

**MASTER SERVICES AGREEMENT  
FOR  
VEGETATION MANAGEMENT**

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## **MASTER SERVICES PROCUREMENT AGREEMENT**

**THIS MASTER SERVICES PROCUREMENT AGREEMENT** (the “Agreement”) is made this 15<sup>th</sup> day of May, 2024, (the “Effective Date”) by and between **Avangrid Service Company**, a Delaware corporation, with offices located at One City Center, 5<sup>th</sup> Floor, Portland, Maine 04101 (hereinafter, “Company” or “Customer”) and [REDACTED] (hereinafter, “Supplier” or “Vendor” or “Contractor”). Company and Supplier may be referred to individually as a “Party” and collectively as the “Parties”

WHEREAS, Company is authorized to assist the utility operating company(ies) identified in *Schedule A*, attached hereto and made part hereof, in procuring certain services that they may require from time to time in the operations of their respective businesses, including the services described in *Schedule B*, attached hereto and made part hereof (the “Services”); and

WHEREAS, the Supplier states that it is an established and well-known provider of the Services possessing the skills, qualifications, and experience necessary to perform and manage such Services in an efficient, cost-effective, and controlled manner, with a high degree of quality and responsiveness, and that it has successfully performed similar services for other customers and is willing to provide the Services to the utility operating company Affiliates of Company in accordance with the terms and conditions of this Agreement; and

WHEREAS, in reliance upon such statements and following its review of Supplier’s proposal and negotiation of business terms, Company has selected the Supplier as a vendor-of-choice for the Services, which shall be procured and awarded in accordance with this Agreement.

**NOW THEREFORE**, in consideration of the mutual covenants contained herein, and other good and valuable consideration, the Supplier and Company hereby agree as follows:

### **1. DEFINITIONS**

As used in this Agreement:

- (a) “Affiliate” - shall mean, with respect to a Party, any other entity Controlling, Controlled by, or under common Control with such Party. The term “Control” and its derivatives shall mean with regard to any entity, the legal, beneficial, or equitable ownership, directly or indirectly, of fifty percent (50%) or more of the capital stock (or other ownership interest, if not a corporation) of such entity ordinarily having voting rights.
- (b) “Business Day” - A calendar day other than Saturday, Sunday or a legal, public or bank holiday in the State of Connecticut.

- (c) “Company” - shall mean the company(ies) specified in *Schedule A*, attached hereto and made part hereof.
- (d) “Company Department” - shall mean the business unit in Avangrid that coordinates and manages this Agreement.
- (e) “Contract Price” - shall mean, the total amount paid and payable by the Company to the Supplier for the performance of the Services under this Agreement for each applicable Purchase Order.
- (f) “Day” - shall mean a calendar day including Saturday, Sunday or a legal, public or bank holiday in the State of New York.
- (g) “District” shall also be considered as “Division”
- (h) “Division” shall also be considered as “District”
- (i) The “Effective Date” - shall mean the date specified in the recitals of this Agreement.
- (j) “Industry Standards” - Any of the practices, methods, standards and acts engaged in, or approved by, a significant portion of the independent power industry for the engineering, procurement, construction and maintenance of services similar to the Project and located in the United States that, at a particular time, in the exercise of prudent and reasonable judgment by those experienced in the industry, in light of the facts known or that should reasonably have been known at the time a decision was made, could have been expected to accomplish the desired result consistent with good business practices, reliability, economy, health, safety and expedition. “Industry Standards” are not intended to be limited to the optimum practices, methods or acts to the exclusion of all others, but rather to be practices, methods and acts generally accepted in the United States, having due regard for, among other things, manufacturers’ warranties, contractual obligations, the requirements or guidance of any Governmental Authority, Applicable Law, applicable NERC reliability requirements and the requirements of applicable insurance policies.
- (k) “Intellectual Property “ - In relation to any and all technology, software, firmware, know-how, processes, inventions, ideas, discoveries, techniques, algorithms, programs, discoveries, improvements, devices, products, concepts, designs, prototypes, samples, models, technical information, materials, drawings, specifications, mask works, topography and other works of authorship, any and all rights, priorities and privileges relating to intellectual property therein, whether arising under United States, multinational or foreign laws or otherwise, including but not limited to copyright applications and registrations, copyright licenses, patent applications and registrations, patent licenses, trademark applications and registrations, trademark licenses, trade secret rights and all rights to sue at law or in equity for any infringement or other impairment thereof, including the right to receive all proceeds and damages therefrom.

- (l) “Project” - means the Line Clearance project under this Agreement pursuant to which the Supplier will provide the Services, and as specified in each Purchase Order.
- (m) “Project Completion Date” - means the date in which the Project Service/s, as described in the Purchase Order (PO), are fully realized to the satisfaction of the Customer and/or Company and applicable Company(ies).
- (n) “Purchase Order” - shall mean a purchase order issued by Company or Affiliates in accordance with this Agreement.
- (o) “RFP” - shall mean a request for proposal for all or a portion of the Services by Company or the Company.
- (p) “Scope of Work” - shall mean the services described in **Schedule B**, attached hereto and made part hereof.
- (q) “Statement of Work” - shall mean the services described in **Schedule B**, and attached as Exhibit A and made part hereof.
- (r) “Services” - shall mean the services and/or related materials described in **Schedule B**, attached hereto and made part hereof.
- (s) “Small Business Concern” - as defined by the Small Business Administration, shall mean a business that is independently owned and operated and which is not dominant in its field of operation. The law also states that in determining what constitutes as small business, the definition will vary from industry to industry to reflect differences accurately.
- (t) “Supplement” - is a written Purchase Order Supplement, signed by the Company and issued after the execution of this Agreement, authorizing an addition, deletion, or revision in the Services or an adjustment in the Contract Price or the Schedule.
- (u) “T&M” - shall mean Labor and Equipment
- (v) “Term” - shall mean the term of this Agreement, as extended or terminated early in accordance with this Agreement.
- (w) “Terms and Conditions” - shall mean the terms and conditions governing the performance of the Services and related matters pursuant to a Purchase Order, as set forth in **Schedule C**, attached hereto and made part hereof.

## **2. PROCESS FOR AWARDING SERVICES**

**2.1** Company agrees that, upon a request made to Company by an Affiliate for assistance in procuring Services, Company shall, on its own or with the assistance of the Affiliates(s) requiring

the Services, take either of the steps delineated in subsections (a) or (b) toward procuring Services from the Supplier:

(a) Issuance of Purchase Order. Company requesting the Services shall issue to the Supplier duplicate originals of a Purchase Order for the Services incorporating: (i) a statement of work consistent with the standards set forth in **Schedule B**, (ii) the Terms and Conditions set forth in **Schedule C**, and (iii) and the pricing terms set forth in **Schedule D**. Upon receipt of an authorized Purchase Order, Supplier shall accept and commence performance of the Services in accordance with the terms therein.

OR

(b) Issuance of an RFP. (i) Company requesting the Services shall issue an RFP to the Supplier. Within the time period specified in the RFP, Supplier shall issue a written proposal to Company, or if so directed, to the Company specified in the RFP, setting forth: (1) a detailed description of the Services to be provided by the Supplier, consistent with the scope and other requirements specified in the RFP, and (2) Supplier's fees and charges for completing the Services, which will be incorporated as **Schedule D** of the Agreement and Supplier warrants will be calculated in accordance with the pricing terms set forth in **Schedule D**, attached hereto and made part hereof.

(ii) Within the time period specified in the RFP, Company shall review the Supplier's proposal. If Company requiring the Services, in their sole and absolute discretion, determine that they wish to award a contract for Services and thereupon select the Supplier's proposal, Company may elect to issue a Purchase Order and (in such instance) Company shall forward duplicate original Purchase Orders for the Services (conforming with the requirements of Section 2.1(a), above, but also incorporating the Supplier's proposal in accordance with this Agreement) to the Supplier at the address specified in **Schedule F**, below. Upon receipt of an authorized Purchase Order, Supplier shall accept and commence performance of the Services in accordance with the terms therein.

**2.2** (a) Notwithstanding anything to the contrary in this Agreement or in any Purchase Order or RFP issued hereunder, Company makes no representation or warranty that Company will issue any Purchase Orders or RFPs, or any minimum dollar volume of Purchase Orders or RFPs, during the Term of this Agreement. Company requesting Services may terminate a Purchase Order or RFP for such Services at any time upon written notice, without penalty or other obligation, prior to commencement of performance of the Services by Supplier in accordance with the terms herein.

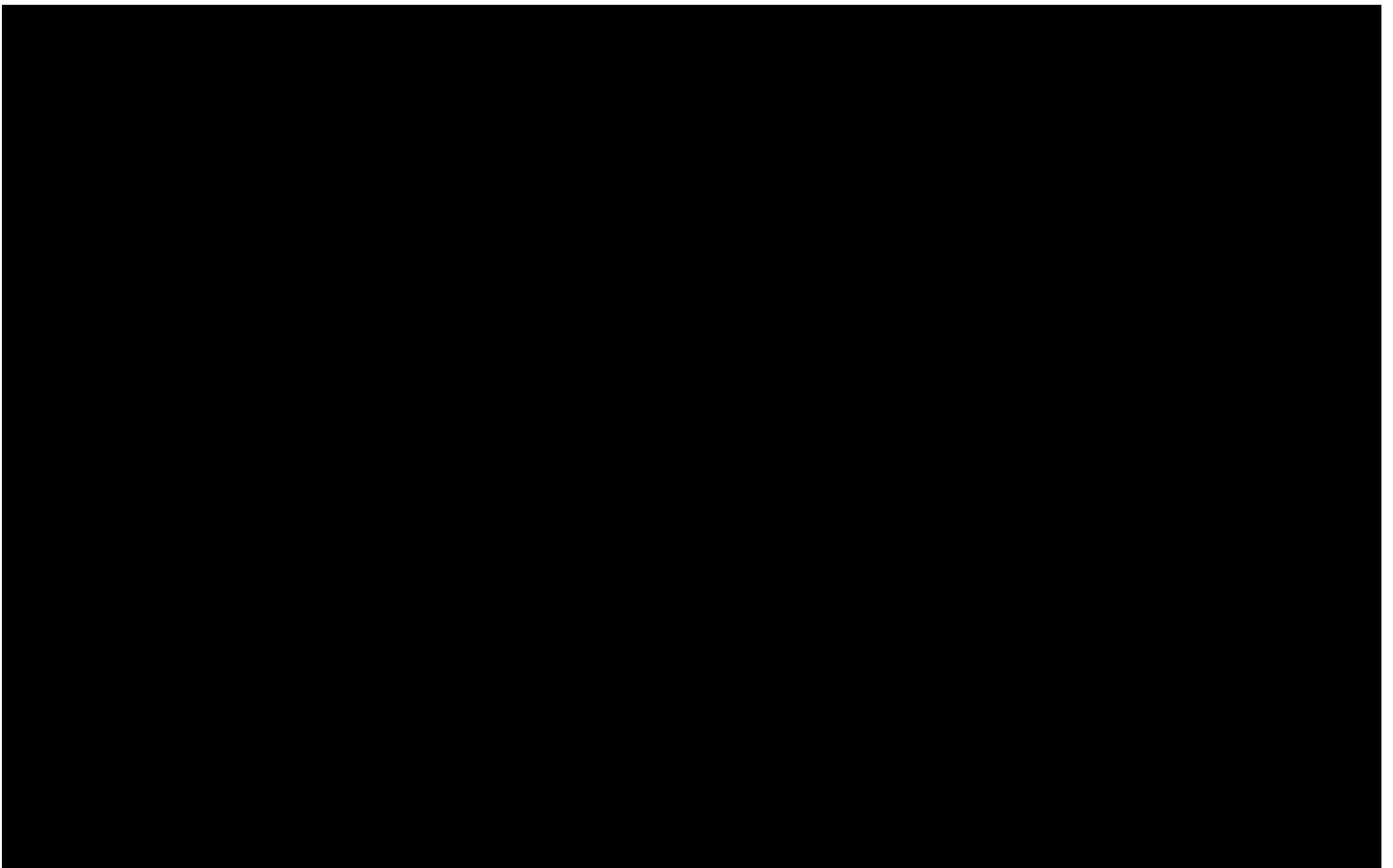
(b) Supplier acknowledges and agrees that the issuance of an RFP, Purchase Order, or other document pursuant to this Section 2 by Company shall not constitute an offer by Company to purchase Services, and that an enforceable agreement for Services shall result only when Company authorizes a Purchase Order for such Services, processed in accordance with this Article 2, and such Purchase Order is issued to Supplier by Company.

(c) Supplier further acknowledges that each Purchase Order processed in accordance with this Article 2 and issued to Supplier by Company, constitutes a separate and distinct contract for the particular Services set forth in the Purchase Order and shall be governed by the following documentation:

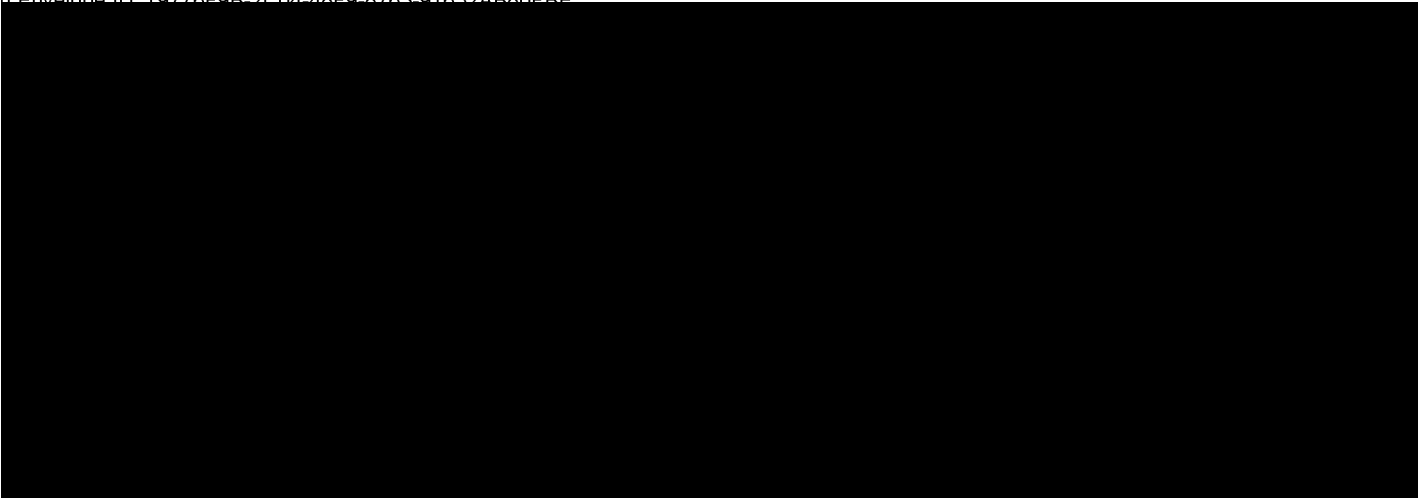
- (i) The Purchase Order (exclusive of its pre-printed terms and conditions);
- (ii) Special Conditions attached hereto as Schedule E.
- (iii) The Terms and Conditions attached hereto as Schedule C, as they may be amended or modified for the particular Purchase Order;
- (iv) The Security Requirements attached hereto as Schedule H;
- (v) The Insurance requirements attached hereto as Schedule G
- (vi) The Scope of Services document attached hereto as Schedule B, as it may be amended, modified or supplemented for the particular Purchase Order; and
- (vii) This Agreement, including all Schedules other than those described in subsections (i), (ii), (iii), (iv), (v), (vi) and above.

In the event of any inconsistency among the aforementioned documentation, the order of precedence shall be as set forth in subsections (i), (ii), (iii), (iv), (v), (vi), and (vii) above.

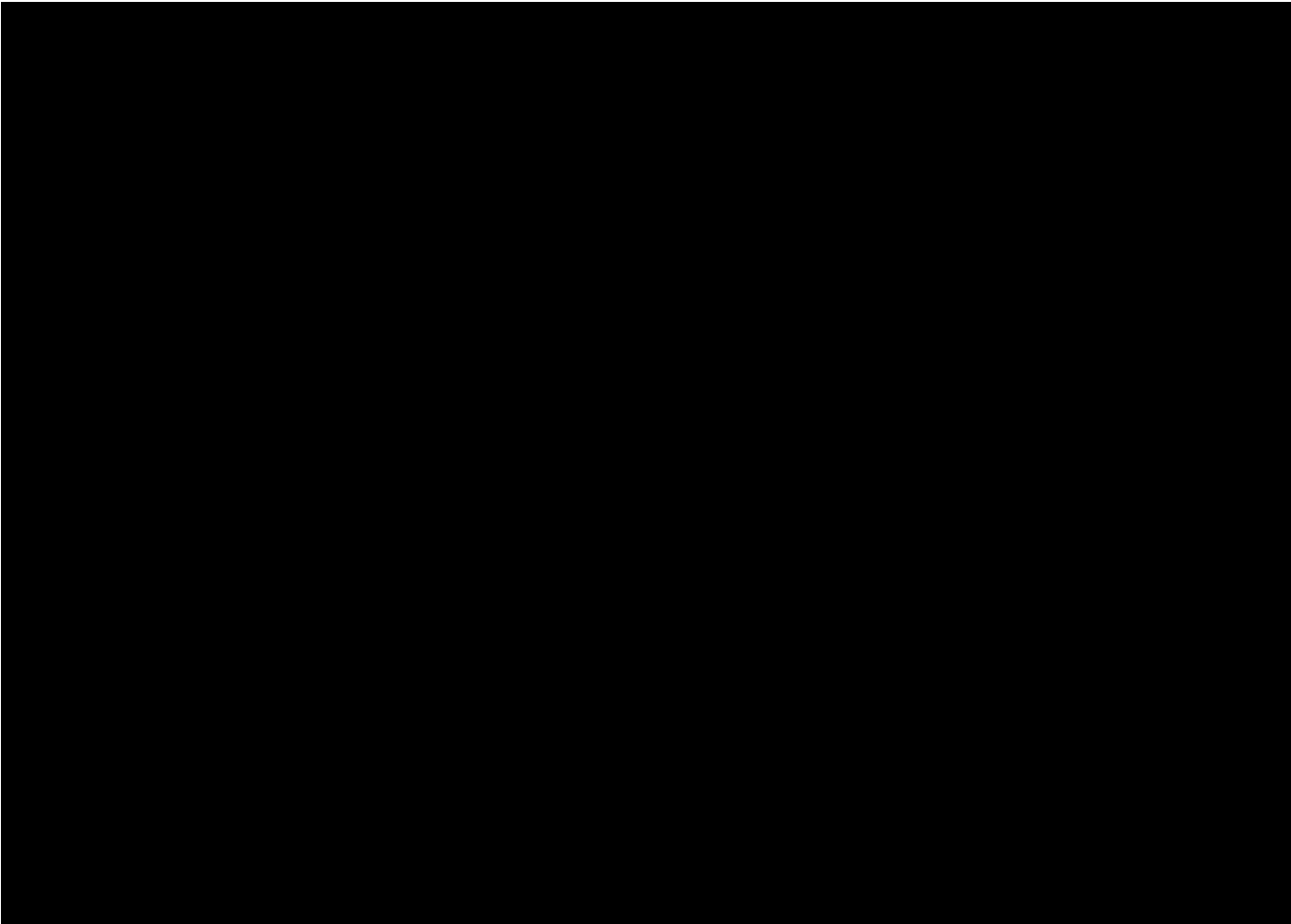
### **3. PRICING; PAYMENT; DISCOUNTS AND REFUNDS**







**4. NO GUARANTY; HOLD HARMLESS**



**5. TERM**

**5.1** This Agreement shall remain in effect until terminated according to Section 5.2(b) below.

**5.2** (a) Company may terminate this Agreement at any time and for any or no reason in accordance with the terms of Article 27 of *Schedule C* to this Agreement. Upon the effective date of termination specified in Company's termination notice: (i) all RFPs, proposals, and Purchase Order for which Supplier has not begun to deliver the Services shall be deemed canceled, unless otherwise agreed in writing by the Company(ies) requesting or issuing such RFPs, proposals, and/or Purchase Orders, and (ii) this Agreement shall be terminated without liability or obligation to the Parties, except for any liabilities and obligations arising under any Purchase Orders issued by Company or Company(ies) for which Supplier has already completed Services in accordance with the terms of this Agreement. Company shall have no liability for any costs, expenses, or other fees incurred by Supplier in connection with any RFPs, proposals, or Purchase Orders that are in process but for which provision of Services has not been completed upon the effective date of termination of this Agreement by Company.

(b) Termination of this Agreement by Company shall not effect, or result in, termination of any Purchase Orders issued by Company or a Company and for which Supplier has begun to deliver Services prior to the effective date of termination set forth in Company's termination notice; provided, however, that this subsection (b) shall not constitute a waiver or relinquishment of any right of termination of any Company pursuant to the terms and conditions of such Purchase Orders.

## **6. GENERAL**

**6.1** Notices. All notices, requests, demands, and determinations under this Agreement shall be in writing and shall be deemed duly given: (i) when delivered by hand, (ii) one (1) day after being given to an express courier with a reliable system for tracking delivery designating overnight delivery, (iii) when sent by confirmed facsimile with a copy sent by another means specified in this Section 6.1, or (iv) six (6) days after the day of mailing, when mailed by United States mail, registered or certified mail, return receipt requested, postage prepaid, and addressed to Party at the address(es) specified in *Schedule F* attached to this Agreement and made a part hereof. A Party may from time to time change its address or designee for notification purposes by giving the other prior written notice of the new address or designee and the date upon which it will become effective.

**6.2** Governing Law. This Agreement and performance under it, and all actions, causes of action, or claims of any kind (whether at law, in equity, in contract, in tort, or otherwise), shall be governed by and construed in accordance with the laws of State of New York, including without limitation New York laws relating to applicable statute of limitation and burdens of proof and available remedies.

**6.3** Binding Nature and Assignment. This Agreement shall be binding on the Parties hereto and their respective successors and assigns. Neither Party may, or shall have the power to, assign this Agreement without the prior written consent of the other, and any such assignment or attempted assignment without such consent shall be null and void, except that Company may assign this Agreement and its rights and obligations hereunder to an Affiliate without the approval of the Supplier, but on prior written notice.

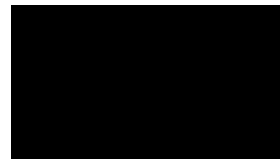
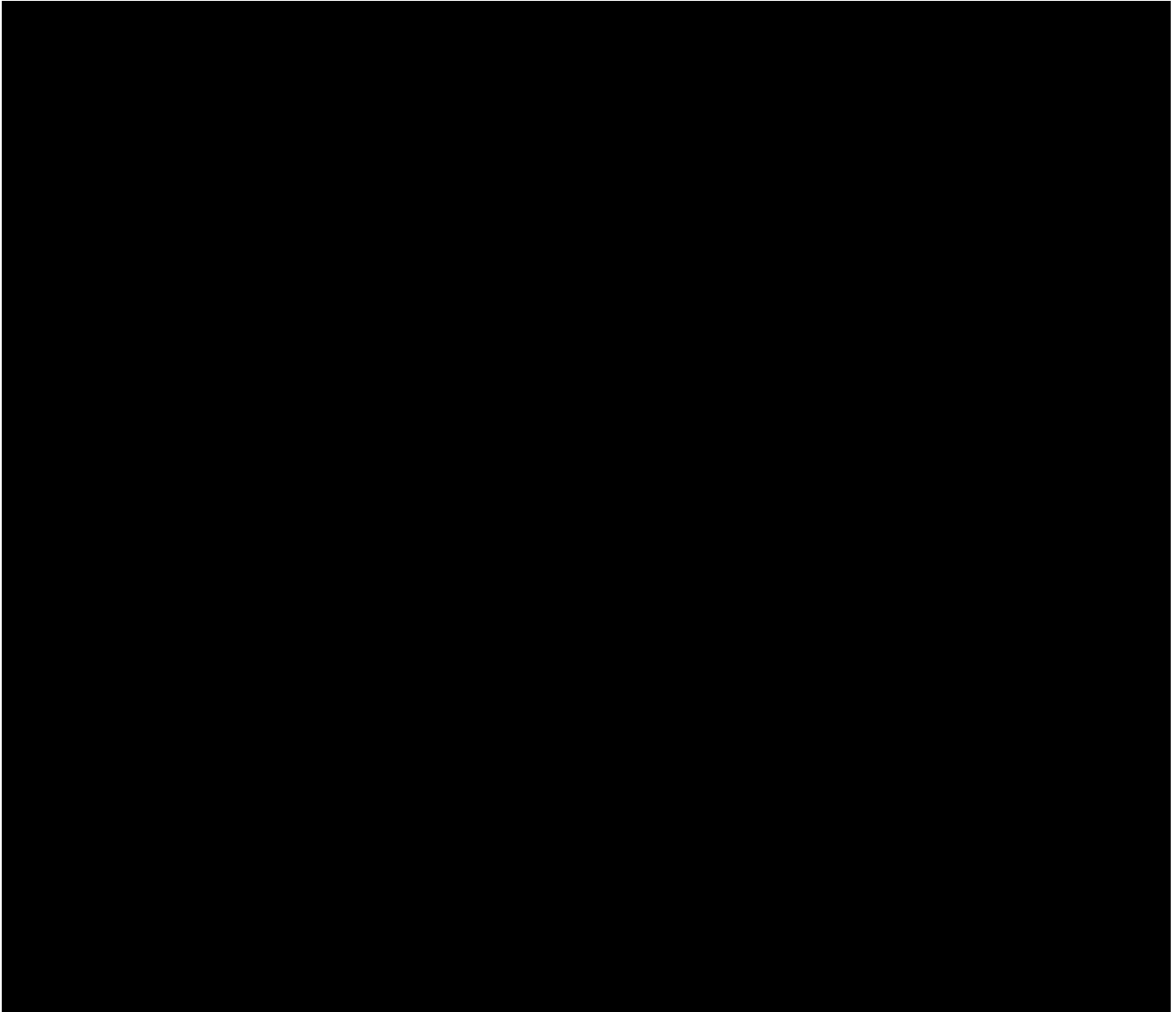
**6.4**    Entire Agreement: Amendment.    This Agreement, including any Schedules referred to herein and attached hereto, each of which is incorporated herein for all purposes, constitutes the entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior agreements, whether written or oral, with respect to the subject matter contained in this Agreement. No change, waiver, or discharge hereof shall be valid unless in writing and signed by an authorized representative of the Party against which such change, waiver, or discharge is sought to be enforced.

**6.5**    Counterparts.    This Agreement may be executed in several counterparts, all of which taken together shall constitute one single Agreement between the parties hereto.

**6.6**    Headings.    The article and section headings and the table of contents used herein are for reference and convenience only and shall not enter into the interpretation hereof.

**6.7**    Relationship of Parties.    Supplier is not an agent of Company and has no authority to represent the Company as to any matters, except as expressly authorized in this Agreement.

**IN WITNESS WHEREOF**, Company and Supplier have each caused this Agreement to be signed and delivered by its duly authorized representative as of the date first given above.



**SCHEDULES:**

- Schedule A: Companies
- Schedule B: Services, Warranty, Deliverables, and Vendor Requirements
- Schedule C: Terms and Conditions
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- Schedule I: Background Check Requirements
- Schedule J: Contractor Safety Guide

**SCHEDULE A – Company**

**New York State Electric & Gas Corporation**  
89 East Avenue  
Rochester, New York 14649

## **SCHEDULE B – Services**

The Supplier is to perform distribution vegetation management services to the Company and Company.

The Supplier will establish a work force capable of completing the annual maintenance plan, capital work, ancillary, including but not limited to; hazard, enhanced, customer service, and hot spot work, and be available for emergency restoration work in all service centers covered in this Agreement.

### **Distribution Specifications**

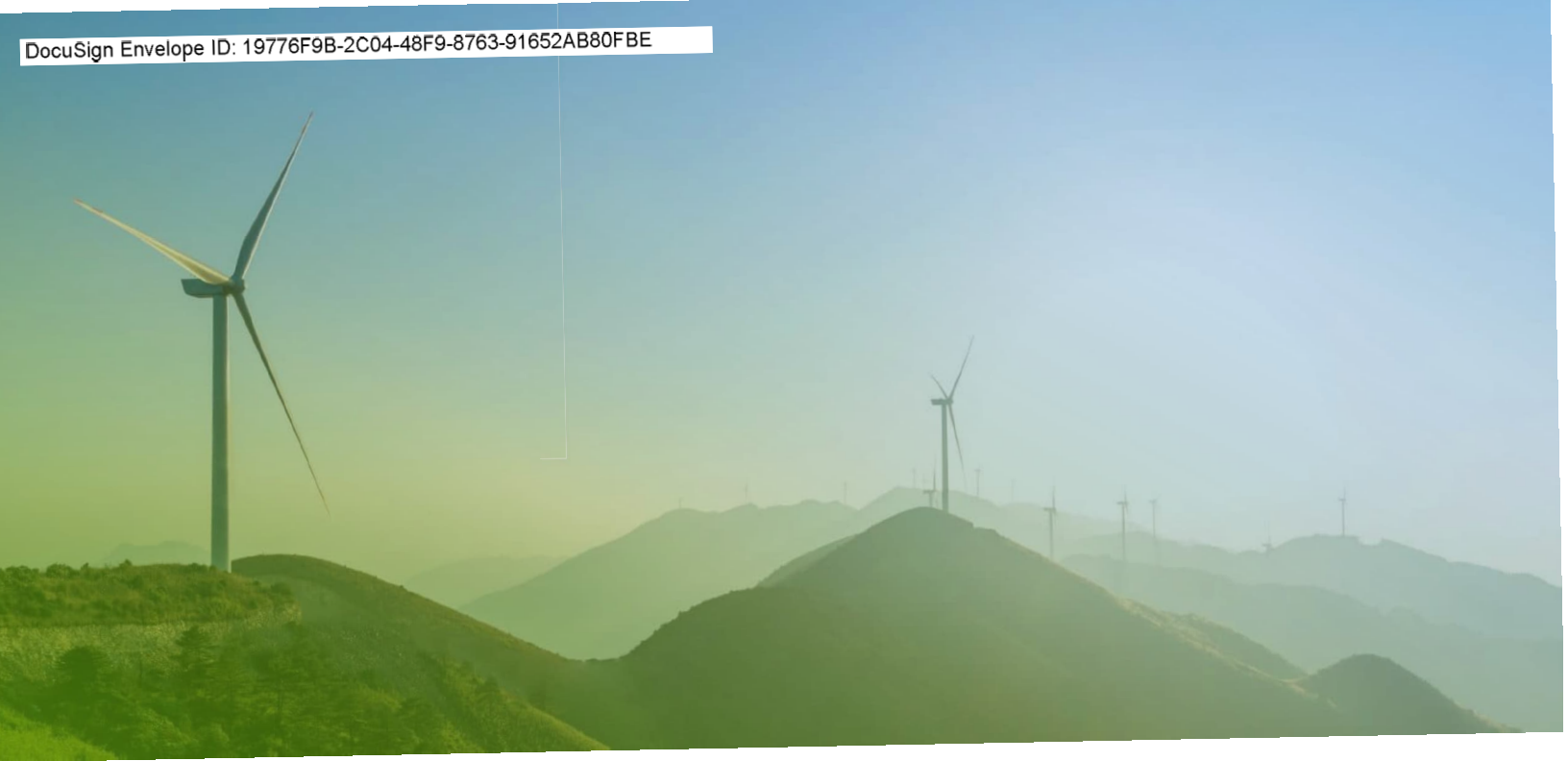
All Distribution vegetation management work employed under this Agreement must comply with Avangrid Statement of Work, **attached hereto as Exhibit A.**

### **Emergency and Storm**

During the times of storm and other emergencies, the Supplier agrees to furnish additional supervision, labor, materials, tools, equipment and transportation to perform emergency line clearance work when requested by the Company or Avangrid. All Supplier vehicles will have appropriate portable and emergency lighting in order to perform work safely during non-daylight hours, and equipment such as tire chains for travel in snow. All Supplier vehicles will be equipped with driver input/readable GPS units. Supplier will require Avangrid's approval before tree crews are released to another utility for restoration work. The Company or Avangrid reserves the right to utilize other contractors to provide storm and/or emergency support. Additional charges may be approved to cover special <sup>a</sup>additional costs" with the prior approval of the Company associated with storm related activities. Lodging and meals will need to be coordinated with Company or Avangrid's representative to ensure no duplicate billing is charged. The company retains the right to pay a "per meal" stipend, or for actual meal charges with documentation; and or per diem, in accordance with Schedule D associated with emergency and storm related activities.

### **Equipment and Vehicle Maintenance**

The Supplier is responsible for all maintenance on its equipment and vehicles. The Company or Avangrid will only provide maintenance support during storm or emergency situations with the intent to get the equipment or vehicle back in service. During these occasions, the Company or Avangrid will keep track of all maintenance done and present this documentation to Supplier for re-imbursement.



# AVANGRID

## *Vegetation Management*

*Transmission, Distribution, Gas ROW,  
& Bareground Weed Control*

*New York, Maine, Connecticut and Massachusetts  
(NYSEG, RG&E, CMP, UI, CNG, SCG, BGC, MNG)*

*Statement of Work & Detailed Specifications*

*2024 - 2026*

Date of document \_\_\_\_\_





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1. *Project Overview*
2. *Divisions of Work To Be Performed (Maps To Be Provided)*
3. *Statement of Work*
4. *Requirements for Bid*
5. *Company Rights and Attachments*
6. *List of Exhibits*

1. *Intent of Specifications*
2. *Scope of Work*
3. *Right-of-Way Reclamation and New Construction*
4. *Wetland and Streams*
5. *Timelines for Maintenance*
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## **ARTICLE 6. (ME, NY, CT) BAREGROUNDWEED CONTROL VEGETATION MAINTENANCE**

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- 1.02 *Definitions*
- 1.03 *Scope of Work*
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### **SECTION 2 APPLICATION OF NON-SELECTIVE HERBICIDES**

- 2.01 *Method of Application*
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- 2.05 *Restrictions and Conditions*
- 2.05 *Visual Notification*
- 2.07 *Security of Equipment and Chemicals*
- 2.08 *Damages*
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- 2.11 *(CMP) Herbicide Formulations*
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### **APPENDIX 16 MAINE SENSITIVE SITES**

### **APPENDIX 17: NON COMPANY OWNED SITES - NYS**

## Introduction

In order for Avangrid to evaluate and determine Supplier's ability and capacity to perform the scope of work as described hereto and throughout this document, and for the Supplier electing to bid on the proposed work must provide as part of their bid package and response with sufficient details an Implementation Plan that Avangrid can integrate into a successful transfer of services between suppliers.

For each category as described in Article 1 through 6, please provide an implementation plan the Supplier proposes to perform work and for each state.

The Implementation Plan informs Avangrid of the Supplier's strategy to fully provide the Services they are proposing to provide (ME, NY, PA, CT, and MA). Note that after the award is offered but before the Framework Agreement is finalized a formal Transition Plan, based on the offer will be developed between Avangrid and Supplier. The Transition Plan will help ensure the agreed upon resources and services are provided within the agreed upon timeframe and then managed over the life of the Agreement to fully achieve the assigned portions of the work as specified in the Statement of Work(s).

Each Implementation Plan is to contain the following components:

Plan Overview – is the Plan for each category achievable and sustainable over the course of the terms as specified in the statement of work(s). An overview of the service(s) chosen by the Supplier and the Regions they desire to perform those services in. The Overview statement firmly establishes the Supplier's understanding of their commitment to the portion of the award they are asking to be given and their ability to render the proposed services to Avangrid.

Key Employees and Roles – Does the Plan have the management resources and field supervision expertise necessary for success?

The Supplier's key employees assigned to oversee and those assigned to accomplish the Supplier's Implementation Plan need to be known. The following information shall also be included:

- Resume with job experience and employment history
- \* Present position and duties currently being performed
- \* Assigned Implementation Plan duties and whether the employee is temporary or permanently assigned to those duties over the life of the Statement of Work(s).

# **ARTICLE 1. (NYSEG, RG&E, & CMP) Detailed Specifications For Transmission and Sub-Transmission Right of Way Vegetation Maintenance**

## **SUB-ARTICLE 1 - MAINE (CMP & MEPCO) SPECIFICATIONS**

### **Section 1 – General**

#### *1.01 General Instructions*

All vegetation management work shall be conducted in a safe, effective manner according to these specifications and in conformity with Federal and State laws, regulations, permit conditions and approvals obtained by the Company. This includes but is not limited to NERC FAC-003-4, the Maine Board of Pesticide Control, the Maine Disposal of Slash Statue, OSHA Standard 29 CFR 1910:269 - Electric Power Generation, Transmission, and Distribution 29 CFR 1910:269(R), and ANSI Z.133.1 Standards.

#### *1.02 Imminent Threat of Outage*

A. The Contractor shall immediately verbally report any observed vegetation-related imminent threats that may cause outages to the appropriate Company Representative. This verbal report is to be given in real time – voice mail messages are not acceptable.

B. If the Contractor is unable to contact the local Company Representative, they shall contact the Transmission Vegetation Manager. If the Contractor is unable to contact the Transmission Vegetation Manager, they shall contact the control center. See Appendix 4 for contact information.

C. Imminent threats include vegetation within the Minimum Approach Distance (a grow in issue) of a Transmission line and any other vegetation that may imminently enter the Minimum Approach Distance (a fall-in issue) Transmission or Sub-Transmission.

#### *1.03 Definitions*

|                         |  |
|-------------------------|--|
| Company                 | Central Maine Power Company  |
| Company Representative  | Person or persons designated as such by the Company.   |
| Contractor              | Firm that has been awarded a formal contract to perform work described in these specifications.  |
| Buffers                 | Areas adjacent to highways, streams, public property, scenic areas, historic areas, or other areas of special concern. May have visual or environmental purpose. |
| Bulk Transmission Lines | The Company transmission lines that are subject to NERC  |

|   |  |
|---|--|
|   | Standard FAC-003-4. These are lines operating above 200 kV and any lines operated below 200 kV that are an element of an Interconnection Reliability Operating Limit (IROL).   |
| Danger Tree   | Any tree that is tall enough to strike an electric supply line.  |
| Disposal Method                                       | A specific technique utilized for disposing of cut vegetation.   |
| Hazard Trees  | A structurally unsound tree that could strike an electric supply line.   |
| Herbicide Applications                                | The application of a chemical herbicide formulation to vegetation for the purpose of removing the vegetation.  |
| Minimum Clearance Achieved At the Time of Maintenance | The radial space around the conductor that creates a wire security zone under normal operating conditions. This distance varies with voltage. Woody species over ten feet in height and capable of growing tall enough to intrude into this zone must be removed at the time vegetation management work is performed. (See Appendix 6)   |
| Minimum Vegetation Clearance Distance MVCD            | The radial space around the conductor into which the vegetation is not allowed to grow. This distance is to be maintained under all rated operating conditions, varies with voltage, and is based on the Gallet equation. (See Appendix 6)   |
| Pruning   | The cutting or removal of tree branches to provide specified clearance distance between vegetation and the conductors.   |
| Removal   | The felling or killing of undesirable vegetation.  |
| ROW   | Right-of-way   |
| Sensitive Area  | Areas on the ROW where legal or environmental impacts/concerns require compromises to the general treatment approach.  |
| Selective Treatment                                   | The removal, by herbicide treatment or cutting, of vegetation designated for removal and the retention of vegetation designated to be preserved.   |
| Sensitive Area  | Areas on the ROW where legal or environmental impacts/concerns require compromises to the general treatment approach.  |
| Slash   | Debris including trees, branches, etc. resulting from cutting.   |
| Sub-Transmission                                      | Lines that carry voltage reduced from the major transmission line system, typically, 34.5kV to <69kV, through which power is supplied to regional distribution substations. Sometimes the sub-transmission voltage is tapped along the way for use in industrial or large commercial operations but typically does not supply customers. |
| Treatment Method                                      | A specific technique utilized for removing vegetation from a   |

|              |  |
|--------------|--|
|              | ROW.   |
| Vernal Pools | Natural temporary pools of water, usually devoid of fish, that allow for the safe development of natal amphibian and insect species.   |
| Wire Zone    | The floor of the ROW that is underneath the conductors and, for bulk transmission, a specified outer distance measured horizontally from the outermost conductors. See Appendix 1. |

#### *1.04 Scheduling and Start of Work*

A. Any Bulk Transmission Lines shall be treated first. If a contractor has work in multiple service centers, the work on the bulk lines shall be started first, regardless of which service center the bulk transmission line is in.

B. Prior to the start of work, the Contractor shall submit the approximate work plan (including schedule and herbicide mixes) the Contractor's crew will follow for the treatment year. This schedule is to include any follow-up inspection of the previous treatment year's work.

C. The Contractor shall complete treatment on each transmission & sub-transmission line in the work plan with as few work interruptions as possible.

#### *1.05 Scope of Work*

##### *A. Obligation of Contractor*

1. Provide notification to the Company regarding starting and stopping of work each day. Such notification and any other daily consultations shall be made in accordance with the specific instructions provided by the Company Representative. Phone numbers for these notifications are listed in Appendix 4.

2. On bulk transmission lines, any refusals of work shall be reported without delay to both the Company Representative and the Transmission Vegetation Manager. This shall be both a verbal and an email report.

3. Enter daily timesheets and treatment records in an electronic device. These are to be transmitted to the Company on a weekly basis. Company may issue a stop work order and/or withhold payment if reports are delinquent.

4. Cut and/or treat all vegetation designated for removal in accordance with these specifications.

5. Abide by all State laws, rules, and regulations relating to the application of pesticides.

6. Cut or drop-crotch all danger trees as specified by the Company Representative.



7. Dispose of all cut vegetation in accordance with these specifications and any state regulations (i.e. Maine Slash Law).
8. Mark the specified treatment width of each treatment site with a brightly colored marker (paint or flagging). Markers shall be along both edges and shall be at each end of the treatment site and at least 150 feet.
9. Notify the Company Representative of any treatment locations where the previously maintained width is less than the treatment width.
10. Report to the Company Representative any abnormalities on the right-of-way such as encroachments, damaged poles, broken or slack guy wires, etc.
11. Report immediately to the Company Representative any incidents such as damage to facilities, contact with a live conductor, serious personal injuries, etc. If the Company Representative is not immediately available, reports shall be made by (1) calling the appropriate Manager or, (2) calling the appropriate Energy Control Center. In no case is electronic or voice mail reporting to be considered adequate. Contact telephone numbers are listed in Appendix 5.
12. Perform landowner contacts for residential pruning and for other occasional specified property owners.
13. Provide a copy of the landowner notification/permission logs to the Company upon request.
14. Provide protection for existing structures, communication lines, power lines, pipelines, fences, roads, and trees within and adjacent to the ROW.
15. Maintain a designated job foreperson on the project site on a full-time basis during the course of the work performed. The Contractor shall provide the foreperson with the instructions and drawings for the work to be performed. If it becomes necessary to change forepersons, it shall be the responsibility of the Contractor to provide the new foreperson with instructions and drawings.
16. Provide a call phone number for the designated crew leader.
17. Provide a picture ID for all general forepersons, crew forepersons, and any other individuals making property owner contacts. The ID shall include the individual's name and the Contractor's company name.
18. Adequately instruct employees on the selective vegetation retention requirements and environmental protection measures set forth in these specifications.
19. Provide signs displaying the Contractor's Company name for all vehicles on the right-of-way and for any vehicles used during contacts with property owners for access or notification.

20. Notify the Company Representative at least one week prior to beginning the job or prior to adding a new crew.

21. Report promptly to the Company Representative any inquiry, complaint, or claim received during the course of the work.

22. Provide work zone traffic control in accordance with the state and/or federal Manual of Uniform Traffic Control Devices when working within any public highway right-of-way.

23. Ensure that Contractor employees performing line clearance work near energized conductors shall have received electrical safety training in accordance with OSHA standard 29 CFR 1910.269 and ANSI standard Z 133.1.

#### B. Obligation of the Company

1. Specify to the Contractor the specific treatment methods, disposal methods, and approved herbicide formulations to be utilized.

2. Pre-authorize any changes in the work plan prior to March.

3. Conduct all ROW negotiations with property owners.

4. Provide data on ROW restrictions and sensitive areas, see Appendix 8.

#### *1.06 Access*

A. Existing public roads shall, whenever possible, be used for access to the ROW.

B. Private access to the ROW shall not be used without the consent of the property owner.

C. Where private access to the ROW is utilized, the Contractor shall be responsible for any damage thereto.

D. Contractor will maintain existing access roads/paths by hand cutting the path and its edges during lump sum floor work. Paths must be kept free of brush, slash, and stumps over 3". Overgrown paths should be cleared to facilitate access where ground conditions permit. The wire zone is the preferred location of access paths. If a path within the wire zone is not possible due to site conditions, a path must still be maintained outside of this zone but still within a company right-of-way. Paths should be hand cut or mowed in conjunction with herbicide when needed and permitted. Paths should be maintained to a minimum of 6 feet to allow for ATV's to travel. If an existing path has been maintained to a width larger than 6 feet, the path should continue to be maintained at this width.

E. Where requested by the Company Representative, to facilitate access for visual inspection of the facilities or for emergency repairs, a 20-foot access path shall be clear cut of all woody vegetation. Where an access road exists, the access road shall serve as the path and it shall be clear cut of all woody vegetation. Where no access road exists, a 20-foot access path shall be clear cut under the conductors. All woody vegetation cut from the path or access road shall be piled to the side of the clear-cut area. Stumps within the clear-cut area shall have a maximum height of three inches unless otherwise requested by the

Company Representative. Herbicide treatment shall be performed in accordance with Sections 5 through 7 of this specification. Projects and special assignments for paths can use unit pricing as outlined in the MSA.

#### *1.07 Buffers and Screens*

At road crossings and stream crossings, designated by the Company Representative, additional vegetation shall be left to provide visual screening of the ROW or to provide shade to a stream. In buffer zones that are designated as screens, there may be pruning of select vegetation. In buffers and screens, the following shall apply:

A. Vehicle traffic shall be restricted to a single lane through the buffer zone.

B. Vegetation cut in a buffer zone shall be disposed of outside of the buffer zone. See Appendices 9 and 10 for no slash buffers.

C. Vegetation designated for removal from buffer zones shall be removed so as not to damage remaining vegetation.

D. Plants designated by the Company Representative to remain that are inexcusably damaged or removed by the Contractor shall be replaced by the Contractor. Replacements shall be planted at sites selected by the Company with species having total value equal to those damaged.

E. Select screens may consist of non-capable species or conifer species at major road and river crossings that are pruned or removed on a periodic basis because they cannot be removed due to regulatory requirements. Screens will be maintained in areas where they are required by permit or ordinance. All other screens will be removed. Screen removal must be approved by the Company Representative.

1. The depth of the screen should be as narrow as possible, generally consisting of no more than 1 or 2 rows of shrubs.

2. Hardwood trees growing within a softwood screen must be removed. Dead or dying softwoods may be left for wildlife habitat if no longer presenting risk to facilities or general public. Company representative should be consulted when dead softwoods are left within a screen.

3. Some vegetation may have to be removed if the density is inhibiting light penetration and causing sparse growth. Vegetation that threatens electric reliability will be removed.

#### *1.08 Crossing of Streams, Wetlands, Significant Vernal Pools, and Wet Areas*

While working in the immediate area of streams, wetlands, vernal pools, or wet areas, the Contractor shall

A. Comply with all applicable Federal, State, and local laws and regulations; and the rules and regulations of any agency having jurisdiction over any crossing of a stream or wet area.

1. There is to be no equipment crossing of salmon streams in ME.

B. Employ all necessary precautions to protect the waterway from pollution caused by vehicular movement or disturbance to the stream bed and banks.

C. Where access roads are not indicated and crossings are not prohibited, the Contractor shall limit vehicular crossings of streams and wet areas to one location. The Contractor shall limit the number of times any one stream or wet area is crossed with vehicles to the minimum number necessary for completion of the work.

D. The Contractor shall be responsible for repairing any damage such as deep ruts or scarified areas which in the opinion of the Company Representative could cause erosion.

#### *1.09 Working in Regulated and Other Sensitive Areas*

A. Contractor will conspicuously flag the edges of any regulated or sensitive areas as needed.

B. No herbicide shall be stored, mixed, or loaded within 100 feet of any wetland or surface water.

C. No fuel storage, vehicle/equipment parking and maintenance, or refueling within 100 feet of any wetland or waterbody.

D. For ME restrictions for regulated and sensitive areas, see Appendices 9 and 10.

### **Section 2 – Floor Treatment Methods**

#### *2.01 General Instructions*

A. Any discrepancies between field conditions and instructions for completion of work are to be reported to the Company Representative.

B. It is the responsibility of the Contractor to perform the work as specified and ensure that all vegetation scheduled for removal is treated to the specified width.

1. Unless it is a specified trim area, (certain screens and buffers) there will be no pruning of vegetation rooted in the ROW.

2. Removal of trees less than 6 inches DBH within the designated treatment area is part of the contract. For trees greater than 6 inches DBH that are rooted within the treatment area of right-of-way, the Contractor is to inform the Company.

3. In the wire zone, all vegetation taller than ten (10) feet tall must be cut and where applicable, the stumps treated. The Company Representative may specify that certain shrub species (alder, buckthorn, etc.) be treated to maintain open access to the ROW.

C. Treatment of the lines in ME is on a per line basis. Where the specified section is adjacent to another transmission line in the same ROW, vegetation maintenance will extend to the midpoint between the two transmission lines. The midpoint is half the distance from

the centerline of one transmission line to the centerline of the adjacent transmission line. Access path maintenance may extend beyond this midpoint depending on historic locations.

D. The ME cycle length is four years.

## *2.02 Selective Treatment*

The following shall apply in areas designated for selective treatment:

A. Selective treatment shall be performed utilizing one of the following methods as described in Section 6 of these specifications:

1. Selective Cutting (HC)
2. Selective Cutting and Stump Treatment (ST)
3. Selective Low Volume Foliar Treatment (LVF)

B. For ME, the default treatment method is LVF unless restrictions or conditions require HC or ST. Avoid foliar herbicide applications near yards, gardens, pools, agricultural fields, and where humans or animals are congregating.

C. All tall-growing woody vegetation including but not necessarily limited to those listed in Appendix 2 shall be removed by cutting and/or herbicide application as specified. The only exemptions are:

1. ME specified screens and buffers that require topping of certain vegetation.
2. Ravine and valley crossings where conductor height at maximum sag (under all rated operating conditions) and sway is sufficient to allow for all species to remain at their mature height. The Company Representative shall determine at what point, in ravines and valleys, treatment should cease.
3. Easement restrictions.
4. Maintenance Agreements. These are formal written agreements where a landowner agrees to maintain, at their cost and to our specifications, the vegetation in the right-of-way. Contractor crews will be notified of these locations, and they are not to cut or spray the brush within the ROW corridor. The Contractor will still perform all edge and screen work, but no herbicide is to be used by the Contractor.

D. All low-growing vegetation including but not necessarily limited to those listed in Appendix 3 shall be retained, except:

1. Those capable of growing tall-enough to intrude into the Minimum Clearance Achieved at the Time of Maintenance (see Appendix 6).
2. As otherwise requested by the Company Representative.

E. All woody vegetation within 15 feet of a structure and all vines growing on guy wires, poles or towers shall be removed by hand cutting. Herbicide may be used as a supplement, unless otherwise prohibited. Slash must be removed from this 15 foot zone. A minimum of 5 feet must be clear of all brush around poles, structures, and guy wires.

F. Low-growing woody vegetation shall, when possible, be avoided by vehicles used for traversing the ROW. Where driving over low-growing vegetation cannot be avoided, any low-growing vegetation which is damaged shall be cut and lopped so as to be in close contact with the ground.

G. Each herbicide applicator, saw operator, and equipment operator shall be able to differentiate between those species which are to be treated and those that are to be retained.

H. For manual cutting the following shall apply:

1. Trees to be removed shall be cut to a maximum stump height of 3 inches.
2. Stumps shall have a smooth surface, free of splinters.
3. Cut vegetation shall be disposed of by one of the methods described in Section 4 of these specifications as requested by the Company Representative.
4. Care shall be taken in felling tree such that they do not fall into power and communications lines, pavements, roads, etc. See Section 3.02 Procedures for Widening and Danger Trees.
5. Care shall be taken to avoid damage to compatible vegetation being retained.

### *2.03 Mechanized Cutting*

Mechanized cutting may be specified for selective sites such as electric rights-of-way and on non-selective sites such as wire zones, access paths, and pipelines. Mechanized cutting shall be performed by cutting all woody vegetation within the ROW, except as noted below, with rotary or flail type cutters. Any portion of the treatment site that cannot be mechanically cut shall be hand cut. In addition to Section 2.02, mechanized cutting shall be performed in accordance with the following:

A. Contractor shall maintain a non-mowing zone of at least 15 feet around all infrastructures. The non-mowing zone shall be hand-cut. While it is permissible to drive forward through the zone to access other areas, no backing or mowing operation will be allowed within that zone. All vines growing on guy wires, poles, or towers shall be hand-cut and removed.

B. Contractor shall flag all guy wires and structures. Flagging shall be as high as the worker can reach. At all times, Contractor shall protect structures, guys, communication lines, power lines, pipelines, fences, roads, and trees to remain within and adjacent to the ROW.

C. Vegetation shall be cut to a maximum stump height of 6 inches except for access roads which shall be cut to a maximum stump height of 3 inches.

D. Slash shall be cut so that it lies in close contact with the ground. Vegetation shall be cut so that slash and other debris do not enter waterbodies, highways, lawn areas, agricultural fields, or other areas where personal injury or property damage could result.



E. Where wet ground conditions would result in rutting, incompatible vegetation shall be hand cut as per Section 2.02 of this specification. The slash resulting from selective cutting shall be disposed of as specified by the Company Representative.

F. Streams – Where stream crossings are allowed, streams shall be crossed at one point only. Vegetation to be cut from stream banks shall be selectively cut as per Section 2.02 of this specification. Slash shall be removed from areas subject to flooding.

G. Deep ruts or erosion caused by mechanical cutting shall be repaired by the contractor and seeded with a conservation seed mix approved by the Company Representative.

### **Section 3 – Edge Treatment Methods**

Any discrepancies between field conditions and instructions for completion of work are to be reported to the Company Representative.

#### *3.01 Pruning*

A. Side Pruning – Where side pruning is specified the following shall apply:

1. The Company Representative shall specify whether trees shall be side pruned to the cutting line or back to the trunk.
2. The Company Representative may authorize mechanical ground side pruning or aerial side pruning in rural off-road areas.
3. Limbs shall be felled inside the ROW to avoid damage to trees and property outside the ROW. Caution shall be taken to see that the falling limbs do not come into contact with conductors, guys, poles, or other facilities.
4. Cut material shall be disposed of by the disposal method designated by the Company Representative as described in Section 4 of these specifications.

B. Topping and Pruning

1. Trees shall be topped to the specified height utilizing the drop-crotch technique by pruning to a lateral at least 1/3 the diameter of the cut. See Appendix 5, Drawing No. S-12,458.
2. Cut material shall be disposed in accordance with Section 4 of these specifications.
3. There will be no pruning of non-screen trees that are rooted within the ROW. These trees are to be removed.

#### *3.02 Procedures for Widening and Danger Trees*

A. Trees that are located outside the minimum approach distances that could fall into an energized conductor shall not be removed until:

1. The tree has been topped to a height that makes it impossible to fall into the line or;
2. The tree has been rope-guyed to prevent it from falling into the line and the Company Representative has informed the Contractor that the recloser circuit “off” switch has been placed in the off position.

### *3.03 Maine Edge Work*

For ME, the Planner or Contractor will inspect every span of the annul treatments lines for edge work and perform any necessary edge. Company arborist or consultant may plan or prescribe work in place of contractor inspection. The edge work consists of hazard trees and side pruning to be paid for on a unit rate basis. Widening may also be authorized on a T&M or lump sum basis.

A. For side pruning, the Contractor will prune for Minimum Clearance Achieved at the Time of Maintenance, see Appendix 9.

B. Hazard trees are located outside of the specified clearing width of the ROW. These trees pose a threat to the reliability of the line. In order to threaten the line, the tree must be sufficiently tall to strike the line if it falls and it must exhibit one or more of the following characteristics that would make it likely to fall:

1. The tree displays excessive lean toward the line.
2. The tree is diseased or has a defect that increases the risk that it will fall toward or into the conductors.
3. The root system is shallow due to moisture conditions or species characteristics, making wind throw a concern.

C. Landowner permission is required for all of ROW removals. Healthy danger trees require written permission, see Appendix 10 for form.

D. The Company Representative will be consulted for all off ROW removals.

E. Hardwood stumps are to be treated with herbicide whenever environmentally acceptable.

## **Section 4 – Slash Disposal**

### *4.01 General Instructions*

A. Cut vegetation shall not be disposed of in the following locations:

1. Access roads.
2. Within 15 feet of a structure.



3. In ditches, inside the bed or bank of streams or in low-lying areas where water flow would be disrupted.
4. In agricultural fields.
5. In areas maintained as lawns.
6. Within a minimum of 25 feet of a road.

B. Vegetation cut from scattered areas, fence ROWs, or isolated trees in cultivated areas shall be removed and placed along the nearest fence line or accepted area for piling.

C. Contractor will make special efforts to ensure toxic vegetation is disposed of outside of active pasture areas.

D. In those locations where vegetation is cut and no method of disposal is specified, the Lop and Scatter method of disposal shall be utilized in accordance with section 2.02 of this specification.

E. For Maine, all of the requirements of the Article 3 Slash Disposal Statue will be followed.

#### *4.02 Piling*

Where cut vegetation is to be piled, the piles shall have a maximum height of 3 feet and a maximum width of 15 feet. The piles shall have a 20-foot break every 100 feet of pile length to serve as a fire break. Piles shall have a neat and orderly appearance, void of any excessive protruding material.

A. Piling With Equipment – Piling with equipment shall be performed in accordance with the following:

1. Cut vegetation shall be carried or dragged, not pushed, to pile locations.
2. Piles shall be compacted to less than the specified maximum height by traversing with tracked vehicles and/or other equipment.

B. Hand Piling – Where cut vegetation is piled by hand, the piles shall be compacted to less than the specified maximum height by cutting with chainsaws.

C. In Maine, all piling will be in accordance with the current Maine Slash Law.

#### *4.03 Chipping*

Cut vegetation shall be reduced to chips by the use of an approved chipping machine in accordance with the following:

- A. Chips shall be disposed of such that chips accumulate to depths no greater than 4 inches to serve as mulch for erosion control purposes.
- B. No chips shall enter any watercourse or wetland area.

C. Vegetation which cannot be chipped shall be disposed of by another method approved by the Company Representative.

#### *4.04 Lop and Scatter*

A. Trees to be removed shall be felled, delimbed of all branches greater than 2 inches in diameter and cut into sections such that the entire length of each tree is in close contact with the ground. Vegetation disposed of in this manner shall not protrude more than 2 feet above the surface of the ground.

B. Where an access road exists, cut vegetation shall not be disposed of within the access road. Where no access road exists, a 20-foot swath, directly under the conductors, shall remain clear of cut vegetation.

### **Section 5 – Herbicide Applications**

#### *5.01 General*

A. The Contractor shall abide by all State laws, rules, and regulations relating to the application of pesticides. The Contractor, crew foreperson, and at least one other member of the herbicide crew shall hold a valid Maine Arborist and Pesticide Applicator licenses (category 6A).

B. The application of herbicides shall be performed in accordance with the product label, appropriate governmental regulations, and these specifications. The Contractor shall be in compliance with the OSHA Hazard Communication standard 29 CFR 1910.1200.

C. All herbicide applications shall be done in a manner that will prevent damage to trees and property outside the ROW.

D. Application shall be discontinued when windy conditions may result in off-target herbicide drift.

E. The Company shall consider unskilled or careless application by workers as just cause for stopping work or cancellation of the contract.

F. Foliar spray units shall be refilled with water from a supply vehicle. Water shall not be pumped directly from a water source into the spray tank.

G. Herbicide concentrate shall not be transported on a vehicle used for supplying water to foliar spray equipment.

H. Each vehicle used for herbicide application or for transportation of herbicide concentrate on the right-of-way shall be equipped with a shovel and absorptive material for containing and controlling spills. All herbicide spills shall be reported immediately to the Company Representative.

I. All evergreens over 3 feet in height that are scheduled to be removed shall be cut and disposed of unless otherwise directed. Evergreens under 3 feet in height that are scheduled to be removed may receive a foliar application.

J. Pitch pine is to be stump treated.

K. The Contractor shall periodically review the results of the work to ensure adequate coverage of target species.

#### *5.02 Security of Equipment and Herbicides*

The Contractor shall take the following precautions to protect his equipment and materials from vandalism and unauthorized use when left unattended on the ROW or on Company property not within a locked fence:

A. Power-pack or back-pack sprayers shall be emptied or stored in locked compartments.

B. Ignition keys shall be removed for all vehicles used for herbicide treatment, vehicles containing herbicide concentrate, or herbicide solution.

C. Ignition keys shall be removed from engines which provide power to pumps on power-driven spray equipment. Engines without lockable ignition systems shall have the sparkplug wire disconnected or made inoperable in some similar fashion.

D. The opening to the spray tank, on power spray units, shall be locked.

E. Drains on spray tanks shall be fitted with lockable valves or threaded caps.

F. Containers carrying herbicide concentrate shall be securely locked or bolted to spray units or other vehicles used to transport herbicide concentrate.

G. Valves or barrel pumps on containers carrying herbicide concentrate shall be locked or removed and replaced with threaded plugs. Threaded plugs shall be mechanically tightened to prevent removal by hand.

H. The pressure control valve shall be closed.

I. Any equipment used for operations involving herbicide applications shall not be left unattended within 100 feet of any stream, waterbody, significant vernal pool, Inland Waterfowl & Wading Bird Habitat, or State regulated wetland.

### **Section 6 – Herbicide Treatment Methods**

All formulation to be used shall be specified by the Company and it shall be one of those listed in Section 7 of these specifications.

#### *6.01 Selective Cutting and Stump Treatment*

All tall-growing woody vegetation shall be cut as described in Section 2.02 of these specifications. All stumps of vegetation cut shall be treated in accordance with the following:

A. Application – The formulation shall be applied as described below:

1. Low Volume – The herbicide concentrate is mixed with a mineral oil type carrier specifically designed and labeled for this purpose. The herbicide concentrate comprises 20% to 30% of the total mix. The formulation shall be applied to wet the cut surface, bark, root crown, and exposed roots. Particular attention shall be given to a complete encircling and wetting of the root collar at the ground line.
2. Cut Surface Concentrate – The herbicide is applied as a ready-to-use concentrate or it is diluted with water. The concentrate shall be applied only to the cut surface of the slump. Particular attention shall be given to wetting the entire cambium area next to the bark.

B. Equipment – The application equipment to be used is dependent on the formulation type and shall be as follows:

1. Low Volume – Application to be made with a hand operated backpack sprayer equipped with a Spraying Systems Mode 23L-7676 gun and Spraying System 5500 Y2 Cone Jet nozzle or equivalent gun and nozzle.
2. Cut Surface Concentrate – Application to be made with a hand operated sprayer or trigger operated squirt bottle.

C. Weather Conditions – No application shall be made while rain is falling. Low volume formulations shall not be applied when snow or ice is two or more inches in depth around the stumps to be treated. Cut surface concentrates may be applied when snow or ice is present as long as the cut surface to be treated is free of ice and snow. Stumps treated one hour or less prior to rain shall be treated again but not until one hour after runoff has stopped.

D. Timing – The stump shall be treated before cutting (pre-treat) or immediately after they are cut. Where pre-treat is specified a waiting period between treatment and cutting, established by the Company, shall be observed. Where a pre-treat is utilized, only formulations containing an oil type carrier may be used.

E. Restrictions – The following areas within the ROW are not to be treated with herbicides. Vegetation to be removed shall be cut and disposed of as requested by the Company Representative:

1. ME – see Appendices 8 and 9.
2. Within any orchard, nursery planting, or crop planting.
3. Within active pasture areas unless written permission is obtained from the property owner and the application is not a label violation.

### *6.02 Selective Low Volume Foliar Treatment*

All tall-growing woody vegetation including but not necessarily limited to those listed in Appendix 2 shall be treated. Selective low volume foliar treatment shall be done in accordance with the following:

A. Application – The solution shall be applied so as to partially wet all foliage. Emphasis shall be given to wetting the top and major branches. The applicator shall stand within 5 feet of the target vegetation. Target vegetation greater than 10 feet in height shall be cut and stump treated.

B. Equipment – The herbicide solution shall be applied with either a motorized or hand operated backpack sprayer.

1. Hand Operated Backpacks – Hand operated units shall be equipped with spray guns that have at least two spray tips: one for tall and one for short vegetation.

C. Weather Conditions – Herbicide treatment shall not be done during rain or while rain is dripping from the foliage. Foliage treated one hour or less prior to rain shall be treated again after run-off has stopped.

D. Timing – Herbicide treatment shall be done during the growing season while the foliage is fully developed and still has its normal green color and vigor, approximately from mid-June to the end of August.

F. Restrictions – The following areas within the ROW are not to be treated with herbicides. Vegetation to be removed shall be cut and disposed of as requested by the Company Representative.

1. ME – see Appendices 8 and 9.

2. Within any orchard, nursery, or crop planting.

3. Within active pasture areas or within ten feet of a fence which encloses an active pasture area unless written permission is obtained from the property owner and the application is not a label violation.

4. Areas identified on Company Treatment Maps or in written instructions to the Contractor.

### *6.03 Dormant Stem Treatment*

Dormant Stem Treatment may be used for woody vegetation control outside of the growing season, where traditional foliar applications would otherwise be practical but may yield undesirable consequences, particularly brown-out. Dormant Stem Treatment also affords the opportunity to perform work and minimize disturbance in potential Monarch Butterfly habitat as they overwinter in the South, typically late September through May. While basal or cut stump treatments also offer herbicide control outside of the growing season, Dormant Stem Treatment is most practical for dense, tall stands of undesirable vegetation. However, selectivity shall still be employed.

All tall-growing woody vegetation including but not necessarily limited to those listed in Appendix 2 shall be treated. Dormant Stem Treatment shall be performed in accordance with the following:

- A. Application - The solution shall be applied to the entire stem. The applicator shall apply from within 10 to 15 feet of the target vegetation.
- B. Equipment - The herbicide solution can be applied with backpacks or power-driven equipment. Spray nozzles shall be adjusted to produce a coarse spray of large droplets at a maximum of 50 pounds pressure at the nozzle.
- C. Weather Conditions- Herbicide treatment shall not be performed during rain or while stems are wet. Frozen ground should also be avoided.
- D. Timing - Herbicide treatment shall be performed during the dormant season, preferably in late winter prior to budbreak. No applications shall be made after budbreak or prior to leaf drop.
- E. Restrictions - See Appendix 4 for those areas within the ROW that are not to be treated with herbicides.

#### *6.04 Cut Stubble Treatment*

Cut Stubble Treatment may be used as a follow-up herbicide treatment for long-term control of sites requiring broadcast, access path, or wire zone mechanical cutting outside of the growing season. While avoiding brown-out from conventional foliar follow-up treatment, Cut Stubble Treatment can also be performed immediately after mechanical cutting for up to two weeks, potentially avoiding repeated trips to difficult-to-access sites and repeated disturbance to the soil. Herbicides with residual soil activity may be used, therefore Cut Stubble Treatment shall be avoided on sites where drift and runoff are possible, such as on sandy soils and floodplains.

All restrictions pertaining to Mechanized Cutting in Section 2.03 shall be observed. The stumps/stubble of all woody vegetation shall be treated. Cut Stubble Treatment shall be performed in accordance with the following:

- A. Application – The solution shall be applied to the surfaces of the cut stems and the soil immediately adjacent. The applicator shall apply from within 10 to 15 feet of the target vegetation.
- B. Equipment - The herbicide solution shall be applied with power-driven equipment. Spray nozzles shall be adjusted to produce a coarse spray of large droplets at a maximum of 50 pounds pressure at the nozzle.
- C. Weather Conditions- Herbicide treatment shall not be performed during rain or while stems are wet. Frozen ground should also be avoided.
- D. Timing - Herbicide treatment should be performed during the dormant season but may be performed in the growing season before resprout.

E. Restrictions - See Appendix 4 for those areas within the ROW that are not to be treated with herbicides. Cut Stubble Treatments using herbicides with soil residual activity shall not be used within the Adirondack Park.

## **Section 7 – Herbicide Formulations**

### *7.01 General*

All label restrictions for mixing shall be adhered to. The formulations listed in these specifications specify minimum quantities of active ingredients. The Contractor may increase the quantity of active ingredients as long as label recommendations are not exceeded. The Contractor shall seek the prior approval from the Company Representative concerning any deviation from the formulation specified by the Company.

Trade names are mentioned here only for ease of understanding. It does not constitute endorsement of one product over another. Any product, labeled by the appropriate State and Federal regulatory bodies for the specified use, which meets this specification, may be substituted. Each formulation shall be agitated sufficiently to insure proper mixing.

### *7.02 Adjuvants and Basal Oil Diluents*

Drift control additives, surfactants and basal oil diluents shall be selected from those listed below or an equivalent. Equivalents shall be labeled for such use and approved by the Company Representative prior to use.

#### **A. Drift Control Additives**

1. Arborchem 38-F (Arborchem Products Co.)
2. Driftgard (Custom Chemicides)
3. More (Exacto Chemical Co.)

#### **B. Surfactants**

1. Agri-Dex (Helena Chemical Co.)
2. Arborchem Aquatic Surfactant (Arborchem Products Co.)
3. Arborchem Clean Cut (Arborchem Products Co.)
4. Nu-Film-IR (Miller Chemical Co.)
5. Ortho X-77 (Chevron Chemical Co.)
6. Paraspred Industrial (Custom Chemicides)
7. Unifilm Crop Oil Industrial (Custom Chemicides)

#### **C. Basal Diluents**

1. Arborchem Basal Oil (Arborchem Products Co.)



2. Hy-Grade EC (CWC Chemical, Inc.)

3. Unifilm Basal Bark Oil (Custom Chemicides)

### 7.03 Formulations for Selective Basal and Stump Treatment

ST – stump treatment

| Formula | Treatment Method | Minimum Quantities of Active Ingredient         | Quantity of Concentrate                            | Type and Quantity of Carrier  |
|---------|------------------|---|--|---|
| HE 400  | ST               | 4 lbs.<br>Triclopyr                             | 1 gal. Garlon<br>4 Ultra                           | 3 gallons of an approved mineral oil diluent that is labeled for this purpose |
| HE 401  | ST               | 3 lbs.<br>Triclopyr<br><br>.25 lbs.<br>Imazapyr | 3 qt. Garlon<br>4 Ultra<br><br>16 oz.<br>Stalker   | 3 gallons of an approved mineral oil diluent that is labeled for this purpose |
| HE 705  | ST               | 1.6 lbs.<br>Glyphosate<br>.08 lbs.<br>Imazapyr  | 38 oz.<br>Rodeo<br>Concentrate<br>5 oz.<br>Arsenal | 85 oz. water<br><br>0.64 oz. Milliken or Exacto<br><br>blue dye               |
| HE 600  | ST               | 1 lb. 2,4-D<br>0.25 lb.<br>Picloram             | 1 gal.<br>Pathway                                  | Undiluted   |
| HE 702  | ST               | 2 lbs.<br>Glyphosate                            | 0.5 gal.<br>Rodeo<br>Concentrate<br>(1)            | 0.5 gal. water<br>0.64 oz. Milliken or Exacto<br>blue dye                     |

Trademark of Dow Agrosiences LLC: Garlon 4 Ultra, Rodeo, Pathway

Trademark of BASF Corporation: Arsenal, Stalker

Trademark of Exacto Chemical Company: Exacto dye



#### 7.04 Formulations for Selective Low Volume Foliar Treatment

The Contractor shall add a surfactant, and any other adjuvant recommended on the product label, to the formulation at the manufacturer's recommended rate. Adjuvants shall be selected from those listed under Section 7.02 of these specifications.

| Formula | Minimum Quantities of Active Ingredient                             | Quantity of Concentrate   | Type and Quantity of Carrier |
|---------|---|---|------------------------------|
| HE 500  | 20 lbs. Fosamine<br>0.5 lbs. Imazapyr<br>1.8 oz. Metsulfuron Methyl | 5 gal. Krenite S <sup>(4)</sup><br>32 oz. Arsenal <sup>(3)</sup><br>3 oz. Escort <sup>(4)</sup><br><b>- OR -</b><br>5 gal. Krenite S <sup>(4)</sup><br>13 oz. Lineage Clearstand <sup>(4)</sup><br>1 oz. Escort XP <sup>(4)</sup> | 94.75 gal. Water             |
| HE 700  | 27 lbs. Glyphosate  | 5 gal. Rodeo Concentrate <sup>(5)</sup>   | 95 gal. Water                |
| HE 703  | 21.6 lbs. Glyphosate<br>.75 lbs. Imazapyr                           | 4 gal. Rodeo Concentrate <sup>(5)</sup><br>48 oz. Arsenal <sup>(3)</sup>  | 96 gal. Water                |
| HE 708  | 21.6 lbs. Glyphosate<br>1.8 oz. Metsulfuron Methyl                  | 4 gal. Rodeo Concentrate <sup>(5)</sup><br>3 oz. Escort XP <sup>(4)</sup>   | 96 gal. Water                |

#### Maine Only

|               |   |  |               |
|---------------|---|--|---------------|
| HE 707<br>(6) | 0.2 oz. Glyphosate<br>0.08 fl.oz.<br>Isopropylamine salt of Imazapyr<br>0.025 fl.oz.<br>Triisopropanolammonium salt of 2-Pyridine carboxylic acid | Rodeo Concentrate <sup>(2)</sup> at 4%, Arsenal <sup>(8)</sup> at 0.25% Milestone <sup>(2)</sup> at 0.5% | 95 gal. Water |
|---------------|---|--|---------------|

Vastlan(6) (2.25%), Milestone (0.33%), Liberate (0.5%), 4 oz Escort XP(7) per 100 (0.03%) 96.42 gal. Water

(1) Trademark of Arborchem Product Company

- (2) Trademark of Monsanto Company
- (3) Trademark of BASF Corporation
- (4) Trademark of E.I. DuPont DeNemours & Co., Inc.

- (5) Trademark of Dow Agrosiences LLC
- (6) Trademark of Corteva Agriscience
- (7) Trademark of Bayer

## **Section 8 – Quality Control and Guarantees**

### ***8.01 Completion of Work***

Upon completion of the work, the Contractor reviews the job to insure that:

- A. All specified cutting has been completed and all cut-vegetation has been disposed of in accordance with the job instructions.
- B. All areas scheduled for herbicide application have been treated and all areas where incomplete application is discernible have been retreated.
- C. All Re-dos have been completed to specification.

### ***8.02 Contractor Work Guarantee***

A. The Contractor shall review the job and insure that:

- 1. All specified cutting has been completed and all cut vegetation has been disposed of in accordance with the job instructions.
- 2. The percentage of kill is 100% within the wire zone and at least 95% in the border zone on each site where herbicide treatment was specified and no live incompatibles over 10 foot height.
- 3. Living incompatible species greater than six feet in height found within the wire zone during the final review shall be cut. Where applicable, the stumps shall be treated. Living incompatible species less than six feet in height in the wire zone may receive and LVF treatment, where applicable. All formulations shall be approved by the Company Representative.

Any locations found not in compliance with the above will be corrected as soon as possible by the Contractor and may jeopardize the Contractor's standing under this contract and their future inclusion on the list of approved bidders.

B. Any re-treatment of sites is subject to all provisions and warranty clauses of this contract. No additional compensation is due for any re-treatment activities.

C. Any contractual quality control issues that cannot be readily resolved at the point of concern will be referred to the Company Procurement Department, who will take corrective action with quality deficient suppliers.

D. Upon completion of this review and any necessary correction work, the Contractor shall submit a Contractor Work Guarantee Form (see Appendix 10) certifying that items A, B, and C above have been completed and that the job is submitted for final acceptance by the Company.

1. This statement shall be provided to the Company Representative by December 31 of the treatment year. This is for a review that occurs during the current treatment year and after completion of the work and remedial work. If it is discovered in the subsequent year that the specified herbicide control was not achieved or the remedial work was not completed, then the Contractor will be obligated to correct any issues.

2. If the review is not completed on time, the Company Representative may have the final review performed and any necessary corrective action completed at the expense of the Contractor.

## **Section 9 – Vegetation Ground Patrols**

### *9.01 General Instructions*

A. Upon request, the Contractor shall perform a vegetation ground patrol of electric transmission lines.

B. Patrollers will record Priority 1 and Priority 2 trees, Hazard Trees, and Comments. See Appendix 6.

C. All patrollers must be pre-approved by the Company Representative.

## **APPENDIX 1 - Wire Zones**

The Wire Zone for non-bulk lines is the floor of the ROW that is underneath the conductors.

The Wire Zone for bulk lines is both the floor of the ROW that is underneath the conductors and 15 feet beyond the outside conductors. The 15 feet is measured horizontally from the outermost conductors.

### **Typical Total Arm Length By Construction Type For Tangent Structures**

- 34.5 & 46 kV single pole construction, the arms are eight feet
- 115 kV H-frame, the arms are 29 feet
- 115 kV steel lattice tower, the top and bottom arms are 20 feet 6” and the middle arm is 26 feet 6”
- 230 kV H-frame construction arms are 40 feet
- 345 kV H-frame construction, the arms are 53 feet 2.5”
- 345 kV steel tower, the top and bottom arms are 42 feet and the middle arm is 50 feet

## **APPENDIX 2 - Undesirable Tall Growing Species**

The following is a representative list of tall growing tree species that are considered undesirable in most right-of-way situations. These trees shall be removed from the right-of-way floor if the tree's mature height would intrude into the Minimum Clearance Achieved At The Time of Maintenance zone, as measured under normal operating conditions.

In sites where the conductor height ensures that a mature tree will never reach the Minimum Clearance Achieved At the Time of Maintenance distances or be able to fall into the line, tall-growing tree species may be retained on the ROW as long as there is no undesirable affect on access, construction, reliability, or public safety.

- Ash
- Aspens and Cottonwood
- Basswood
- Beech
- Birches
- Black Gum/Tupelo
- Locusts
- Black Walnut
- Butternut
- Catalpa
- Cedars (possible exception of Red Cedar)
- Cherries (possible exception of Choke Cherry)
- Chestnuts
- Cucumber Tree
- Elms
- Firs
- Hemlock
- Hickories
- Hophornbeam
- Maples
- Mountain Ash
- Oaks (possible exception of Scrub Oak)
- Pines
- Red Mulberry
- Sassafras
- Spruces
- Sycamore
- Tamarack/Larch
- Tree of Heaven
- Tulip/Yellow Poplar
- Willow

### **APPENDIX 3 - Shrubs and Small Trees to Be Retained Under Specific Conditions**

The following is a representative list of shrubs that generally mature at a height of ten feet or less. They may be retained in the wire zone except where its mature height would intrude into the Minimum Clearance Achieved At The Time of Maintenance zone, as measured under normal operating conditions.

Any plant on the right-of-way shall be removed if its mature height would intrude into the Minimum Clearance Achieved At The Time of Maintenance zone, as measured under normal operating conditions..

|                        |                    |
|------------------------|--------------------|
| Alternate Leaf Dogwood | Jerseytea          |
| American Hazelnut      | Mapleleaf Viburnum |
| Arrowood               | Mountain Laurel    |
| Beaked Hazelnut        | Mountain Maple     |
| Blueberry              | Redosier Dogwood   |
| Brambles               | Rhododendron       |
| Bush Honeysuckle       | Rose               |
| Common Elderberry      | Scarlet Elderberry |
| Common Winterberry     | Silky Dogwood      |
| Gray Dogwood           | Spicebush          |
| Hobblebush             | Spirea             |
| Honeysuckle            | Sweetfern          |
| Huckleberry            |                    |

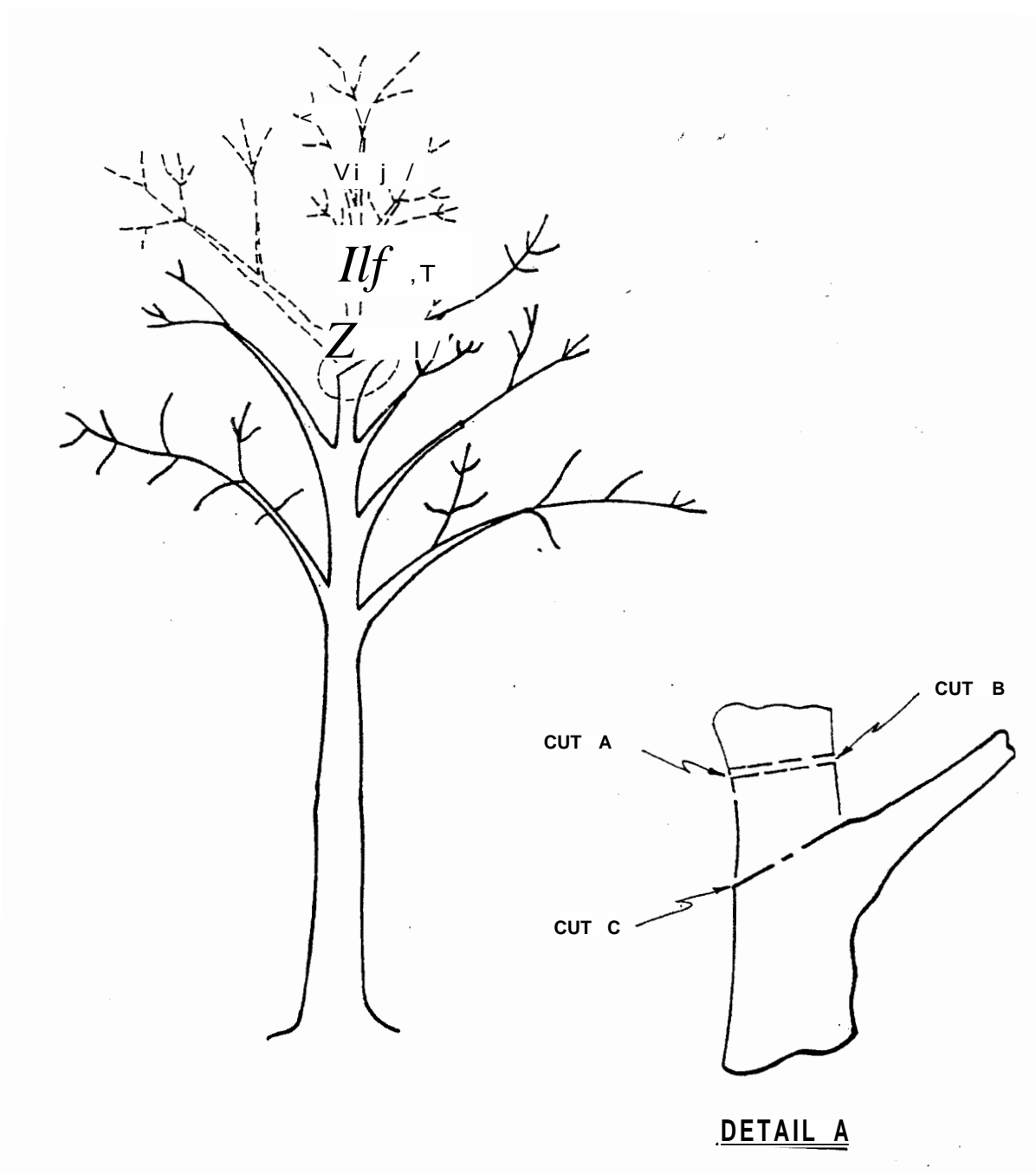
The following is a representative list of tall shrubs and small trees that generally mature at a height greater than ten feet. They are to be retained primarily along the outer edges of the ROW. Any plant on the ROW shall be removed if its mature height would intrude into the Minimum Clearance Achieved At The Time of Maintenance zone, as measured under normal operating conditions.

|                   |                |
|-------------------|----------------|
| American Hornbeam | Red Cedar      |
| Apple             | Scrub Oak      |
| Autumn Olive      | Shadbush       |
| Buckthorn         | Shrub Willow   |
| Choke Cherry      | Speckled Alder |
| Common Pear       | Striped Maple  |
| Flowering Dogwood | Sumac          |
| Hawthorn          | Witchhazel     |
| Hercules' Club    | Witherod       |
| Nannyberry        |                |

#### **APPENDIX 4 - Company Contact Information**

To be provided at a later date

## APPENDIX 5 - Tree Topping Drop Crotch Technique





## APPENDIX 6 – Minimum Clearance Tables

### Maine Clearance Tables for All Rated Operating Conditions

#### Minimum Vegetation Clearance Distance MVCD under all rated operating conditions

| Nominal System Voltage(kV) | Maximum System Voltage(kV) | Over sea level up to 500 ft | Over 500 ft up to 1000 ft | Over 1000 ft up to 2000 ft | Over 2000 ft up to 3000 ft |
|----------------------------|----------------------------|-----------------------------|---------------------------|----------------------------|----------------------------|
| 345                        | 362                        | 3.19ft                      | 3.26ft                    | 3.39ft                     | 3.53ft                     |
| 230                        | 242                        | 3.03ft                      | 3.09ft                    | 3.22ft                     | 3.36ft                     |
| 115 and under              | 121                        | 1.44ft                      | 1.47ft                    | 1.54ft                     | 1.61ft                     |

### Minimum Clearance Achieved At the Time of Maintenance

#### For normal operating conditions

| Minimum Clearance Achieved at the Time of Maintenance | Voltage        |
|---|----------------|
| 17 feet   | 34.5 and 46 kV |
| 20 feet   | 69 and 115 kV  |
| 20 feet   | 230 kV         |
| 25 feet   | 345 kV         |

### Priority 1 and 2 Clearances for Patrols and Inspections

| Priority #1<br>To Be Removed As Soon As Possible |  |
|--|--|
| Voltage (kV)                                     | Distance between vegetation and conductors |
| 35   | 4' or less                                 |
| 46   | 5' or less                                 |
| 69   | 5' or less                                 |
| 115  | 5' or less                                 |
| 230  | 6' or less                                 |
| 345  | 10' or less                                |

| Priority #2<br>To Be Removed before next growing season after identification |  |
|--|--|
| Voltage (kV)   | Distance between vegetation and conductors |
| 35   | > 4' and < 8'                              |
| 46   | > 5' and < 9'                              |
| 69   | > 5' and < 9'                              |
| 115  | > 5' and < 9'                              |
| 230  | > 6' and < 10'                             |
| 345  | > 10' and < 14'                            |

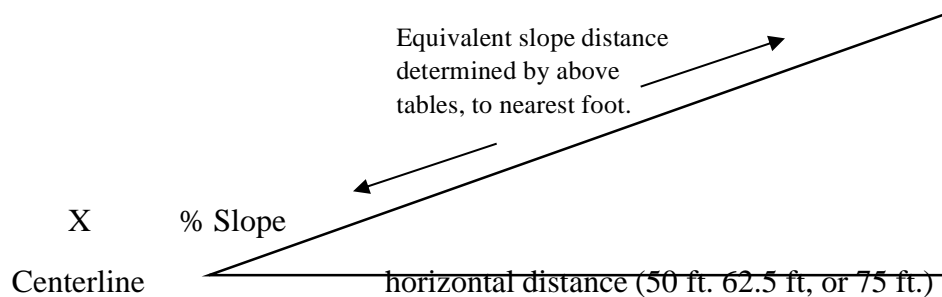
## APPENDIX 7 – ROW Width Tables

### Tables to Determine ROW Widths on Slopes When Horizontal ROW Width is Known

| Horizontal<br>50 Feet |                            |
|-----------------------|----------------------------|
| %<br>Slope            | Feet = to 50<br>horizontal |
| 5%                    | <b>50</b>                  |
| 10%                   | <b>50</b>                  |
| 15%                   | <b>51</b>                  |
| 20%                   | <b>51</b>                  |
| 25%                   | <b>52</b>                  |
| 30%                   | <b>52</b>                  |
| 35%                   | <b>53</b>                  |
| 40%                   | <b>54</b>                  |
| 45%                   | <b>55</b>                  |
| 50%                   | <b>56</b>                  |
| 55%                   | <b>57</b>                  |
| 60%                   | <b>58</b>                  |
| 65%                   | <b>60</b>                  |
| 70%                   | <b>61</b>                  |
| 75%                   | <b>63</b>                  |
| 80%                   | <b>64</b>                  |
| 85%                   | <b>66</b>                  |
| 90%                   | <b>67</b>                  |
| 95%                   | <b>69</b>                  |
| 100%                  | <b>71</b>                  |
| 105%                  | <b>73</b>                  |
| 110%                  | <b>74</b>                  |
| 115%                  | <b>76</b>                  |
| 120%                  | <b>78</b>                  |

| Horizontal<br>62.5 Feet |                              |
|-------------------------|------------------------------|
| %<br>Slope              | Feet = to 62.5<br>horizontal |
| 5%                      | <b>63</b>                    |
| 10%                     | <b>63</b>                    |
| 15%                     | <b>63</b>                    |
| 20%                     | <b>64</b>                    |
| 25%                     | <b>64</b>                    |
| 30%                     | <b>65</b>                    |
| 35%                     | <b>66</b>                    |
| 40%                     | <b>67</b>                    |
| 45%                     | <b>69</b>                    |
| 50%                     | <b>70</b>                    |
| 55%                     | <b>71</b>                    |
| 60%                     | <b>73</b>                    |
| 65%                     | <b>75</b>                    |
| 70%                     | <b>76</b>                    |
| 75%                     | <b>78</b>                    |
| 80%                     | <b>80</b>                    |
| 85%                     | <b>82</b>                    |
| 90%                     | <b>84</b>                    |
| 95%                     | <b>86</b>                    |
| 100%                    | <b>88</b>                    |
| 105%                    | <b>91</b>                    |
| 110%                    | <b>93</b>                    |
| 115%                    | <b>95</b>                    |
| 120%                    | <b>98</b>                    |

| Horizontal<br>75 Feet |                            |
|-----------------------|----------------------------|
| %<br>Slope            | Feet = to 75<br>horizontal |
| 5%                    | <b>75</b>                  |
| 10%                   | <b>75</b>                  |
| 15%                   | <b>76</b>                  |
| 20%                   | <b>76</b>                  |
| 25%                   | <b>77</b>                  |
| 30%                   | <b>78</b>                  |
| 35%                   | <b>79</b>                  |
| 40%                   | <b>81</b>                  |
| 45%                   | <b>82</b>                  |
| 50%                   | <b>84</b>                  |
| 55%                   | <b>86</b>                  |
| 60%                   | <b>87</b>                  |
| 65%                   | <b>89</b>                  |
| 70%                   | <b>92</b>                  |
| 75%                   | <b>94</b>                  |
| 80%                   | <b>96</b>                  |
| 85%                   | <b>98</b>                  |
| 90%                   | <b>101</b>                 |
| 95%                   | <b>103</b>                 |
| 100%                  | <b>106</b>                 |
| 105%                  | <b>109</b>                 |
| 110%                  | <b>111</b>                 |
| 115%                  | <b>114</b>                 |
| 120%                  | <b>117</b>                 |



### APPENDIX 8 - Maine MPRP Restrictions

| Resource                 | Requirements & Restrictions   |
|--------------------------|---|
| Streams & Rivers         | <ol style="list-style-type: none"> <li>1. No herbicide application within 25' of water.</li> <li>2. No herbicide stored, mixed or loaded within 100 feet of any wetland or surface water.</li> <li>3. No fuel storage, vehicle/equipment parking and maintenance, or refueling within 100' of wetland or waterbody.</li> <li>4. No slash left within 50' of stream bank top and no slash higher than 18"</li> <li>5. No slash higher than 18".</li> <li>6. No crossing of salmon streams with equipment.</li> <li>7. ATVs may only cross or be operated within streams (without mats) in those streams not identified as "restricted access".</li> <li>8. For non-capable species, only those greater than 10 feet tall <b>and</b> located within wire zone (15 feet either side of outermost conductor) may be cut.</li> <li>9. Capable species within the 25-foot stream buffer: For 115 kv lines, do not remove capable species under 5 ft height. For 345 kv lines, do not remove capable species under 7 ft height.</li> <li>10. Vegetation removal within the (25' or 100') stream buffer must use hand cutting or reach in techniques</li> </ol> |
| Wetlands                 | <ol style="list-style-type: none"> <li>1. No herbicide application within 25' of water.</li> <li>2. No herbicide stored, mixed or loaded within 100 feet of any wetland or surface water.</li> <li>3. No slash higher than 18".</li> <li>4. Remove slash that falls into water.</li> <li>5. For non-capable species, only those greater than 10 feet tall <b>and</b> located within wire zone (15 feet either side of outermost conductor) may be cut.</li> </ol>   |
| Significant Vernal Pools | <ol style="list-style-type: none"> <li>1. No herbicide application within 25' of vernal pool depression.</li> <li>2. No herbicide stored, mixed or loaded within 100 feet of any wetland or surface water.</li> <li>3. No equipment travel within SVP depression.</li> <li>4. Vegetation removal must use hand cutting or reach in techniques.</li> <li>5. Clearing and mechanical maintenance prohibited within 250' of SVP depression April 1-June 30; hand tools only during this period.</li> <li>6. No vegetation clearing within 25' of SVP depression April 1-June 30.</li> <li>7. No slash left within 50' of SVP depression.</li> <li>8. No slash higher than 18".</li> <li>9. Remove slash that falls into depression.</li> <li>10. For non-capable species, only those greater than 10 feet tall and located within wire zone (15 feet either side of outermost conductor) may be cut.</li> </ol>  |

Continued on next page

|  |   |
|--|---|
| Inland Waterfowl & Wading Bird Habitat | <ol style="list-style-type: none"> <li>1. No herbicide application within 25' of water.</li> <li>2. No herbicide stored, mixed or loaded within 100 feet of any wetland or surface water.</li> <li>3. No clearing April 15 to July 15 without DEP approval.</li> <li>4. No slash left within 50' of IWWH and no slash higher than 18".</li> <li>5. Remove slash that falls into IWWH.</li> <li>6. For non-capable species, only those greater than 10 feet tall and located within wire zone (15 feet either side of outermost conductor) may be cut.</li> <li>7. If not creating safety hazard, must leave 2-3 snags/acre, snags 12" 16" DBH or largest available.</li> </ol>          |
| Deer Wintering Areas                   | <ol style="list-style-type: none"> <li>1. Impacts to scrub-shrub and herbaceous vegetation, and other non-capable species must be minimized to the maximum extent practicable.</li> <li>2. For non-capable species, only those greater than 10 feet tall <b>and</b> located within wire zone (15 feet either side of outermost conductor) may be cut.</li> </ol>  |
| Rare Natural Communities               | <ol style="list-style-type: none"> <li>1. No herbicide application within 25' of water.</li> <li>2. No herbicide stored, mixed or loaded within 100 feet of any wetland or surface water.</li> <li>3. Heavy equipment travel minimized to maximum extent practicable.</li> <li>4. Hand cutting or reach in techniques or other techniques agreed to by DEP and Maine Natural Areas Program.</li> <li>5. When equipment access necessary, activity must be restricted to few narrow travel lanes marked prior to clearing.</li> </ol>  |
| All Areas &/or Other Resources         | <ol style="list-style-type: none"> <li>1. Allow capables to grow in certain ravines/valleys.</li> <li>2. No herbicide application when wind &gt; 15 mph.</li> <li>3. Restrictions on specific herbicides used in riparian areas, SVPs, and IWWH based on mobility &amp; persistence.</li> <li>4. No herbicides within 1007200' or 2007400' of known private/public wells based on Pesticide Leaching Potential (PLP).</li> <li>5. No herbicides within 1007200' or 2007400' of known private/public surface water intakes based on PLP.</li> <li>6. No herbicides within 25' of surface waters, open water wetlands, SVP depressions, rare natural communities, RTE habitat.</li> </ol> |

## **APPENDIX 9 - Maine Special Features and Other Restrictions**

**See excel spreadsheet entitled Appendix 10**

## **APPENDIX 10-A - Vegetation Management Forms**

Contract Start Up Meeting – Work Procedure Review Form

Tree Removal Permission

# CMP Transmission Vegetation Maintenance Contract Start-up Meeting – Work Procedure Review

Service Center \_\_\_\_\_ Treatment Year \_\_\_\_\_

Contractor \_\_\_\_\_ Crew \_\_\_\_\_  
Leader \_\_\_\_\_

Check off items that were discussed

|  |  |
|--|--|
|  | Label precautions                        |
|  | Sensitive areas                          |
|  | Equipment inspection and operation       |
|  | Application procedures                   |
|  | Spill prevention and clean-up procedures |
|  | Species identification                   |
|  | Protection of infrastructure             |
|  | Flagging ROW edges                       |
|  | Other-                                   |

## Certified Pesticide Applicators

Name \_\_\_\_\_

ID # \_\_\_\_\_ Expires \_\_\_\_\_

Name \_\_\_\_\_

ID # \_\_\_\_\_ Expires \_\_\_\_\_

Name \_\_\_\_\_

ID # \_\_\_\_\_ Expires \_\_\_\_\_

## Comments:

Company representative's name \_\_\_\_\_

Company \_\_\_\_\_ Date \_\_\_\_\_

## Tree Removal Permission Form

Line \_\_\_\_\_ Str \_\_\_\_\_

Property Owner Name(s) \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

I (we) am (are) the owner(s) of the property at

\_\_\_\_\_

I (we) hereby grant permission to remove the following danger trees from my (our) property:

\_\_\_\_\_

\_\_\_\_\_

Property Owner(s) Signature(s)

\_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

Name & Company of Permission Person

\_\_\_\_\_

\_\_\_\_\_



## **SUB-ARTICLE 2 - New York State Electric and Gas (NYSEG) Transmission and Sub-Transmission Right of Way Vegetation Maintenance Specifications**

### **Section 1 – General**

#### *1.01 General Instructions*

All vegetation management work shall be conducted in a safe, effective manner according to these specifications and in conformity with Federal and State laws, regulations, permit conditions and approvals obtained by the Company. This includes but is not limited to NERC FAC-003-04, NYSDEC laws and regulations, OSHA Standard 29 CFR 1910:269 - Electric Power Generation, Transmission, and Distribution 29 CFR 1910:269(R), ANSI Z.133.1 Standards and the New York Utility Company Best Management Practices for Preventing the Transportation of Invasive Species.

#### *1.02 Imminent Threat of Outage*

A. The Contractor shall immediately verbally report any observed vegetation-related imminent threats that may cause outages to the appropriate Company Representative. This verbal report is to be given in real time – voice mail messages are not acceptable.

B. If the Contractor is unable to contact the local Company Representative, they shall contact the Transmission Vegetation Manager. If the Contractor is unable to contact the Transmission Vegetation Manager, they shall contact the control center. See Appendix 5 for contact information.

C. Imminent threats include vegetation within the Minimum Approach Distance (a grow in issue) of a Transmission line, and any other vegetation that may imminently enter the Minimum Approach Distance (a fall-in issue) Transmission or Sub-Transmission.

### 1.03 Definitions

|   |  |
|---|--|
| Company   | New York State Electric & Gas  |
| Company Representative                                | Person or persons designated as such by the Company.   |
| Contractor  | Firm that has been awarded a formal contract to perform work described in these specifications.  |
| Buffers   | Areas adjacent to highways, streams, public property, scenic areas, historic areas, or other areas of special concern. May have visual or environmental purpose.   |
| Bulk Transmission Lines                               | The Company transmission lines that are subject to NERC Standard FAC-003-4. These are lines operating above 200 kV and any lines operated below 200 kV that are an element of an Interconnection Reliability Operating Limit (IROL).   |
| Danger Tree   | Any tree that is tall enough to strike an electric supply line.  |
| Disposal Method                                       | A specific technique utilized for disposing of cut vegetation.   |
| Hazard Trees  | A structurally unsound tree that could strike an electric supply line.   |
| Herbicide Applications                                | The application of a chemical herbicide formulation to vegetation for the purpose of removing the vegetation.  |
| Minimum Clearance Achieved At the Time of Maintenance | The radial space around the conductor that creates a wire security zone under normal operating conditions. This distance varies with voltage. Woody species over ten feet in height and capable of growing tall enough to intrude into this zone must be removed at the time vegetation management work is performed. (See Appendix 7) |
| Minimum Vegetation Clearance Distance MVCD            | The radial space around the conductor into which the vegetation is not allowed to grow. This distance is to be maintained under all rated operating conditions, varies with voltage, and is based on the Gallet equation. (See Appendix 7)   |
| Pruning   | The cutting or removal of tree branches to provide specified clearance distance between vegetation and the conductors.   |
| Removal   | The felling or killing of undesirable vegetation.  |
| ROW   | Right-of-way   |
| Sensitive Area  | Areas on the ROW where legal or environmental impacts/concerns require compromises to the general treatment approach.  |
| Selective Treatment                                   | The removal, by herbicide treatment or cutting, of vegetation designated for removal and the retention of vegetation designated  |

|                  |  |
|------------------|--|
|                  | to be preserved.   |
| Sensitive Area   | Areas on the ROW where legal or environmental impacts/concerns require compromises to the general treatment approach.  |
| Slash            | Debris including trees, branches, etc. resulting from cutting.   |
| Sub-Transmission | Lines that carry voltages reduced from the major transmission line system, typically 34.5kV to <69kV, through which power is supplied to regional distribution substations. Sometimes the sub-transmission voltage is tapped along the way for use in industrial or large commercial operations but typically does not supply customers. |
| Treatment Method | A specific technique utilized for removing vegetation from a ROW.  |
| Vernal Pools     | Natural temporary pools of water, usually devoid of fish, that allow for the safe development of natal amphibian and insect species.   |
| Wire Zone        | The floor of the ROW that is underneath the conductors and, for bulk transmission, a specified outer distance measured horizontally from the outermost conductors. See Appendix 1.   |

#### *1.04 Scheduling and Start of Work*

A. Any Bulk Transmission Lines shall be treated first. If a contractor has work in multiple service centers, the work on the bulk lines shall be started first, regardless of which service center the bulk transmission line is in.

B. Prior to the start of work, the Contractor shall submit the approximate work plan (including schedule and herbicide mixes) the Contractor's crew will follow for the treatment year. This schedule is to include any follow-up inspection of the previous treatment year's work.

C. The Contractor shall complete treatment on each transmission & sub-transmission line in the work plan line with as few work interruptions as possible.

#### *1.05 Scope of Work*

##### *A. Obligation of Contractor*

1. Provide notification to the Company regarding starting and stopping of work each day. Such notification and any other daily consultations shall be made in accordance with the specific instructions provided by the Company Representative. Phone numbers for these notifications are to be provided and updated each year.

2. On bulk transmission lines, any refusals of work shall be reported without delay to both the Company Representative and the Transmission Vegetation Manager. This shall be both a verbal and an email report.

3. Enter daily timesheets and treatment records in an electronic device. These are to be transmitted to the Company on a weekly basis unless otherwise instructed. Company may issue a stop work order and/or withhold payment if reports are delinquent.
4. Cut and/or treat all vegetation designated for removal in accordance with these specifications.
5. Inspect No Treatment Sites for work and inform forester of any work.
6. Abide by all State laws, rules, and regulations relating to the application of pesticides.
7. Cut or drop-crotch all danger trees as specified by the Company Representative.
8. Dispose of all cut vegetation in accordance with these specifications and any state regulations.
9. Mark the specified treatment width of each treatment site with a brightly colored marker (paint or flagging). Markers shall be along both edges and shall be at each end of the treatment site and at least 150 feet.
10. Notify the Company Representative of any treatment locations where the previously maintained width is less than the treatment width.
11. Report to the Company Representative any abnormalities on the right-of-way such as encroachments, damaged poles, broken or slack guy wires, etc.
12. Report immediately to the Company Representative any incidents such as damage to facilities, contact with a live conductor, serious personal injuries, etc. If the Company Representative is not immediately available, reports shall be made by (1) calling the appropriate Manager or, (2) calling the appropriate Energy Control Center. In no case is electronic or voice mail reporting to be considered adequate. Contact telephone numbers will be provided and updated regularly.
13. Perform landowner contacts for residential pruning and for other occasional specified property owners.
14. Provide a copy of the landowner notification/permission logs to the Company upon request.
15. Provide protection for existing structures, communication lines, power lines, pipelines, fences, roads, and trees within and adjacent to the ROW.
16. Maintain a designated job foreperson on the project site on a full-time basis during the course of the work performed. The Contractor shall provide the foreperson with the instructions and drawings for the work to be performed. If it becomes necessary to change forepersons, it shall be the responsibility of the Contractor to provide the new foreperson with instructions and drawings.

17. Provide a call phone number for the designated crew leader.
18. Provide a picture ID for all general forepersons, crew forepersons, and any other individuals making property owner contacts. The ID shall include the individual's name and the Contractor's company name.
19. Adequately instruct employees on the selective vegetation retention requirements and environmental protection measures set forth in these specifications.
20. Provide signs displaying the Contractor's Company name for all vehicles used on the right-of-way and for any vehicles used during contacts with property owners for access or notification.
21. Notify the Company Representative at least one week prior to beginning the job or prior to adding a new crew.
22. Report promptly to the Company Representative any inquiry, complaint, or claim received during the course of the work.
23. Provide work zone traffic control in accordance with the state and/or federal Manual of Uniform Traffic Control Devices when working within any public highway right-of-way.
24. Ensure that Contractor employees performing line clearance work near energized conductors shall have received electrical safety training in accordance with OSHA standard 29 CFR 1910.269 and ANSI standard Z 113.1.

#### B. Obligation of the Company

1. Specify to the Contractor the specific treatment methods, disposal methods, and approved herbicide formulations to be utilized.
2. Pre-authorize any changes in the work plan prior to March.
3. Conduct all ROW negotiations with property owners.
4. Provide Treatment Maps of the ROWs to be treated showing all ROW restrictions and sensitive areas and designated hazard trees and side pruning.

#### *1.06 Access*

- A. Existing public roads shall, whenever possible, be used for access to the ROW.
- B. Private access to the ROW shall not be used without the consent of the property owner.
- C. Where private access to the ROW is utilized, the Contractor shall be responsible for any damage thereto.
- D. Contractor will maintain existing access roads/paths by hand cutting the path and its edges during lump sum floor work. Paths must be kept free of brush, slash, and stumps

over 3". Overgrown paths should be cleared to facilitate access where ground conditions permit. The wire zone is the preferred location of access paths. If a path within the wire zone is not possible due to site conditions, a path must still be maintained outside of this zone but still within a company right-of-way. Paths should be hand cut or mowed in conjunction with herbicide when needed and permitted. Paths should be maintained to a minimum of 6 feet to allow for ATV's to travel. If an existing path has been maintained to a width larger than 6 feet, the path should continue to be maintained at this width.

E. Where requested by the Company Representative, to facilitate access for visual inspection of the facilities or for emergency repairs, a 20-foot access path shall be clear cut of all woody vegetation. Where an access road exists, the access road shall serve as the path and it shall be clear cut of all woody vegetation. Where no access road exists, a 20-foot access path shall be clear cut under the conductors. All woody vegetation cut from the path or access road shall be piled to the side of the clear-cut area. Stumps within the clear-cut area shall have a maximum height of three inches unless otherwise requested by the Company Representative. Herbicide treatment shall be performed in accordance with Sections 5 through 7 of this specification. Projects and special assignments for paths can use unit pricing as outlined in the MSA.

#### *1.07 Buffers and Screens*

At road crossings and stream crossings, designated by the Company Representative, additional vegetation shall be left to provide visual screening of the ROW or to provide shade to a stream. In buffer zones that are designated as screens, there may be pruning of select vegetation. In buffers and screens, the following shall apply:

- A. Vehicle traffic shall be restricted to a single lane through the buffer zone.
- B. Vegetation cut in a buffer zone shall be disposed of outside of the buffer zone.
- C. Vegetation designated for removal from buffer zones shall be removed so as not to damage remaining vegetation.
- D. Plants designated by the Company Representative to remain that are inexcusably damaged or removed by the Contractor shall be replaced by the Contractor. Replacements shall be planted at sites selected by the Company with species having total value equal to those damaged.
- E. For lines below 69 kV, trees designated for topping by the Company Representative shall be topped as described in Section 2.02 of these specifications. Unless there is a legal restriction, there shall be no topping of trees on lines at or above 69 kV.

#### *1.08 Crossing of Streams, Wetlands, Significant Vernal Pools, and Wet Areas*

While working in the immediate area of streams, wetlands, vernal pools, or wet areas, the Contractor shall

- A. Comply with all applicable Federal, State, and local laws and regulations; and the rules and regulations of any agency having jurisdiction over any crossing of a stream or wet area.

B. Employ all necessary precautions to protect the waterway from pollution caused by vehicular movement or disturbance to the stream bed and banks.

C. Where access roads are not indicated and crossings are not prohibited, the Contractor shall limit vehicular crossings of streams and wet areas to one location. The Contractor shall limit the number of times any one stream or wet area is crossed with vehicles to the minimum number necessary for completion of the work.

D. The Contractor shall be responsible for repairing any damage such as deep ruts or scarified areas which in the opinion of the Company Representative could cause erosion.

#### *1.09 Working in Regulated and Other Sensitive Areas*

A. Contractor will conspicuously flag the edges of any regulated or sensitive areas as needed.

B. No herbicide shall be stored, mixed, or loaded within 100 feet of any wetland or surface water.

C. No fuel storage, vehicle/equipment parking and maintenance, or refueling within 100 feet of any wetland or waterbody.

D. NYS DEC Regulated Wetlands – Any herbicide application within a NYSDEC regulated wetland and/or its 100-foot boundary requires a permit. If a permit is obtained, Contractor shall understand and abide by all permit requirements. In the absence of a permit, NYSDEC regulated wetlands and its 100-foot boundaries are to be hand-cut. On the Company's VMS Treatment Maps, NYSDEC regulated wetlands are designated by a green symbol (see legend of VMS map).



## Section 2 – Floor Treatment Methods

### 2.01 General Instructions

- A. Any discrepancies between field conditions and instructions for completion of work are to be reported to the Company Representative.
- B. It is the responsibility of the Contractor to perform the work as specified and ensure that all vegetation scheduled for removal is treated to the specified width.
  - 1. Unless it is a specified trim area, (certain screens and buffers) there will be no pruning of vegetation rooted in the ROW.
  - 2. Removal of trees less than 6 inches DBH within the designated treatment area is part of the contract. For trees greater than 6 inches DBH that are rooted within the treatment area of right-of-way, the Contractor is to inform the Company.
- C. Treatment of lines in NYS is on a per corridor basis unless otherwise noted on treatment maps. See treatment sites for treatment widths and detailed instructions.
- D. The New York State cycle length is six years.

### 2.02 Selective Treatment

The following shall apply in areas designated for selective treatment:

- A. Selective treatment shall be performed utilizing one of the following methods as described in Section 6 of these specifications:
  - 1. Selective Basal Treatment (B) *NYS only*
  - 2. Selective Cutting (HC)
  - 3. Selective Cutting and Stump Treatment (ST)
  - 4. Selective Stem Foliar Treatment (SF) *NYS only*
  - 5. Selective Low Volume Foliar Treatment (LVF)
- B. All tall-growing woody vegetation including but not necessarily limited to those listed in Appendix 2 shall be removed by cutting and/or herbicide application as specified. The only exemptions are:
  - 1. NYS screens on 35 and 46 kV lines where vegetation has been designated for topping or side pruning.
  - 2. Ravine and valley crossings where conductor height at maximum sag (under all rated operating conditions) and sway is sufficient to allow for all species to remain at their mature height. The Company Representative shall determine at what point, in ravines and valleys, treatment should cease.
  - 3. Easement restrictions.
  - 4. Maintenance Agreements. These are formal written agreements where a



landowner agrees to maintain, at their cost and to our specifications, the vegetation in the right-of-way. Contractor crews will be notified of these locations, and they are not to cut or spray the brush within the ROW corridor. The Contractor will still perform all edge and screen work but no herbicide is to be used by the Contractor.

C. All low-growing vegetation including but not necessarily limited to those listed in Appendix 3 shall be retained, except:

1. Those capable of growing tall-enough to intrude into the Minimum Clearance Achieved at the Time of Maintenance (see Appendix 7).
2. As otherwise requested by the Company Representative.

D. All woody vegetation within 15 feet of a structure and all vines growing on guy wires, poles or towers shall be removed by hand cutting in conjunction with herbicide application as specified. Vegetation and slash must be removed from the immediate 5' zone around the infrastructure within treatment sites and as additionally specified by the Company Representative.

E. Low-growing woody vegetation shall, when possible, be avoided by vehicles used for traversing the ROW. Where driving over low-growing vegetation cannot be avoided, any low-growing vegetation which is damaged shall be cut and lopped so as to be in close contact with the ground.

F. Each herbicide applicator, saw operator, and equipment operator shall be able to differentiate between those species which are to be treated and those that are to be retained.

G. For manual cutting the following shall apply:

1. Trees to be removed shall be cut to a maximum stump height of 3 inches.
2. Stumps shall have a smooth surface, free of splinters.
3. Cut vegetation shall be disposed of by one of the methods described in Section 4 of these specifications as requested by the Company Representative.
4. Care shall be taken in felling tree such that they do not fall into power and communications lines, pavements, roads, etc. See Section 3.02 Procedures for Widening and Danger Trees.
5. Care shall be taken to avoid damage to compatible vegetation being retained.

### *2.03 Mechanized Cutting*

Mechanized cutting may be specified for selective sites such as electric rights-of-way and on non-selective sites such as wire zones, access paths, and pipelines. Mechanized cutting shall be performed by cutting all woody vegetation within the ROW, except as noted below, with rotary or flail type cutters. Any portion of the treatment site that cannot be mechanically cut shall be hand cut. In addition to Section 2.02, mechanized cutting shall be performed in accordance with the following:

A. Contractor shall maintain a non-mowing zone of at least 15 feet around all infrastructures. The non-mowing zone shall be hand-cut. While it is permissible to drive

forward through the zone to access other areas, no backing or mowing operation will be allowed within that zone. All vines growing on guy wires, poles, or towers shall be hand-cut and removed.

B. Contractor shall flag all guy wires and structures. Flagging shall be as high as the worker can reach. At all times, Contractor shall protect structures, guys, communication lines, power lines, pipelines, fences, roads, and trees to remain within and adjacent to the ROW.

C. Vegetation shall be cut to a maximum stump height of 6 inches except for access roads which shall be cut to a maximum stump height of 3 inches.

D. Slash shall be cut so that it lies in close contact with the ground. Vegetation shall be cut so that slash and other debris do not enter waterbodies, highways, lawn areas, agricultural fields, or other areas where personal injury or property damage could result.

E. Where wet ground conditions would result in rutting, incompatible vegetation shall be hand cut as per Section 2.02 of this specification. The slash resulting from selective cutting shall be disposed of as specified by the Company Representative.

F. Streams – Where stream crossings are allowed, streams shall be crossed at one point only. Vegetation to be cut from stream banks shall be selectively cut as per Section 2.02 of this specification. Slash shall be removed from areas subject to flooding.

G. Deep ruts or erosion caused by mechanical cutting shall be repaired by the contractor and seeded with a conservation seed mix approved by the Company Representative.

### **Section 3 – Edge Treatment Methods**

Any discrepancies between field conditions and instructions for completion of work are to be reported to the Company Representative.

#### *3.01 Pruning*

A. Side Pruning – Where side pruning is specified the following shall apply:

2. The Company Representative shall specify whether trees shall be side pruned to the cutting line or back to the trunk.
3. The Company Representative may authorize mechanical ground side pruning or aerial side pruning in rural off-road areas.
4. Limbs shall be felled inside the ROW to avoid damage to trees and property outside the ROW. Caution shall be taken to see that the falling limbs do not come into contact with conductors, guys, poles, or other facilities.
5. Cut material shall be disposed of by the disposal method designated by the Company Representative as described in Section 4 of these specifications.

B. Topping and Pruning

1. Trees shall be topped to the specified height utilizing the drop-crotch technique by pruning to a lateral at least 1/3 the diameter of the cut. See Appendix 6, Drawing No. S-12,458.
2. Cut material shall be disposed in accordance with Section 4 of these specifications.
3. There will be no pruning of non-screen trees that are rooted within the ROW. These trees are to be removed.

#### *3.02 Procedures for Widening and Danger Trees*

A. Trees that are located outside the minimum approach distances that could fall into an energized conductor shall not be removed until:

1. The tree has been topped to a height that makes it impossible to fall into the line or;
2. The tree has been rope-guyed to prevent it from falling into the line and the Company Representative has informed the Contractor that the recloser circuit “off” switch has been placed in the off position.

## **Section 4 – Slash Disposal**

### *4.01 General Instructions*

A. Cut vegetation shall be removed from the following locations if no other permit conditions exist:

1. Access roads.
2. Within 15 feet of a structure.
3. In ditches, inside the bed or bank of streams, or in low-lying areas where water flow would be disrupted.
4. In agricultural fields.
5. In areas maintained as lawns.
6. Within 25 feet of a road.

B. Vegetation cut from scattered areas, fence ROWs, or isolated trees in cultivated areas shall be removed and placed along the nearest fence line or accepted area for piling.

C. Contractor will make special efforts to ensure that toxic vegetation is disposed of outside of active pasture areas.

D. In those locations where vegetation is cut and no method of disposal is specified, the Lop and Scatter method of disposal shall be utilized in accordance with section 2.02 of this specification.

### *4.02 Piling*

Where cut vegetation is to be piled, the piles shall have a maximum height of 3 feet and a maximum width of 15 feet. The piles shall have a 20-foot break every 100 feet of pile length to serve as a fire break. Piles shall have a neat and orderly appearance, void of any excessive protruding material.

A. Piling With Equipment – Piling with equipment shall be performed in accordance with the following:

1. Cut vegetation shall be carried or dragged, not pushed, to pile locations.
2. Piles shall be compacted to less than the specified maximum height by traversing with tracked vehicles and/or other equipment.

B. Hand Piling – Where cut vegetation is piled by hand, the piles shall be compacted to less than the specified maximum height by cutting with chainsaws.

#### *4.03 Chipping*

Cut vegetation shall be reduced to chips by the use of an approved chipping machine in accordance with the following:

- A. Chips shall be disposed of such that chips accumulate to depths no greater than 4 inches to serve as mulch for erosion control purposes.
- B. No chips shall enter any watercourse or wetland area.
- C. Vegetation which cannot be chipped shall be disposed of by another method approved by the Company Representative.

#### *4.04 Lop and Scatter*

- A. Trees to be removed shall be felled, delimbed of all branches greater than 2 inches in diameter and cut into sections such that the entire length of each tree is in close contact with the ground. Vegetation disposed of in this manner shall not protrude more than 2 feet above the surface of the ground.
- B. Where an access road exists, cut vegetation shall not be disposed of within the access road. Where no access road exists, a 20-foot swath, directly under the conductors, shall remain clear of cut vegetation.

### **Section 5 – Herbicide Applications**

#### *5.01 General*

- A. The Contractor shall abide by all State laws, rules, and regulations relating to the application of pesticides.
  - 1. NY – Contractor shall be registered with the New York State Department of Environmental Conservation as a Pesticide Applicator Business.
  - 2. PA – Contractor shall hold a commercial pesticide application license by the Pennsylvania Secretary of Agriculture.
- B. The application of herbicides shall be performed in accordance with the product label, appropriate governmental regulations, and these specifications. The Contractor shall be in compliance with the OSHA Hazard Communication standard 29 CFR 1910.1200.
- C. All herbicide applications shall be done in a manner that will prevent damage to trees and property outside the ROW.
- D. Application shall be discontinued when windy conditions may result in off-target herbicide drift.
- E. The Company shall consider unskilled or careless application by workers as just cause for stopping work or cancellation of the contract.
- F. Foliar spray units shall be refilled with water from a supply vehicle. Water shall not be pumped directly from a water source into the spray tank.

G. Herbicide concentrate shall not be transported on a vehicle used for supplying water to foliar spray equipment.

H. Each vehicle used for herbicide application or for transportation of herbicide concentrate on the right-of-way shall be equipped with a shovel and absorptive material for containing and controlling spills. All herbicide spills shall be reported immediately to the Company Representative.

I. All evergreens over 3 feet in height that are scheduled to be removed shall be cut and disposed of unless otherwise directed. Evergreens under 3 feet in height that are scheduled to be removed may receive a foliar application.

J. Pitch pine is to be stump treated.

K. The Contractor shall periodically review the results of the work to ensure adequate coverage of target species.

#### *5.02 Security of Equipment and Herbicides*

The Contractor shall take the following precautions to protect his equipment and materials from vandalism and unauthorized use when left unattended on the ROW or on Company property not within a locked fence:

A. Power-pack or back-pack sprayers shall be emptied or stored in locked compartments.

B. Ignition keys shall be removed for all vehicles used for herbicide treatment, vehicles containing herbicide concentrate, or herbicide solution.

C. Ignition keys shall be removed from engines which provide power to pumps on power-driven spray equipment. Engines without lockable ignition systems shall have the sparkplug wire disconnected or made inoperable in some similar fashion.

D. The opening to the spray tank, on power spray units, shall be locked.

E. Drains on spray tanks shall be fitted with lockable valves or threaded caps.

F. Containers carrying herbicide concentrate shall be securely locked or bolted to spray units or other vehicles used to transport herbicide concentrate.

G. Valves or barrel pumps on containers carrying herbicide concentrate shall be locked or removed and replaced with threaded plugs. Threaded plugs shall be mechanically tightened to prevent removal by hand.

H. The pressure control valve shall be closed.

I. Any equipment used for operations involving herbicide applications shall not be left unattended within 100 feet of any stream, waterbody, significant vernal pool, Inland Waterfowl & Wading Bird Habitat, or State regulated wetland.

## Section 6 – Herbicide Treatment Methods

All formulation to be used shall be specified by the Company and it shall be one of those listed in Section 7 of these specifications.

### 6.01 *Selective Cutting and Stump Treatment*

All tall-growing woody vegetation shall be cut as described in Section 2.02 of these specifications. All stumps of vegetation cut shall be treated in accordance with the following:

A. Application – The formulation shall be applied as described below:

1. Low Volume – The herbicide concentrate is mixed with a mineral oil type carrier specifically designed and labeled for this purpose. The herbicide concentrate comprises 20% to 30% of the total mix. The formulation shall be applied to wet the cut surface, bark, root crown, and exposed roots. Particular attention shall be given to a complete encircling and wetting of the root collar at the ground line.

2. Cut Surface Concentrate – The herbicide is applied as a ready-to-use concentrate or it is diluted with water. The concentrate shall be applied only to the cut surface of the slump. Particular attention shall be given to wetting the entire cambium area next to the bark.

B. Equipment – The application equipment to be used is dependent on the formulation type and shall be as follows:

1. Low Volume – Application to be made with a hand operated backpack sprayer equipped with a Spraying Systems Mode 23L-7676 gun and Spraying System 5500 Y2 Cone Jet nozzle or equivalent gun and nozzle.

2. Cut Surface Concentrate – Application to be made with a hand operated sprayer or trigger operated squirt bottle.

C. Weather Conditions – No application shall be made while rain is falling. Low volume formulations shall not be applied when snow or ice is two or more inches in depth around the stumps to be treated. Cut surface concentrates may be applied when snow or ice is present as long as the cut surface to be treated is free of ice and snow. Stumps treated one hour or less prior to rain shall be treated again but not until one hour after runoff has stopped.

D. Timing – The stump shall be treated before cutting (pre-treat) or immediately after they are cut. Where pre-treat is specified a waiting period between treatment and cutting, established by the Company, shall be observed. Where a pre-treat is utilized, only formulations containing an oil type carrier may be used.

E. Restrictions – The following areas within the ROW are not to be treated with herbicides. Vegetation to be removed shall be cut and disposed of as requested by the Company Representative:

1. NYS – see Appendix 4.

2. Within any orchard, nursery planting, or crop planting.
3. Within active pasture areas unless written permission is obtained from the property owner and the application is not a label violation.

#### *6.02 Selective Low Volume Foliar Treatment*

All tall-growing woody vegetation including but not necessarily limited to those listed in Appendix 2 shall be treated. Selective low volume foliar treatment shall be done in accordance with the following:

A. Application – The solution shall be applied so as to partially wet all foliage. Emphasis shall be given to wetting the top and major branches. The applicator shall stand within 5 feet of the target vegetation. Target vegetation greater than 10 feet in height shall be cut and stump treated.

B. Equipment – The herbicide solution shall be applied with either a motorized or hand operated backpack sprayer.

1. Hand Operated Backpacks – Hand operated units shall be equipped with spray guns that have at least two spray tips: one for tall and one for short vegetation.

2. NYS Only – Motorized Backpacks – Motorize units shall operate at pressures from 50 to 90 p.s.i. and be used in conjunction with a foam adjuvant. The spray gun shall be equipped with at least two foam generating spray tips: one for tall and one for short vegetation.

C. Weather Conditions – Herbicide treatment shall not be done during rain or while rain is dripping from the foliage. Foliage treated one hour or less prior to rain shall be treated again after run-off has stopped.

D. Timing – Herbicide treatment shall be done during the growing season while the foliage is fully developed and still has its normal green color and vigor, approximately from mid-June to the end of August.

F. Restrictions – The following areas within the ROW are not to be treated with herbicides. Vegetation to be removed shall be cut and disposed of as requested by the Company Representative.

1. NYS – see Appendix 4.
2. Within any orchard, nursery, or crop planting.
4. Within active pasture areas or within ten feet of a fence which encloses an active pasture area unless written permission is obtained from the property owner and the application is not a label violation.
5. Areas identified on Company Treatment Maps or in written instructions to the Contractor.



### *6.03 NYS Only: Selective Basal Treatment*

All tall-growing woody vegetation including but not necessarily limited to those listed in Appendix 2 shall be treated. Selective basal treatment shall be done in accordance with the following:

A. Application – The solution shall be applied to each stem from a point 18 inches high on the stem to ground line completely encircling the stem and any exposed roots. The solution shall be applied only to wet the stem and all exposed roots. Where sprout growth originates from a stump, the treatment shall also be applied to completely encircle the stump and any exposed roots.

B. Equipment – Application to be made with a hand operated backpack sprayer equipped with a Spraying System Model 23L-7676 gun and Spraying Systems 5500 Y2 Cone Jet nozzle or equivalent gun and nozzle.

C. Weather Conditions – No applications shall be made while rain is falling or when snow or ice is two inches or more in depth around the stems to be treated. Stems treated one hour or less prior to rain shall be treated again but not until one hour after runoff has stopped.

D. Restrictions – See Appendix 4 for those areas within the ROW that are not to be treated with herbicides. Vegetation to be removed shall be cut and disposed of as requested by the Company Representative.

#### *E. Special Conditions*

1. All species of oak greater than two inches in diameter shall be cut and the stumps treated when using Garlon 4.
2. All species of ash, oak, and hickory shall be cut and stump treated when treatment occurs between September 15 and March 1.
3. In areas where the visual impact of brownout is a concern, professional judgment will determine the maximum height of vegetation to be treated with the basal method.

### *6.04 NYS Only: Selective Stem Foliar Treatment*

All tall-growing woody vegetation including but not necessarily limited to those listed in Appendix 2 shall be treated. Selective stem foliar treatment shall be done in accordance with the following:

A. Application – The solution shall be applied so as to thoroughly wet the entire stem and foliage to achieve runoff. The applicator shall stand within 10 to 15 feet of the target vegetation.

B. Equipment – The herbicide solution shall be applied with power-driven equipment. Spray nozzles shall be adjusted to produce a coarse spray of large droplets at a maximum of 50 pounds pressure at the nozzle. Orifice disc shall be No. 8 or larger.

C. Weather Conditions – Herbicide treatment shall not be done during the rain or while rain is dripping from the foliage. Foliage treated one hour or less prior to rain shall be treated again after runoff has stopped.

D. Timing – Herbicide treatment shall be done during the growing season while the foliage is fully developed and still has its normal green color and vigor, approximately from mid-June to the end of August.

E. Restrictions – See Appendix 4 for those areas within the Row that are not to be treated with herbicides. Vegetation to be removed shall be cut and disposed of as requested by the Company Representative.

#### *6.05 NYS Only: Access Path and Wire Zone Follow-up Treatment*

A selective stem foliar treatment shall be applied to areas cleared for access paths or wire zones and designated for follow-up herbicide treatment by the company representative. The method is selective in order to retain grasses and broad leaf weeds for erosion control. This selective stem foliar treatment shall be applied one year after initial path clearing and in accordance with the following:

A. Application – The herbicide formulation shall be uniformly applied over the area to be treated so as to wet all vegetation in the treated area. Each successive application pattern shall overlap the previous pattern to avoid untreated strips.

B. Equipment – The herbicide solution shall be applied with power-driven equipment. Spray nozzles shall be adjusted to produce a coarse spray of large droplets at a maximum of 50 pounds pressure at the nozzle. Orifice disc shall be No. 8 or larger.

C. Weather Conditions – Herbicide treatment shall not be done during rain or while rain is dripping from the foliage. Foliage treated one hour or less prior to rain shall be treated again after runoff has stopped.

D. Timing – Herbicide treatment shall be done during the growing season while the foliage is fully developed and still has its normal green color and vigor, approximately from mid-June to the end of August.

E. Restrictions – See Appendix 4 for those areas within the ROW that are not to be treated with herbicides. Vegetation to be removed shall be cut and disposed of as requested by the Company Representative.

#### *6.06 Dormant Stem Treatment*

Dormant Stem Treatment may be used for woody vegetation control outside of the growing season, where traditional foliar applications would otherwise be practical but may yield undesirable consequences, particularly brown-out. Dormant Stem Treatment also affords the opportunity to perform work and minimize disturbance in potential Monarch Butterfly habitat as they overwinter in the South, typically late September through May. While basal or cut stump treatments also offer herbicide control outside of the growing season, Dormant

Stem Treatment is most practical for dense, tall stands of undesirable vegetation. However, selectivity shall still be employed.

All tall-growing woody vegetation including but not necessarily limited to those listed in Appendix 2 shall be treated. Dormant Stem Treatment shall be performed in accordance with the following:

A. Application - The solution shall be applied to the entire stem. The applicator shall apply from within 10 to 15 feet of the target vegetation.

B. Equipment - The herbicide solution can be applied with backpacks or power-driven equipment. Spray nozzles shall be adjusted to produce a coarse spray of large droplets at a maximum of 50 pounds pressure at the nozzle.

C. Weather Conditions- Herbicide treatment shall not be performed during rain or while stems are wet. Frozen ground should also be avoided.

D. Timing - Herbicide treatment shall be performed during the dormant season, preferably in late winter prior to budbreak. No applications shall be made after budbreak or prior to leaf drop.

E. Restrictions - See Appendix 4 for those areas within the ROW that are not to be treated with herbicides.

#### *6.07 Cut Stubble Treatment*

Cut Stubble Treatment may be used as a follow-up herbicide treatment for long-term control of sites requiring broadcast, access path, or wire zone mechanical cutting outside of the growing season. While avoiding brown-out from conventional foliar follow-up treatment, Cut Stubble Treatment can also be performed immediately after mechanical cutting for up to two weeks, potentially avoiding repeated trips to difficult-to-access sites and repeated disturbance to the soil. Herbicides with residual soil activity may be used, therefore Cut Stubble Treatment shall be avoided on sites where drift and runoff are possible, such as on sandy soils and floodplains.

All restrictions pertaining to Mechanized Cutting in Section 2.03 shall be observed. The stumps/stubble of all woody vegetation shall be treated. Cut Stubble Treatment shall be performed in accordance with the following:

A. Application – The solution shall be applied to the surfaces of the cut stems and the soil immediately adjacent. The applicator shall apply from within 10 to 15 feet of the target vegetation.

B. Equipment - The herbicide solution shall be applied with power-driven equipment. Spray nozzles shall be adjusted to produce a coarse spray of large droplets at a maximum of 50 pounds pressure at the nozzle.

C. Weather Conditions- Herbicide treatment shall not be performed during rain or while stems are wet. Frozen ground should also be avoided.

D. Timing - Herbicide treatment should be performed during the dormant season but may be performed in the growing season before resprout.

E. Restrictions - See Appendix 4 for those areas within the ROW that are not to be treated with herbicides. Cut Stubble Treatments using herbicides with soil residual activity shall not be used within the Adirondack Park.

## **Section 7 – Herbicide Formulations**

### *7.01 General*

All label restrictions for mixing shall be adhered to. The formulations listed in these specifications specify minimum quantities of active ingredients. The Contractor may increase the quantity of active ingredients as long as label recommendations are not exceeded. The Contractor shall seek the prior approval from the Company Representative concerning any deviation from the formulation specified by the Company.

Trade names are mentioned here only for ease of understanding. It does not constitute endorsement of one product over another. Any product, labeled by the appropriate State and Federal regulatory bodies for the specified use, which meets this specification, may be substituted. Each formulation shall be agitated sufficiently to insure proper mixing.

### *7.02 Adjuvants and Basal Oil Diluents*

Drift control additives, surfactants and basal oil diluents shall be selected from those listed below or an equivalent. Equivalents shall be labeled for such use and approved by the Company Representative prior to use.

#### **A. Drift Control Additives**

1. Arborchem 38-F (Arborchem Products Co.)
2. Driftgard (Custom Chemicides)
3. More (Exacto Chemical Co.)

#### **B. Surfactants**

1. Agri-Dex (Helena Chemical Co.)
2. Arborchem Aquatic Surfactant (Arborchem Products Co.)
3. Arborchem Clean Cut (Arborchem Products Co.)
4. Nu-Film-IR (Miller Chemical Co.)
5. Ortho X-77 (Chevron Chemical Co.)
6. Paraspred Industrial (Custom Chemicides)
7. Unifilm Crop Oil Industrial (Custom Chemicides)

#### **C. Basal Diluents**

1. Arborchem Basal Oil (Arborchem Products Co.)
2. Hy-Grade EC (CWC Chemical, Inc.)
3. Unifilm Basal Bark Oil (Custom Chemicides)

### 7.03 Formulations for Selective Basal and Stump Treatment

B – low volume basal – NYS Only

ST – stump treatment

| Formula | Treatment Method | Minimum Quantities of Active Ingredient         | Quantity of Concentrate                            | Type and Quantity of Carrier  |
|---------|------------------|---|--|---|
| HE 400  | Basal & ST       | 4 lbs.<br>Triclopyr                             | 1 gal. Garlon<br>4 Ultra                           | 3 gallons of an approved mineral oil diluent that is labeled for this purpose |
| HE 401  | Basal & ST       | 3 lbs.<br>Triclopyr<br><br>.25 lbs.<br>Imazapyr | 3 qt. Garlon<br>4 Ultra<br><br>16 oz.<br>Stalker   | 3 gallons of an approved mineral oil diluent that is labeled for this purpose |
| HE 705  | ST               | 1.6 lbs.<br>Glyphosate<br>.08 lbs.<br>Imazapyr  | 38 oz.<br>Rodeo<br>Concentrate<br>5 oz.<br>Arsenal | 85 oz. water<br><br>0.64 oz. Milliken or Exacto<br><br>blue dye               |
| HE 600  | ST               | 1 lb. 2,4-D<br>0.25 lb.<br>Picloram             | 1 gal.<br>Pathway                                  | Undiluted   |
| HE 702  | ST               | 2 lbs.<br>Glyphosate                            | 0.5 gal.<br>Rodeo<br>Concentrate<br>(1)            | 0.5 gal. water<br>0.64 oz. Milliken or Exacto<br>blue dye                     |

Trademark of Dow Agrosiences LLC: Garlon 4 Ultra, Rodeo, Pathway

Trademark of BASF Corporation: Arsenal, Stalker

Trademark of Exacto Chemical Company: Exacto dye

#### 7.04 Formulations for Selective Stem Foliar Treatment – NYS Only

The Contractor shall add a drift control additive, a surfactant and any other adjuvant specified on the product label to all selective stem foliar treatment formulations. These adjuvants shall be mixed according to the manufacturer's directions. Adjuvants shall be selected for those listed under Section 7.02 of these specifications.

| Formul<br>a   | Minimum Quantities<br>of Active Ingredient                               | Quantity of Concentrate  | Type and Quantity of<br>Carrier |
|---------------|--|--|---------------------------------|
| HE 402<br>(6) | 2.25 lbs. Triclopyr<br>0.6 oz. Metsulfuron<br>Methyl                     | 3 qts. Garlon 3A <sup>(2)(7)</sup><br>1 oz. Escort XP <sup>(3)</sup>   | 99.25 gal. Water                |
| HE 403        | 1.5 lb. Triclopyr<br>0.5 lb. Picloram                                    | 0.5 gal. Garlon 3A <sup>(2)(7)</sup><br>1 qt. Tordon K <sup>(2)</sup>  | 99.25 gal. Water                |
| HE 501        | 6 lbs. Fosamine<br>1.5 oz. Imazapyr<br>0.6 oz. Metsulfuron<br>Methyl     | 1.5 gal. Krenite S <sup>(3)</sup><br>6 oz. Arsenal <sup>(8)</sup><br>1 oz. Escort XP <sup>(3)</sup><br><b>- OR -</b><br>1.5 gal. Krenite S <sup>(3)</sup><br>2.4 oz. Lineage Clearstand <sup>(3)</sup><br>0.6 oz. Escort XP <sup>(3)</sup> | 98.5 gal. Water                 |
| HE 701<br>(6) | 5.4 lbs. Glyphosate  | 4 qts. Rodeo Concentrate <sup>(2)</sup>  | 99 gal. Water                   |
| HE 704        | 5.4 lbs. Glyphosate<br>1.5 oz. Imazapyr                                  | 4 qts. Rodeo Concentrate <sup>(2)</sup><br>6 oz. Arsenal <sup>(8)</sup>  | 99 gal. Water                   |
| HE 706        | 5.4 lbs. Glyphosate<br>1.5 oz. Imazapyr<br>0.5 oz. Metsulfuron<br>Methyl | 4 qts. Rodeo Concentrate <sup>(2)</sup><br>6 oz. Arsenal <sup>(8)</sup><br>0.5 oz. Escort XP <sup>(3)</sup>  | 99 gal. Water                   |
| HE 709<br>(6) | 4 lbs. Glyphosate<br>0.6 oz Metsulfuron<br>Methyl                        | 3 qts. Rodeo Concentrate <sup>(2)</sup><br>1 oz. Escort XP <sup>(3)</sup>  | 99.25 gal. Water                |

(1) Trademark of Arborchem Product Company

(2) Trademark of Dow Agrosiences LLC

(3) Trademark of E.I. DuPont DeNemours & Co., Inc.

(4) Trademark of Monsanto Company

(5) Trademark of Exacto Chemical Company

(6) Add surfactant at the rate of 2 qts. per 100 gal. mix.

(7) 0.5 gal. of Garlon 4 Ultra may be substituted for Garlon 3A with the written authorization of the Company Representative.

(8) Trademark of BASF Corporation

### 7.05 Formulations for Selective Low Volume Foliar Treatment

The Contractor shall add a surfactant, and any other adjuvant recommended on the product label, to the formulation at the manufacturer's recommended rate. Adjuvants shall be selected from those listed under Section 7.02 of these specifications.

| Formula | Minimum Quantities of Active Ingredient                             | Quantity of Concentrate   | Type and Quantity of Carrier |
|---------|---|---|------------------------------|
| HE 500  | 20 lbs. Fosamine<br>0.5 lbs. Imazapyr<br>1.8 oz. Metsulfuron Methyl | 5 gal. Krenite S <sup>(4)</sup><br>32 oz. Arsenal <sup>(3)</sup><br>3 oz. Escort <sup>(4)</sup><br><b>- OR -</b><br>5 gal. Krenite S <sup>(4)</sup><br>13 oz. Lineage Clearstand <sup>(4)</sup><br>1 oz. Escort XP <sup>(4)</sup> | 94.75 gal. Water             |
| HE 700  | 27 lbs. Glyphosate  | 5 gal. Rodeo Concentrate <sup>(5)</sup>   | 95 gal. Water                |
| HE 703  | 21.6 lbs. Glyphosate<br>.75 lbs. Imazapyr                           | 4 gal. Rodeo Concentrate <sup>(5)</sup><br>48 oz. Arsenal <sup>(3)</sup>  | 96 gal. Water                |
| HE 708  | 21.6 lbs. Glyphosate<br>1.8 oz. Metsulfuron Methyl                  | 4 gal. Rodeo Concentrate <sup>(5)</sup><br>3 oz. Escort XP <sup>(4)</sup>   | 96 gal. Water                |

(1) Trademark of Arborchem Product Company

(2) Trademark of Monsanto Company

(3) Trademark of BASF Corporation

(4) Trademark of E.I. DuPont DeNemours & Co., Inc.

(5) Trademark of Dow Agrosiences LLC



## **Section 8 – Quality Control and Guarantees**

### *8.01 Completion of Work*

Upon completion of the work, the Contractor reviews the job to insure that:

- A. All specified cutting has been completed and all cut-vegetation has been disposed of in accordance with the job instructions.
- B. All areas scheduled for herbicide application have been treated and all areas where incomplete application is discernible have been retreated.
- C. All Re-dos have been completed to specification.

### *8.02 Contractor Work Guarantee*

A. The Contractor shall review the job and insure that:

- 1. All specified cutting has been completed and all cut vegetation has been disposed of in accordance with the instructions.
- 2. The percentage of treatment is 100% within the wire zone and at least 95% in the border zone on each site where herbicide treatment was specified and no live incompatibles over 10 foot height remain. In NYS, new seedlings under one foot are exempt.
- 3. Living incompatible species greater than six feet in height found within the wire zone during the final review shall be cut. Where applicable, the stumps shall be treated. Living incompatible species less than six feet in height in the wire zone may receive and LVF treatment or be scheduled for dormant follow-up, where applicable. All formulations shall be approved by the Company Representative.

Any locations found not in compliance with the above will be corrected as soon as possible or scheduled for follow-up by the Contractor and may jeopardize the Contractor's standing under this contract and their future inclusion on the list of approved bidders.

B. Any re-treatment of sites is subject to all provisions and warranty clauses of this contract. No additional compensation is due for any re-treatment activities.

C. Any contractual quality control issues that cannot be readily resolved at the point of concern will be referred to the Company Procurement Department, who will take corrective action with quality deficient suppliers.

D. Upon completion of this review and any identified necessary correction work, the Contractor shall submit a Contractor Work Guarantee Form (see Appendix 9) certifying that items A, B, and C above have been completed and/or scheduled and that the job is submitted for final acceptance by the Company.

- 1. This statement shall be provided to the Company Representative by December 31 of the treatment year. This is for a review that occurs during the current treatment year and after completion of the work and remedial work able to be performed



within the same year. If it is discovered in the subsequent year that the specified herbicide control was not achieved or the remedial work was not completed, then the Contractor will be obligated to correct any issues.

2. If the review is not completed on time, the Company Representative may have the final review performed and any necessary corrective action completed at the expense of the Contractor.

## **Section 9 – Vegetation Ground Patrols**

### *9.01 General Instructions*

- A. Upon request, the Contractor shall perform a vegetation ground patrol of electric transmission lines.
- B. Patrollers will record Priority 1 and Priority 2 trees, Hazard Trees, and Comments. See Appendix 7.
- C. All patrollers must be pre-approved by the Company Representative.

## **APPENDIX 1 – Wire Zones**

The wire zone for non bulk lines is The floor of the ROW that is underneath the conductors.

The wire zone for bulk lines is both the floor of the ROW that is underneath the conductors and 15 feet beyond the outside conductors. The 15 feet is measured horizontally from the outermost conductors.

### **Typical Total Arm Length By Construction Type For Tangent Structures**

- 34.5 & 46 kV single pole construction, the arms are eight feet
- 115 kV H-frame, the arms are 25 feet
- 115 kV steel lattice tower, the top and bottom arms are 20 feet 6” and the middle arm is 26 feet 6”
- 230 kV H-frame construction arms are 40 feet
- 345 kV H-frame construction, the arms are 52 feet
- 345 kV steel tower, the top and bottom arms are 42 feet and the middle arm is 50 feet

## **APPENDIX 2 - Undesirable Tall Growing Species**

The following is a representative list of tall growing tree species that are considered undesirable in most right-of-way situations. These trees shall be removed from the right-of-way floor if the tree's mature height would intrude into the Minimum Clearance Achieved At The Time of Maintenance zone, as measured under normal operating conditions.

In sites where the conductor height ensures that a mature tree will never reach the Minimum Clearance Achieved At the Time of Maintenance distances or be able to fall into the line, tall-growing tree species may be retained on the ROW as long as there is no undesirable affect on access, construction, reliability, or public safety.

- Ash
- Aspens and Cottonwood
- Basswood
- Beech
- Birches
- Black Gum/Tupelo
- Locusts
- Black Walnut
- Butternut
- Catalpa
- Cedars (possible exception of Red Cedar)
- Cherries (possible exception of Choke Cherry)
- Chestnuts
- Cucumber Tree
- Elms
- Firs
- Hemlock
- Hickories
- Hophornbeam
- Maples
- Mountain Ash
- Oaks (possible exception of Scrub Oak)
- Pines
- Red Mulberry
- Sassafras
- Spruces
- Sycamore
- Tamarack/Larch
- Tree of Heaven
- Tulip/Yellow Poplar
- Willow

### **APPENDIX 3 - Shrubs and Small Trees to Be Retained Under Specific Conditions**

The following is a representative list of shrubs that generally mature at a height of ten feet or less. They may be retained in the wire zone except where its mature height would intrude into the Minimum Clearance Achieved At The Time of Maintenance zone, as measured under normal operating conditions.

Any plant on the right-of-way shall be removed if its mature height would intrude into the Minimum Clearance Achieved At The Time of Maintenance zone, as measured under normal operating conditions..

|                        |                    |
|------------------------|--------------------|
| Alternate Leaf Dogwood | Jerseytea          |
| American Hazelnut      | Mapleleaf Viburnum |
| Arrowood               | Mountain Laurel    |
| Beaked Hazelnut        | Mountain Maple     |
| Blueberry              | Redosier Dogwood   |
| Brambles               | Rhododendron       |
| Bush Honeysuckle       | Rose               |
| Common Elderberry      | Scarlet Elderberry |
| Common Winterberry     | Silky Dogwood      |
| Gray Dogwood           | Spicebush          |
| Hobblebush             | Spirea             |
| Honeysuckle            | Sweetfern          |
| Huckleberry            |                    |

The following is a representative list of tall shrubs and small trees that generally mature at a height greater than ten feet. They are to be retained primarily along the outer edges of the ROW. Any plant on the ROW shall be removed if its mature height would intrude into the Minimum Clearance Achieved At The Time of Maintenance zone, as measured under normal operating conditions.

|                   |                |
|-------------------|----------------|
| American Hornbeam | Red Cedar      |
| Apple             | Scrub Oak      |
| Autumn Olive      | Shadbush       |
| Buckthorn         | Shrub Willow   |
| Choke Cherry      | Speckled Alder |
| Common Pear       | Striped Maple  |
| Flowering Dogwood | Sumac          |
| Hawthorn          | Witchhazel     |
| Hercules' Club    | Witherod       |
| Nannyberry        |                |

## APPENDIX 4 - NYS Herbicide Restrictions

No herbicide applications shall be made

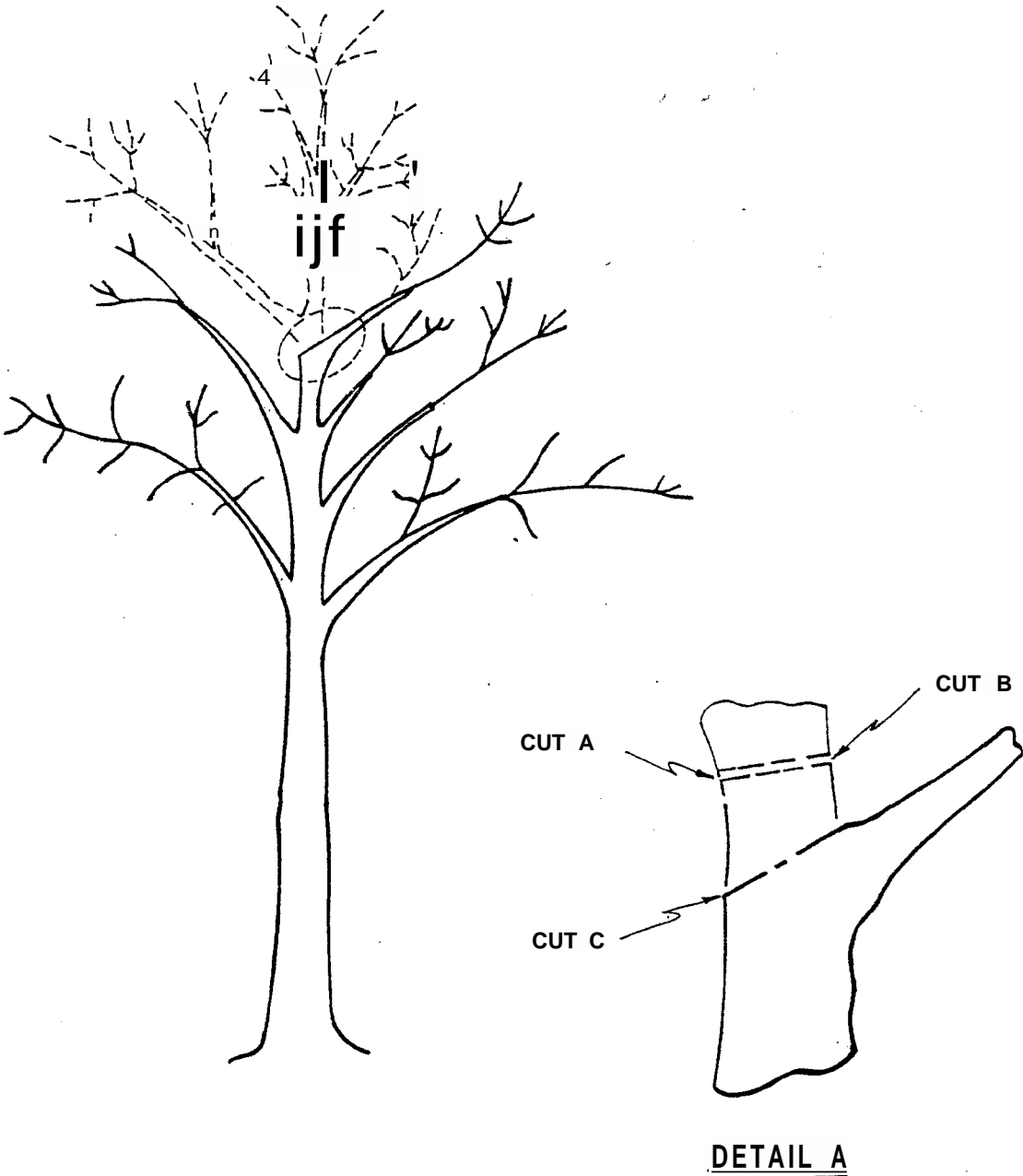
1. Within 100 feet of a NYDEC regulated wetland without a permit
2. Within 100 feet of a potable water supply
3. Within any orchard, or nursery planting, or crop planting
4. Within active pasture areas unless written permission is obtained from the property owner and the application is not a label violation
5. Within areas identified on the Company Treatment Maps or in written instructions to the Contractor
6. Within any of the restricted areas in the chart below

| Method       | Water Restrictions   | Grape Restrictions   |
|--------------|--|--|
| <b>ST</b>    | No applications within 5 feet of any stream or water body  | No applications within 100 ft and applications within 500 ft of grapes shall only be made during the dormant season. Extreme caution shall be exercised when applying herbicides in grape growing areas. |
| <b>Basal</b> | No applications within 15 feet of any stream or water body | No applications within 100 ft and applications within 500 ft of grapes shall only be made during the dormant season. Extreme caution shall be exercised when applying herbicides in grape growing areas. |
| <b>LVF</b>   | No applications within 15 feet of any stream or water body | No low volume foliar applications shall be made within 100 feet of a grape vineyard. Extreme caution shall be exercised when applying herbicides in grape growing areas.                                 |
| <b>SF</b>    | No applications within 50 feet of any stream or water body | No stem foliar applications shall be made within 500 feet of a grape vineyard. Extreme caution shall be exercised when applying herbicides in grape growing areas.                                       |

## **APPENDIX 5 - Company Contact Information**

To be provided and updated regularly.

APPENDIX 6 - Tree Topping Drop Crotch Technique



## APPENDIX 7 – Minimum Clearance Tables

*New York Clearance Tables for All Rated Operating Conditions*

### Minimum Vegetation Clearance Distance MVCD under all rated operating conditions

| Nominal System Voltage(kV) | Maximum System Voltage(kV) | Over sea level up to 500 ft | Over 500 ft up to 1000 ft | Over 1000 ft up to 2000 ft | Over 2000 ft up to 3000 ft |
|----------------------------|----------------------------|-----------------------------|---------------------------|----------------------------|----------------------------|
| 345                        | 362                        | <b>3.19ft</b>               | <b>3.26ft</b>             | <b>3.39ft</b>              | <b>3.53ft</b>              |
| 230                        | 242                        | <b>3.03ft</b>               | <b>3.09ft</b>             | <b>3.22ft</b>              | <b>3.36ft</b>              |
| 115 and under              | 121                        | <b>1.44ft</b>               | <b>1.47ft</b>             | <b>1.54ft</b>              | <b>1.61ft</b>              |

*Minimum Clearance Achieved At the Time of Maintenance*

### For normal operating conditions

| Minimum Clearance Achieved at the Time of Maintenance | Voltage               |
|---|-----------------------|
| <b>17 feet</b>  | <b>34.5 and 46 kV</b> |
| <b>20 feet</b>  | <b>69 and 115 kV</b>  |
| <b>20 feet</b>  | <b>230 kV</b>         |
| <b>25 feet</b>  | <b>345 kV</b>         |

*Priority 1 and 2 Clearances for Patrols and Inspections*

| <b>Priority #1</b><br>To Be Removed As Soon As Possible |  |
|---|--|
| Voltage (kV)  | Distance between vegetation and conductors |
| 35  | 4' or less                                 |
| 46  | 5' or less                                 |
| 69  | 5' or less                                 |
| 115   | 5' or less                                 |
| <b>230</b>  | <b>6' or less</b>                          |
| <b>345</b>  | <b>10' or less</b>                         |

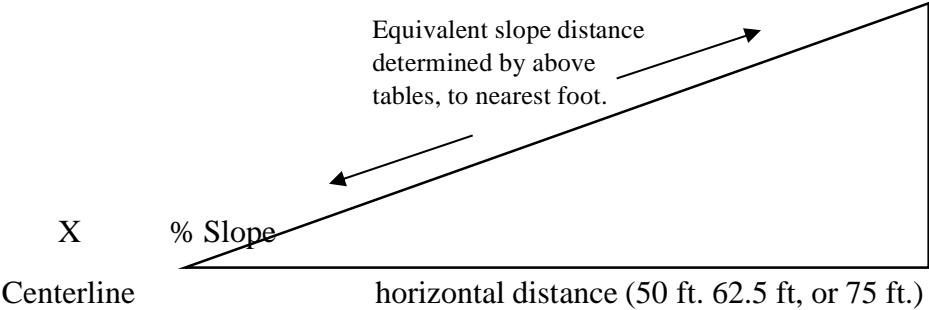
| <b>Priority #2</b><br>To Be Removed before next growing season after identification |  |
|---|--|
| Voltage (kV)  | Distance between vegetation and conductors |
| 35  | > 4' and < 8'                              |
| 46  | > 5' and < 9'                              |
| 69  | > 5' and < 9'                              |
| 115   | > 5' and < 9'                              |
| <b>230</b>  | <b>&gt; 6' and &lt; 10'</b>                |
| <b>345</b>  | <b>&gt; 10' and &lt; 14'</b>               |



APPENDIX 8 – ROW Width Tables

Tables to Determine ROW Widths on Slopes When Horizontal ROW Width is Known

| Horizontal<br>50 Feet |                            | Horizontal<br>62.5 Feet |                              | Horizontal<br>75 Feet |                            |
|-----------------------|----------------------------|-------------------------|------------------------------|-----------------------|----------------------------|
| %<br>Slope            | Feet = to 50<br>horizontal | %<br>Slope              | Feet = to 62.5<br>horizontal | %<br>Slope            | Feet = to 75<br>horizontal |
| 5%                    | 50                         | 5%                      | 63                           | 5%                    | 75                         |
| 10%                   | 50                         | 10%                     | 63                           | 10%                   | 75                         |
| 15%                   | 51                         | 15%                     | 63                           | 15%                   | 76                         |
| 20%                   | 51                         | 20%                     | 64                           | 20%                   | 76                         |
| 25%                   | 52                         | 25%                     | 64                           | 25%                   | 77                         |
| 30%                   | 52                         | 30%                     | 65                           | 30%                   | 78                         |
| 35%                   | 53                         | 35%                     | 66                           | 35%                   | 79                         |
| 40%                   | 54                         | 40%                     | 67                           | 40%                   | 81                         |
| 45%                   | 55                         | 45%                     | 69                           | 45%                   | 82                         |
| 50%                   | 56                         | 50%                     | 70                           | 50%                   | 84                         |
| 55%                   | 57                         | 55%                     | 71                           | 55%                   | 86                         |
| 60%                   | 58                         | 60%                     | 73                           | 60%                   | 87                         |
| 65%                   | 60                         | 65%                     | 75                           | 65%                   | 89                         |
| 70%                   | 61                         | 70%                     | 76                           | 70%                   | 92                         |
| 75%                   | 63                         | 75%                     | 78                           | 75%                   | 94                         |
| 80%                   | 64                         | 80%                     | 80                           | 80%                   | 96                         |
| 85%                   | 66                         | 85%                     | 82                           | 85%                   | 98                         |
| 90%                   | 67                         | 90%                     | 84                           | 90%                   | 101                        |
| 95%                   | 69                         | 95%                     | 86                           | 95%                   | 103                        |
| 100%                  | 71                         | 100%                    | 88                           | 100%                  | 106                        |
| 105%                  | 73                         | 105%                    | 91                           | 105%                  | 109                        |
| 110%                  | 74                         | 110%                    | 93                           | 110%                  | 111                        |
| 115%                  | 76                         | 115%                    | 95                           | 115%                  | 114                        |
| 120%                  | 78                         | 120%                    | 98                           | 120%                  | 117                        |



## **APPENDIX 9 - Vegetation Management Forms**

Contract Start Up Meeting – Work Procedure Review Form

NYSEG Transmission Contractor Work Guarantee

Tree Removal Permission

## NYSEG/RGE Transmission and Sub-Transmission Vegetation Maintenance Contract Start-up Meeting – Work Procedure Review

Service Center\_\_\_\_\_

Treatment Year\_\_\_\_\_

Contractor\_\_\_\_\_

Crew

Leader\_\_\_\_\_

Check off items that were discussed

|  |  |
|--|--|
|  | Label precautions                        |
|  | Sensitive areas                          |
|  | Equipment inspection and operation       |
|  | Application procedures                   |
|  | Spill prevention and clean-up procedures |
|  | Species identification                   |
|  | Protection of infrastructure             |
|  | Flagging ROW edges                       |
|  | Other-                                   |

### Certified Pesticide Applicators

Name\_\_\_\_\_

ID #\_\_\_\_\_ Expires \_\_\_\_\_

Name\_\_\_\_\_

ID #\_\_\_\_\_ Expires \_\_\_\_\_

Name\_\_\_\_\_

ID #\_\_\_\_\_ Expires \_\_\_\_\_

### Comments:

Company representative's name \_\_\_\_\_

Company\_\_\_\_\_ Date\_\_\_\_\_

## **Transmission (69kV & Greater) Contractor Work Guarantee**

This statement shall be provided to the Company Representative by December 31 of the treatment year. This is for a review that occurs during the current treatment year and after completion of the work and remedial work able to be performed within the same year. If it is discovered in the subsequent year that the specified herbicide control was not achieved or the remedial work was not completed, then the Contractor will be obligated to correct any issues.

For the \_\_\_\_\_ service center, for transmission vegetation management work performed in the year \_\_\_\_\_.

I certify that

A. All specified cutting has been completed and all cut vegetation has been disposed of in accordance with the instructions.

B. The percentage of treatment is 100% within the wire zone and at least 95% in the border zone on each site where herbicide treatment was specified and no live incompatibles over 10 foot height remain. In NYS, new seedlings under one foot are exempt.

C. Living incompatible species greater than six feet in height found within the wire zone during the final review shall be cut. Where applicable, the stumps shall be treated. Living incompatible species less than six feet in height in the wire zone may receive and LVF treatment or be scheduled for dormant follow-up, where applicable. All formulations shall be approved by the Company Representative.

This job is submitted for final acceptance by the Company.

Name (print) \_\_\_\_\_

Signature \_\_\_\_\_

Company \_\_\_\_\_

Date \_\_\_\_\_

## Tree Removal Permission Form

Line \_\_\_\_\_ Str \_\_\_\_\_

Property Owner Name(s) \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

I (we) am (are) the owner(s) of the property at

\_\_\_\_\_

I (we) hereby grant permission to remove the following danger trees from my (our) property:

\_\_\_\_\_

\_\_\_\_\_

Property Owner(s) Signature(s)

\_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

Name & Company of Permission Person

\_\_\_\_\_

\_\_\_\_\_

## **SUB-ARTICLE 3 - Rochester Gas and Electric (RG&E) Transmission and Sub-Transmission Right of Way Vegetation Maintenance Specifications**

### **Section 1 – General**

#### *1.01 General Instructions*

All vegetation management work shall be conducted in a safe, effective manner according to these specifications and in conformity with Federal and State laws, regulations, permit conditions and approvals obtained by the Company. This includes but is not limited to NERC FAC-003-04, and NYSDEC laws and regulations, OSHA Standard 29 CFR 1910:269 - Electric Power Generation, Transmission, and Distribution 29 CFR 1910:269(R), ANSI Z.133.1 Standards and the New York Utility Company Best Management Practices for Preventing the Transportation of Invasive Species.

#### *1.02 Imminent Threat of Outage*

A. The Contractor shall immediately verbally report any observed vegetation-related imminent threats that may cause outages to the appropriate Company Representative. This verbal report is to be given in real time – voice mail messages are not acceptable.

B. If the Contractor is unable to contact the local Company Representative, they shall contact the Transmission Vegetation Manager. If the Contractor is unable to contact the Transmission Vegetation Manager, they shall contact the control center. See Appendix 5 for contact information.

C. Imminent threats include vegetation within the Minimum Approach Distance (a grow in issue) of a Transmission line and any other vegetation that may imminently enter the Minimum Approach Distance (a fall-in issue) Transmission or Sub-Transmission.

### 1.03 Definitions

|   |  |
|---|--|
| Company   | Rochester Gas & Electric   |
| Company Representative                                | Person or persons designated as such by the Company.   |
| Contractor  | Firm that has been awarded a formal contract to perform work described in these specifications.  |
| Buffers   | Areas adjacent to highways, streams, public property, scenic areas, historic areas, or other areas of special concern. May have visual or environmental purpose.   |
| Bulk Transmission Lines                               | The Company transmission lines that are subject to NERC Standard FAC-003-4. These are lines operating above 200 kV and any lines operated below 200 kV that are an element of an Interconnection Reliability Operating Limit (IROL).   |
| Danger Tree   | Any tree that is tall enough to strike an electric supply line.  |
| Disposal Method                                       | A specific technique utilized for disposing of cut vegetation.   |
| Hazard Trees  | A structurally unsound tree that could strike an electric supply line.   |
| Herbicide Applications                                | The application of a chemical herbicide formulation to vegetation for the purpose of removing the vegetation.  |
| Minimum Clearance Achieved At the Time of Maintenance | The radial space around the conductor that creates a wire security zone under normal operating conditions. This distance varies with voltage. Woody species over ten feet in height and capable of growing tall enough to intrude into this zone must be removed at the time vegetation management work is performed. (See Appendix 7) |
| Minimum Vegetation Clearance Distance MVCD            | The radial space around the conductor into which the vegetation is not allowed to grow. This distance is to be maintained under all rated operating conditions, varies with voltage, and is based on the Gallet equation. (See Appendix 7)   |
| Pruning   | The cutting or removal of tree branches to provide specified clearance distance between vegetation and the conductors.   |
| Removal   | The felling or killing of undesirable vegetation.  |
| ROW   | Right-of-way   |
| Sensitive Area  | Areas on the ROW where legal or environmental impacts/concerns require compromises to the general treatment approach.  |
| Selective Treatment                                   | The removal, by herbicide treatment or cutting, of vegetation designated for removal and the retention of vegetation designated  |

|                  |  |
|------------------|--|
|                  | to be preserved.   |
| Sensitive Area   | Areas on the ROW where legal or environmental impacts/concerns require compromises to the general treatment approach.  |
| Slash            | Debris including trees, branches, etc. resulting from cutting.   |
| Sub-Transmission | Lines that carry voltages reduced from the major transmission line system, typically 34.5kV to <69kV, through which power is supplied to regional distribution substations. Sometimes the sub-transmission voltage is tapped along the way for use in industrial or large commercial operations but typically does not supply customers. |
| Treatment Method | A specific technique utilized for removing vegetation from a ROW.  |
| Vernal Pools     | Natural temporary pools of water, usually devoid of fish, that allow for the safe development of natal amphibian and insect species.   |
| Wire Zone        | The floor of the ROW that is underneath the conductors and, for bulk transmission, a specified outer distance measured horizontally from the outermost conductors. See Appendix 1.   |

#### *1.04 Scheduling and Start of Work*

A. Any Bulk Transmission Lines shall be treated first. If a contractor has work in multiple service centers, the work on the bulk lines shall be started first, regardless of which service center the bulk transmission line is in.

B. Prior to the start of work, the Contractor shall submit the approximate work plan (including the schedule and herbicide mixes) the Contractor's crew will follow for the treatment year. This schedule is to include any follow-up inspection of the previous treatment year's work.

C. The Contractor shall complete treatment on each transmission & sub-transmission line in the work plan line with as few work interruptions as possible.

#### *1.05 Scope of Work*

##### *A. Obligation of Contractor*

1. Provide notification to the Company regarding starting and stopping of work each day. Such notification and any other daily consultations shall be made in accordance with the specific instructions provided by the Company Representative. Phone numbers for these notifications are listed in Appendix 5.

2. On bulk transmission lines, any refusals of work shall be reported immediately to both the Company Representative and the Transmission Vegetation Manager. This shall be both a verbal and an email report.



3. Enter daily timesheets and treatment records in an electronic device These are to be transmitted to the Company on a weekly basis. Company may issue a stop work order and/or withhold payment if reports are delinquent.
4. Cut and/or treat all vegetation designated for removal in accordance with these specifications.
5. Inspect No Treatment Sites for work and inform forester of any work.
6. Abide by all State laws, rules, and regulations relating to the application of pesticides.
7. Cut or drop-crotch all danger trees as specified by the Company Representative.
8. Dispose of all cut vegetation in accordance with these specifications and any state regulations (i.e. Maine Slash Statue).
9. Mark the specified treatment width of each treatment site with a brightly colored marker (paint or flagging). Markers shall be along both edges and shall be at each end of the treatment site and at least 150 feet.
10. Notify the Company Representative of any treatment locations where the previously maintained width is less than the treatment width.
11. Report to the Company Representative any abnormalities on the right-of-way such as encroachments, damaged poles, broken or slack guy wires, etc.
12. Report immediately to the Company Representative any incidents such as damage to facilities, contact with a live conductor, serious personal injuries, etc. If the Company Representative is not immediately available, reports shall be made by (1) calling the appropriate Manager or, (2) calling the appropriate Energy Control Center. In no case is electronic or voice mail reporting to be considered adequate. Contact telephone numbers are listed in Appendix 5.
13. Perform landowner contacts for residential pruning and for other occasional specified property owners.
14. Provide a copy of the landowner notification/permission logs to the Company upon request.
15. Provide protection for existing structures, communication lines, power lines, pipelines, fences, roads, and trees within and adjacent to the ROW.
16. Maintain a designated job foreperson on the project site on a full-time basis during the course of the work performed. The Contractor shall provide the foreperson with the instructions and drawings for the work to be performed. If it becomes necessary to change forepersons, it shall be the responsibility of the Contractor to provide the new foreperson with instructions and drawings.
17. Provide a call phone number for the designated crew leader.

18. Provide a picture ID for all general forepersons, crew forepersons, and any other individuals making property owner contacts. The ID shall include the individual's name and the Contractor's company name.
19. Adequately instruct employees on the selective vegetation retention requirements and environmental protection measures set forth in these specifications.
20. Provide signs displaying the Contractor's Company name for all vehicles used on the right-of-way and for any vehicles used during contacts with property owners for access or notification.
21. Notify the Company Representative at least one week prior to beginning the job or prior to adding a new crew.
22. Report promptly to the Company Representative any inquiry, complaint, or claim received during the course of the work.
23. Provide work zone traffic control in accordance with the state and/or federal Manual of Uniform Traffic Control Devices when working within any public highway right-of-way.
24. Ensure that Contractor employees performing line clearance work near energized conductors shall have received electrical safety training in accordance with OSHA standard 29 CFR 1910.269 and ANSI standard Z 133.1.

#### B. Obligation of the Company

1. Specify to the Contractor the specific treatment methods, disposal methods, and approved herbicide formulations to be utilized.
2. Pre-authorize any changes in the work plan prior to March.
3. Conduct all ROW negotiations with property owners.
5. Provide Treatment Maps of the ROWs to be treated showing all ROW restrictions and sensitive areas and designated hazard trees and side pruning.

#### *1.06 Access*

- A. Existing public roads shall, whenever possible, be used for access to the ROW.
- B. Private access to the ROW shall not be used without the consent of the property owner.
- C. Where private access to the ROW is utilized, the Contractor shall be responsible for any damage thereto.
- D. Contractor will maintain existing access roads/paths by hand cutting the path and its edges during lump sum floor work. Paths must be kept free of brush, slash, and stumps over 3". Overgrown paths should be cleared to facilitate access where ground conditions

permit. The wire zone is the preferred location of access paths. If a path within the wire zone is not possible due to site conditions, a path must still be maintained outside of this zone but still within a company right-of-way. Paths should be hand cut or mowed in conjunction with herbicide when needed and permitted. Paths should be maintained to a minimum of 6 feet to allow for ATV's to travel. If an existing path has been maintained to a width larger than 6 feet, the path should continue to be maintained at this width.

E. Where requested by the Company Representative, to facilitate access for visual inspection of the facilities or for emergency repairs, a 20-foot access path shall be clear cut of all woody vegetation. Where an access road exists, the access road shall serve as the path and it shall be clear cut of all woody vegetation. Where no access road exists, a 20-foot access path shall be clear cut under the conductors. All woody vegetation cut from the path or access road shall be piled to the side of the clear-cut area. Stumps within the clear-cut area shall have a maximum height of three inches unless otherwise requested by the Company Representative. Herbicide treatment shall be performed in accordance with Sections 5 through 7 of this specification. Projects and special assignments for paths can use unit pricing as outlined in the MSA.

#### *1.07 Buffers and Screens*

At road crossings and stream crossings, designated by the Company Representative, additional vegetation shall be left to provide visual screening of the ROW or to provide shade to a stream. In buffer zones that are designated as screens, there may be pruning of select vegetation. In buffers and screens, the following shall apply:

- A. Vehicle traffic shall be restricted to a single lane through the buffer zone.
- B. Vegetation cut in a buffer zone shall be disposed of outside of the buffer zone.
- C. Vegetation designated for removal from buffer zones shall be removed so as not to damage remaining vegetation.
- D. Plants designated by the Company Representative to remain that are inexcusably damaged or removed by the Contractor shall be replaced by the Contractor. Replacements shall be planted at sites selected by the Company with species having total value equal to those damaged.
- E. For lines below 69 kV, trees designated for topping by the Company Representative shall be topped as described in Section 2.02 of these specifications. Unless there is a legal restriction, there shall be no topping of trees on lines at or above 69 kV.

#### *1.08 Crossing of Streams, Wetlands, Significant Vernal Pools, and Wet Areas*

While working in the immediate area of streams, wetlands, vernal pools, or wet areas, the Contractor shall

- A. Comply with all applicable Federal, State, and local laws and regulations; and the rules and regulations of any agency having jurisdiction over any crossing of a stream or wet area.

B. Employ all necessary precautions to protect the waterway from pollution caused by vehicular movement or disturbance to the stream bed and banks.

C. Where access roads are not indicated and crossings are not prohibited, the Contractor shall limit vehicular crossings of streams and wet areas to one location. The Contractor shall limit the number of times any one stream or wet area is crossed with vehicles to the minimum number necessary for completion of the work.

D. The Contractor shall be responsible for repairing any damage such as deep ruts or scarified areas which in the opinion of the Company Representative could cause erosion.

#### *1.09 Working in Regulated and Other Sensitive Areas*

A. Contractor will conspicuously flag the edges of any regulated or sensitive areas as needed.

B. No herbicide shall be stored, mixed, or loaded within 100 feet of any wetland or surface water.

C. No fuel storage, vehicle/equipment parking and maintenance, or refueling within 100 feet of any wetland or waterbody.

D. NYS DEC Regulated Wetlands – Any herbicide application within a NYSDEC regulated wetland and/or its 100-foot boundary requires a permit. If a permit is obtained, Contractor shall understand and abide by all permit requirements. In the absence of a permit, NYSDEC regulated wetlands and its 100-foot boundaries are to be hand-cut. On the Company's VMS Treatment Maps, NYSDEC regulated wetlands are designated by a green symbol (see legend of VMS map).

## Section 2 – Floor Treatment Methods

### 2.01 General Instructions

- A. Any discrepancies between field conditions and instructions for completion of work are to be reported to the Company Representative.
- B. It is the responsibility of the Contractor to perform the work as specified and ensure that all vegetation scheduled for removal is treated to the specified width.
  - 1. Unless it is a specified trim area, (certain screens and buffers) there will be no pruning of vegetation rooted in the ROW.
  - 2. Removal of trees less than 6 inches DBH within the designated treatment area is part of the contract. For trees greater than 6 inches DBH that are rooted within the treatment area of right-of-way, the Contractor is to inform the Company.
  - 3. For RG&E 34.5 kV lump sum along roads; treat 25 feet from the centerline or to the woods edge greater than 6 inches DBH, whichever comes first.
- C. Treatment of lines in NYS is on a per corridor basis unless otherwise noted on treatment maps. See treatment sites for treatment widths and detailed instructions.
- D. The New York State cycle length is six years.

### 2.02 Selective Treatment

The following shall apply in areas designated for selective treatment:

- A. Selective treatment shall be performed utilizing one of the following methods as described in Section 6 of these specifications:
  - 1. Selective Basal Treatment (B) *NYS only*
  - 2. Selective Cutting (HC)
  - 3. Selective Cutting and Stump Treatment (ST)
  - 4. Selective Stem Foliar Treatment (SF) *NYS only*
  - 5. Selective Low Volume Foliar Treatment (LVF)
- B. All tall-growing woody vegetation including but not necessarily limited to those listed in Appendix 2 shall be removed by cutting and/or herbicide application as specified. The only exemptions are:
  - 1. NYS screens on 35 and 46 kV lines where vegetation has been designated for topping or side pruning.
  - 2. Ravine and valley crossings where conductor height at maximum sag (under all rated operating conditions) and sway is sufficient to allow for all species to remain at their mature height. The Company Representative shall determine at what point, in ravines and valleys, treatment should cease.

3. Easement restrictions.

4. Maintenance Agreements. These are formal written agreements where a landowner agrees to maintain, at their cost and to our specifications, the vegetation in the right-of-way. Contractor crews will be notified of these locations, and they are not to cut or spray the brush within the ROW corridor. The Contractor will still perform all edge and screen work but no herbicide is to be used by the Contractor.

C. All low-growing vegetation including but not necessarily limited to those listed in Appendix 3 shall be retained, except:

1. Those capable of growing tall-enough to intrude into the Minimum Clearance Achieved at the Time of Maintenance (see Appendix 7).

2. As otherwise requested by the Company Representative.

D. All woody vegetation within 15 feet of a structure and all vines growing on guy wires, poles or towers shall be removed by hand cutting in conjunction with herbicide application as specified. Vegetation and slash must be removed from the immediate 5' zone around the infrastructure within treatment sites and as additionally specified by the Company Representative.

E. Low-growing woody vegetation shall, when possible, be avoided by vehicles used for traversing the ROW. Where driving over low-growing vegetation cannot be avoided, any low-growing vegetation which is damaged shall be cut and lopped so as to be in close contact with the ground.

F. Each herbicide applicator, saw operator, and equipment operator shall be able to differentiate between those species which are to be treated and those that are to be retained.

G. For manual cutting the following shall apply:

1. Trees to be removed shall be cut to a maximum stump height of 3 inches.

2. Stumps shall have a smooth surface, free of splinters.

3. Cut vegetation shall be disposed of by one of the methods described in Section 4 of these specifications as requested by the Company Representative.

4. Care shall be taken in felling tree such that they do not fall into power and communications lines, pavements, roads, etc. See Section 3.02 Procedures for Widening and Danger Trees.

5. Care shall be taken to avoid damage to compatible vegetation being retained.

### *2.03 Mechanized Cutting*

Mechanized cutting may be specified for selective sites such as electric rights-of-way and on non-selective sites such as wire zones, access paths, and pipelines. Mechanized cutting shall be performed by cutting all woody vegetation within the ROW, except as noted below, with rotary or flail type cutters. Any portion of the treatment site that cannot be mechanically cut shall be hand cut. In addition to Section 2.02, mechanized cutting shall be performed in accordance with the following:

A. Contractor shall maintain a non-mowing zone of at least 15 feet around all infrastructures. The non-mowing zone shall be hand-cut. While it is permissible to drive forward through the zone to access other areas, no backing or mowing operation will be allowed within that zone. All vines growing on guy wires, poles, or towers shall be hand-cut and removed.

B. Contractor shall flag all guy wires and structures. Flagging shall be as high as the worker can reach. At all times, Contractor shall protect structures, guys, communication lines, power lines, pipelines, fences, roads, and trees to remain within and adjacent to the ROW.

C. Vegetation shall be cut to a maximum stump height of 6 inches except for access roads which shall be cut to a maximum stump height of 3 inches.

D. Slash shall be cut so that it lies in close contact with the ground. Vegetation shall be cut so that slash and other debris do not enter waterbodies, highways, lawn areas, agricultural fields, or other areas where personal injury or property damage could result.

E. Where wet ground conditions would result in rutting, incompatible vegetation shall be hand cut as per Section 2.02 of this specification. The slash resulting from selective cutting shall be disposed of as specified by the Company Representative.

F. Streams – Where stream crossings are allowed, streams shall be crossed at one point only. Vegetation to be cut from stream banks shall be selectively cut as per Section 2.02 of this specification. Slash shall be removed from areas subject to flooding.

G. Deep ruts or erosion caused by mechanical cutting shall be repaired by the contractor and seeded with a conservation seed mix approved by the Company Representative.

### **Section 3 – Edge Treatment Methods**

Any discrepancies between field conditions and instructions for completion of work are to be reported to the Company Representative.

#### ***3.01 Pruning***

A. Side Pruning – Where side pruning is specified the following shall apply:

1. The Company Representative shall specify whether trees shall be side pruned to the cutting line or back to the trunk.
2. The Company Representative may authorize mechanical ground side pruning or aerial side pruning in rural off-road areas.
3. Limbs shall be felled inside the ROW to avoid damage to trees and property outside the ROW. Caution shall be taken to see that the falling limbs do not come into contact with conductors, guys, poles, or other facilities.



4. Cut material shall be disposed of by the disposal method designated by the Company Representative as described in Section 4 of these specifications.

**B. Topping and Pruning**

1. Trees shall be topped to the specified height utilizing the drop-crotch technique by pruning to a lateral at least 1/3 the diameter of the cut. See Appendix 6, Drawing No. S-12,458.

2. Cut material shall be disposed in accordance with Section 4 of these specifications.

3. There will be no pruning of non-screen trees that are rooted within the ROW. These trees are to be removed.

*3.02 Procedures for Widening and Danger Trees*

A. Trees that are located outside the minimum approach distances that could fall into an energized conductor shall not be removed until:

1. The tree has been topped to a height that makes it impossible to fall into the line or;

2. The tree has been rope-guyed to prevent it from falling into the line and the Company Representative has informed the Contractor that the recloser circuit “off” switch has been placed in the off position.

**Section 4 – Slash Disposal**

*4.01 General Instructions*

A. Cut vegetation shall be removed from the following locations if no other permit conditions exist:

1. Access roads.

2. Within 15 feet of a structure.

3. In ditches, inside the bed or bank of streams, or in low-lying areas where water flow would be disrupted.

4. In agricultural fields.

5. In areas maintained as lawns.

6. Within a minimum of 25 feet of a road.

B. Vegetation cut from scattered areas, fence ROWs, or isolated trees in cultivated areas shall be removed and placed along the nearest fence line or accepted area for piling.



C. Contractor will make special efforts to ensure that toxic vegetation is disposed of outside of active pasture areas.

D. In those locations where vegetation is cut and no method of disposal is specified, the Lop and Scatter method of disposal shall be utilized in accordance with section 2.02 of this specification.

#### *4.02 Piling*

Where cut vegetation is to be piled, the piles shall have a maximum height of 3 feet and a maximum width of 15 feet. The piles shall have a 20-foot break every 100 feet of pile length to serve as a fire break. Piles shall have a neat and orderly appearance, void of any excessive protruding material.

A. Piling With Equipment – Piling with equipment shall be performed in accordance with the following:

1. Cut vegetation shall be carried or dragged, not pushed, to pile locations.
2. Piles shall be compacted to less than the specified maximum height by traversing with tracked vehicles and/or other equipment.

B. Hand Piling – Where cut vegetation is piled by hand, the piles shall be compacted to less than the specified maximum height by cutting with chainsaws.

#### *4.03 Chipping*

Cut vegetation shall be reduced to chips by the use of an approved chipping machine in accordance with the following:

A. Chips shall be disposed of such that chips accumulate to depths no greater than 4 inches to serve as mulch for erosion control purposes.

B. No chips shall enter any watercourse or wetland area.

C. Vegetation which cannot be chipped shall be disposed of by another method approved by the Company Representative.

#### *4.04 Lop and Scatter*

A. Trees to be removed shall be felled, delimbed of all branches greater than 2 inches in diameter and cut into sections such that the entire length of each tree is in close contact with the ground. Vegetation disposed of in this manner shall not protrude more than 2 feet above the surface of the ground.

B. Where an access road exists, cut vegetation shall not be disposed of within the access road. Where no access road exists, a 20-foot swath, directly under the conductors, shall remain clear of cut vegetation.

## **Section 5 – Herbicide Applications**

### *5.01 General*

A. The Contractor shall abide by all State laws, rules, and regulations relating to the application of pesticides.

1. NY – Contractor shall be registered with the New York State Department of Environmental Conservation as a Pesticide Applicator Business.

B. The application of herbicides shall be performed in accordance with the product label, appropriate governmental regulations, and these specifications. The Contractor shall be in compliance with the OSHA Hazard Communication standard 29 CFR 1910.1200.

C. All herbicide applications shall be done in a manner that will prevent damage to trees and property outside the ROW.

D. Application shall be discontinued when windy conditions may result in off-target herbicide drift.

E. The Company shall consider unskilled or careless application by workers as just cause for stopping work or cancellation of the contract.

F. Foliar spray units shall be refilled with water from a supply vehicle. Water shall not be pumped directly from a water source into the spray tank.

G. Herbicide concentrate shall not be transported on a vehicle used for supplying water to foliar spray equipment.

H. Each vehicle used for herbicide application or for transportation of herbicide concentrate on the right-of-way shall be equipped with a shovel and absorptive material for containing and controlling spills. All herbicide spills shall be reported immediately to the Company Representative.

I. All evergreens over 3 feet in height that are scheduled to be removed shall be cut and disposed of unless otherwise directed. Evergreens under 3 feet in height that are scheduled to be removed may receive a foliar application.

J. Pitch pine is to be stump treated.

K. The Contractor shall periodically review the results of the work to ensure adequate coverage of target species.

### *5.02 Security of Equipment and Herbicides*

The Contractor shall take the following precautions to protect his equipment and materials from vandalism and unauthorized use when left unattended on the ROW or on Company property not within a locked fence:

A. Power-pack or back-pack sprayers shall be emptied or stored in locked compartments.

B. Ignition keys shall be removed for all vehicles used for herbicide treatment, vehicles containing herbicide concentrate, or herbicide solution.

- C. Ignition keys shall be removed from engines which provide power to pumps on power-driven spray equipment. Engines without lockable ignition systems shall have the sparkplug wire disconnected or made inoperable in some similar fashion.
- D. The opening to the spray tank, on power spray units, shall be locked.
- E. Drains on spray tanks shall be fitted with lockable valves or threaded caps.
- F. Containers carrying herbicide concentrate shall be securely locked or bolted to spray units or other vehicles used to transport herbicide concentrate.
- G. Valves or barrel pumps on containers carrying herbicide concentrate shall be locked or removed and replaced with threaded plugs. Threaded plugs shall be mechanically tightened to prevent removal by hand.
- H. The pressure control valve shall be closed.
- I. Any equipment used for operations involving herbicide applications shall not be left unattended within 100 feet of any stream, waterbody, significant vernal pool, Inland Waterfowl & Wading Bird Habitat, or State regulated wetland.

## **Section 6 – Herbicide Treatment Methods**

All formulation to be used shall be specified by the Company and it shall be one of those listed in Section 7 of these specifications.

### ***6.01 Selective Cutting and Stump Treatment***

All tall-growing woody vegetation shall be cut as described in Section 2.02 of these specifications. All stumps of vegetation cut shall be treated in accordance with the following:

A. Application – The formulation shall be applied as described below:

1. Low Volume – The herbicide concentrate is mixed with a mineral oil type carrier specifically designed and labeled for this purpose. The herbicide concentrate comprises 20% to 30% of the total mix. The formulation shall be applied to wet the cut surface, bark, root crown, and exposed roots. Particular attention shall be given to a complete encircling and wetting of the root collar at the ground line.
2. Cut Surface Concentrate – The herbicide is applied as a ready-to-use concentrate or it is diluted with water. The concentrate shall be applied only to the cut surface of the slump. Particular attention shall be given to wetting the entire cambium area next to the bark.

B. Equipment – The application equipment to be used is dependent on the formulation type and shall be as follows:

1. Low Volume – Application to be made with a hand operated backpack sprayer equipped with a Spraying Systems Mode 23L-7676 gun and Spraying System 5500 Y2 Cone Jet nozzle or equivalent gun and nozzle.

2. Cut Surface Concentrate – Application to be made with a hand operated sprayer or trigger operated squirt bottle.

C. Weather Conditions – No application shall be made while rain is falling. Low volume formulations shall not be applied when snow or ice is two or more inches in depth around the stumps to be treated. Cut surface concentrates may be applied when snow or ice is present as long as the cut surface to be treated is free of ice and snow. Stumps treated one hour or less prior to rain shall be treated again but not until one hour after runoff has stopped.

D. Timing – The stump shall be treated before cutting (pre-treat) or immediately after they are cut. Where pre-treat is specified a waiting period between treatment and cutting, established by the Company, shall be observed. Where a pre-treat is utilized, only formulations containing an oil type carrier may be used.

E. Restrictions – The following areas within the ROW are not to be treated with herbicides. Vegetation to be removed shall be cut and disposed of as requested by the Company Representative:

1. NYS – see Appendix 4.
2. Within any orchard, nursery planting, or crop planting.
3. Within active pasture areas unless written permission is obtained from the property owner and the application is not a label violation.

#### *6.02 Selective Low Volume Foliar Treatment*

All tall-growing woody vegetation including but not necessarily limited to those listed in Appendix 2 shall be treated. Selective low volume foliar treatment shall be done in accordance with the following:

A. Application – The solution shall be applied so as to partially wet all foliage. Emphasis shall be given to wetting the top and major branches. The applicator shall stand within 5 feet of the target vegetation. Target vegetation greater than 10 feet in height shall be cut and stump treated.

B. Equipment – The herbicide solution shall be applied with either a motorized or hand operated backpack sprayer.

1. Hand Operated Backpacks – Hand operated units shall be equipped with spray guns that have at least two spray tips: one for tall and one for short vegetation.
2. NYS Only – Motorized Backpacks – Motorize units shall operate at pressures from 50 to 90 p.s.i. and be used in conjunction with a foam adjuvant. The spray gun

shall be equipped with at least two foam generating spray tips: one for tall and one for short vegetation.

C. Weather Conditions – Herbicide treatment shall not be done during rain or while rain is dripping from the foliage. Foliage treated one hour or less prior to rain shall be treated again after run-off has stopped.

D. Timing – Herbicide treatment shall be done during the growing season while the foliage is fully developed and still has its normal green color and vigor, approximately from mid-June to the end of August.

F. Restrictions – The following areas within the ROW are not to be treated with herbicides. Vegetation to be removed shall be cut and disposed of as requested by the Company Representative.

1. NYS – see Appendix 4.
2. Within any orchard, nursery, or crop planting.
3. Within active pasture areas or within ten feet of a fence which encloses an active pasture area unless written permission is obtained from the property owner and the application is not a label violation.
4. Areas identified on Company Treatment Maps or in written instructions to the Contractor.

#### *6.03 NYS Only: Selective Basal Treatment*

All tall-growing woody vegetation including but not necessarily limited to those listed in Appendix 2 shall be treated. Selective basal treatment shall be done in accordance with the following:

A. Application – The solution shall be applied to each stem from a point 18 inches high on the stem to ground line completely encircling the stem and any exposed roots. The solution shall be applied only to wet the stem and all exposed roots. Where sprout growth originates from a stump, the treatment shall also be applied to completely encircle the stump and any exposed roots.

B. Equipment – Application to be made with a hand operated backpack sprayer equipped with a Spraying System Model 23L-7676 gun and Spraying Systems 5500 Y2 Cone Jet nozzle or equivalent gun and nozzle.

C. Weather Conditions – No applications shall be made while rain is falling or when snow or ice is two inches or more in depth around the stems to be treated. Stems treated one hour or less prior to rain shall be treated again but not until one hour after runoff has stopped.

D. Restrictions – See Appendix 4 for those areas within the ROW that are not to be treated with herbicides. Vegetation to be removed shall be cut and disposed of as requested by the Company Representative.

#### E. Special Conditions

1. All species of oak greater than two inches in diameter shall be cut and the stumps treated when using Garlon 4.
2. All species of ash, oak, and hickory shall be cut and stump treated when treatment occurs between September 15 and March 1.
3. In areas where the visual impact of brownout is a concern, professional judgment will determine the maximum height of vegetation to be treated with the basal method.

#### 6.04 NYS Only: Selective Stem Foliar Treatment

All tall-growing woody vegetation including but not necessarily limited to those listed in Appendix 2 shall be treated. Selective stem foliar treatment shall be done in accordance with the following:

- A. Application – The solution shall be applied so as to thoroughly wet the entire stem and foliage to achieve runoff. The applicator shall stand within 10 to 15 feet of the target vegetation.
- B. Equipment – The herbicide solution shall be applied with power-driven equipment. Spray nozzles shall be adjusted to produce a coarse spray of large droplets at a maximum of 50 pounds pressure at the nozzle. Orifice disc shall be No. 8 or larger.
- C. Weather Conditions – Herbicide treatment shall not be done during the rain or while rain is dripping from the foliage. Foliage treated one hour or less prior to rain shall be treated again after runoff has stopped.
- D. Timing – Herbicide treatment shall be done during the growing season while the foliage is fully developed and still has its normal green color and vigor, approximately from mid-June to the end of August.
- E. Restrictions – See Appendix 4 for those areas within the Row that are not to be treated with herbicides. Vegetation to be removed shall be cut and disposed of as requested by the Company Representative.

#### 6.05 NYS Only: Access Path and Wire Zone Follow-up Treatment

A selective stem foliar treatment shall be applied to areas cleared for access paths or wire zones and designated for follow-up herbicide treatment by the company representative. The method is selective in order to retain grasses and broad leaf weeds for erosion control. This selective stem foliar treatment shall be applied one year after initial path clearing and in accordance with the following:

- A. Application – The herbicide formulation shall be uniformly applied over the area to be treated so as to wet all vegetation in the treated area. Each successive application pattern shall overlap the previous pattern to avoid untreated strips.

B. Equipment – The herbicide solution shall be applied with power-driven equipment. Spray nozzles shall be adjusted to produce a coarse spray of large droplets at a maximum of 50 pounds pressure at the nozzle. Orifice disc shall be No. 8 or larger.

C. Weather Conditions – Herbicide treatment shall not be done during rain or while rain is dripping from the foliage. Foliage treated one hour or less prior to rain shall be treated again after runoff has stopped.

D. Timing – Herbicide treatment shall be done during the growing season while the foliage is fully developed and still has its normal green color and vigor, approximately from mid-June to the end of August.

E. Restrictions – See Appendix 4 for those areas within the ROW that are not to be treated with herbicides. Vegetation to be removed shall be cut and disposed of as requested by the Company Representative.

#### *6.06 Dormant Stem Treatment*

Dormant Stem Treatment may be used for woody vegetation control outside of the growing season, where traditional foliar applications would otherwise be practical but may yield undesirable consequences, particularly brown-out. Dormant Stem Treatment also affords the opportunity to perform work and minimize disturbance in potential Monarch Butterfly habitat as they overwinter in the South, typically late September through May. While basal or cut stump treatments also offer herbicide control outside of the growing season, Dormant Stem Treatment is most practical for dense, tall stands of undesirable vegetation. However, selectivity shall still be employed.

All tall-growing woody vegetation including but not necessarily limited to those listed in Appendix 2 shall be treated. Dormant Stem Treatment shall be performed in accordance with the following:

A. Application - The solution shall be applied to the entire stem. The applicator shall apply from within 10 to 15 feet of the target vegetation.

B. Equipment - The herbicide solution can be applied with backpacks or power-driven equipment. Spray nozzles shall be adjusted to produce a coarse spray of large droplets at a maximum of 50 pounds pressure at the nozzle.

C. Weather Conditions- Herbicide treatment shall not be performed during rain or while stems are wet. Frozen ground should also be avoided.

D. Timing - Herbicide treatment shall be performed during the dormant season, preferably in late winter prior to budbreak. No applications shall be made after budbreak or prior to leaf drop.

E. Restrictions - See Appendix 4 for those areas within the ROW that are not to be treated with herbicides.



### *6.07 Cut Stubble Treatment*

Cut Stubble Treatment may be used as a follow-up herbicide treatment for long-term control of sites requiring broadcast, access path, or wire zone mechanical cutting outside of the growing season. While avoiding brown-out from conventional foliar follow-up treatment, Cut Stubble Treatment can also be performed immediately after mechanical cutting for up to two weeks, potentially avoiding repeated trips to difficult-to-access sites and repeated disturbance to the soil. Herbicides with residual soil activity may be used, therefore Cut Stubble Treatment shall be avoided on sites where drift and runoff are possible, such as on sandy soils and floodplains.

All restrictions pertaining to Mechanized Cutting in Section 2.03 shall be observed. The stumps/stubble of all woody vegetation shall be treated. Cut Stubble Treatment shall be performed in accordance with the following:

- A. Application – The solution shall be applied to the surfaces of the cut stems and the soil immediately adjacent. The applicator shall apply from within 10 to 15 feet of the target vegetation.
- B. Equipment - The herbicide solution shall be applied with power-driven equipment. Spray nozzles shall be adjusted to produce a coarse spray of large droplets at a maximum of 50 pounds pressure at the nozzle.
- C. Weather Conditions- Herbicide treatment shall not be performed during rain or while stems are wet. Frozen ground should also be avoided.
- D. Timing - Herbicide treatment should be performed during the dormant season but may be performed in the growing season before resprout.
- E. Restrictions - See Appendix 4 for those areas within the ROW that are not to be treated with herbicides. Cut Stubble Treatments using herbicides with soil residual activity shall not be used within the Adirondack Park.

## **Section 7 – Herbicide Formulations**

### *7.01 General*

All label restrictions for mixing shall be adhered to. The formulations listed in these specifications specify minimum quantities of active ingredients. The Contractor may increase the quantity of active ingredients as long as label recommendations are not exceeded. The Contractor shall seek the prior approval from the Company Representative concerning any deviation from the formulation specified by the Company.

Trade names are mentioned here only for ease of understanding. It does not constitute endorsement of one product over another. Any product, labeled by the appropriate State and Federal regulatory bodies for the specified use, which meets this specification, may be substituted. Each formulation shall be agitated sufficiently to insure proper mixing.



### *7.02 Adjuvants and Basal Oil Diluents*

Drift control additives, surfactants and basal oil diluents shall be selected from those listed below or an equivalent. Equivalents shall be labeled for such use and approved by the Company Representative prior to use.

#### A. Drift Control Additives

1. Arborchem 38-F (Arborchem Products Co.)
2. Driftgard (Custom Chemicides)
3. More (Exacto Chemical Co.)

#### B. Surfactants

1. Agri-Dex (Helena Chemical Co.)
2. Arborchem Aquatic Surfactant (Arborchem Products Co.)
3. Arborchem Clean Cut (Arborchem Products Co.)
4. Nu-Film-IR (Miller Chemical Co.)
5. Ortho X-77 (Chevron Chemical Co.)
6. Paraspred Industrial (Custom Chemicides)
7. Unifilm Crop Oil Industrial (Custom Chemicides)

#### C. Basal Diluents

1. Arborchem Basal Oil (Arborchem Products Co.)
2. Hy-Grade EC (CWC Chemical, Inc.)
3. Unifilm Basal Bark Oil (Custom Chemicides)

### 7.03 Formulations for Selective Basal and Stump Treatment

B – low volume basal – NYS Only

ST – stump treatment

| <b>Formula</b> | <b>Treatment Method</b> | <b>Minimum Quantities of Active Ingredient</b>  | <b>Quantity of Concentrate</b>                     | <b>Type and Quantity of Carrier</b>   |
|----------------|-------------------------|---|--|---|
| HE 400         | Basal & ST              | 4 lbs.<br>Triclopyr                             | 1 gal. Garlon<br>4 Ultra                           | 3 gallons of an approved mineral oil diluent that is labeled for this purpose |
| HE 401         | Basal & ST              | 3 lbs.<br>Triclopyr<br><br>.25 lbs.<br>Imazapyr | 3 qt. Garlon<br>4 Ultra<br><br>16 oz.<br>Stalker   | 3 gallons of an approved mineral oil diluent that is labeled for this purpose |
| HE 705         | ST                      | 1.6 lbs.<br>Glyphosate<br>.08 lbs.<br>Imazapyr  | 38 oz.<br>Rodeo<br>Concentrate<br>5 oz.<br>Arsenal | 85 oz. water<br><br>0.64 oz. Milliken or Exacto<br><br>blue dye               |
| HE 600         | ST                      | 1 lb. 2,4-D<br>0.25 lb.<br>Picloram             | 1 gal.<br>Pathway                                  | Undiluted   |
| HE 702         | ST                      | 2 lbs.<br>Glyphosate                            | 0.5 gal.<br>Rodeo<br>Concentrate<br>(1)            | 0.5 gal. water<br>0.64 oz. Milliken or Exacto<br>blue dye                     |

Trademark of Dow Agrosiences LLC: Garlon 4 Ultra, Rodeo, Pathway

Trademark of BASF Corporation: Arsenal, Stalker

Trademark of Exacto Chemical Company: Exacto dye

#### 7.04 Formulations for Selective Stem Foliar Treatment – NYS Only

The Contractor shall add a drift control additive, a surfactant and any other adjuvant specified on the product label to all selective stem foliar treatment formulations. These adjuvants shall be mixed according to the manufacturer's directions. Adjuvants shall be selected for those listed under Section 7.02 of these specifications.

| Formul<br>a   | Minimum Quantities<br>of Active Ingredient                               | Quantity of Concentrate  | Type and Quantity of<br>Carrier |
|---------------|--|--|---------------------------------|
| HE 402<br>(6) | 2.25 lbs. Triclopyr<br>0.6 oz. Metsulfuron<br>Methyl                     | 3 qts. Garlon 3A <sup>(2)(7)</sup><br>1 oz. Escort XP <sup>(3)</sup>   | 99.25 gal. Water                |
| HE 403        | 1.5 lb. Triclopyr<br>0.5 lb. Picloram                                    | 0.5 gal. Garlon 3A <sup>(2)(7)</sup><br>1 qt. Tordon K <sup>(2)</sup>  | 99.25 gal. Water                |
| HE 501        | 6 lbs. Fosamine<br>1.5 oz. Imazapyr<br>0.6 oz. Metsulfuron<br>Methyl     | 1.5 gal. Krenite S <sup>(3)</sup><br>6 oz. Arsenal <sup>(8)</sup><br>1 oz. Escort XP <sup>(3)</sup><br><b>- OR -</b><br>1.5 gal. Krenite S <sup>(3)</sup><br>2.4 oz. Lineage Clearstand <sup>(3)</sup><br>0.6 oz. Escort XP <sup>(3)</sup> | 98.5 gal. Water                 |
| HE 701<br>(6) | 5.4 lbs. Glyphosate  | 4 qts. Rodeo Concentrate <sup>(2)</sup>  | 99 gal. Water                   |
| HE 704        | 5.4 lbs. Glyphosate<br>1.5 oz. Imazapyr                                  | 4 qts. Rodeo Concentrate <sup>(2)</sup><br>6 oz. Arsenal <sup>(8)</sup>  | 99 gal. Water                   |
| HE 706        | 5.4 lbs. Glyphosate<br>1.5 oz. Imazapyr<br>0.5 oz. Metsulfuron<br>Methyl | 4 qts. Rodeo Concentrate <sup>(2)</sup><br>6 oz. Arsenal <sup>(8)</sup><br>0.5 oz. Escort XP <sup>(3)</sup>  | 99 gal. Water                   |
| HE 709<br>(6) | 4 lbs. Glyphosate<br>0.6 oz Metsulfuron<br>Methyl                        | 3 qts. Rodeo Concentrate <sup>(2)</sup><br>1 oz. Escort XP <sup>(3)</sup>  | 99.25 gal. Water                |

(1) Trademark of Arborchem Product Company

(2) Trademark of Dow Agrosiences LLC

(3) Trademark of E.I. DuPont DeNemours & Co., Inc.

(4) Trademark of Monsanto Company

(5) Trademark of Exacto Chemical Company

(6) Add surfactant at the rate of 2 qts. per 100 gal. mix.

(7) 0.5 gal. of Garlon 4 Ultra may be substituted for Garlon 3A with the written authorization of the Company Representative.

(8) Trademark of BASF Corporation

### 7.05 Formulations for Selective Low Volume Foliar Treatment

The Contractor shall add a surfactant, and any other adjuvant recommended on the product label, to the formulation at the manufacturer's recommended rate. Adjuvants shall be selected from those listed under Section 7.02 of these specifications.

| Formula | Minimum Quantities of Active Ingredient                             | Quantity of Concentrate   | Type and Quantity of Carrier |
|---------|---|---|------------------------------|
| HE 500  | 20 lbs. Fosamine<br>0.5 lbs. Imazapyr<br>1.8 oz. Metsulfuron Methyl | 5 gal. Krenite S <sup>(4)</sup><br>32 oz. Arsenal <sup>(3)</sup><br>3 oz. Escort <sup>(4)</sup><br><b>- OR -</b><br>5 gal. Krenite S <sup>(4)</sup><br>13 oz. Lineage Clearstand <sup>(4)</sup><br>1 oz. Escort XP <sup>(4)</sup> | 94.75 gal. Water             |
| HE 700  | 27 lbs. Glyphosate  | 5 gal. Rodeo Concentrate <sup>(5)</sup>   | 95 gal. Water                |
| HE 703  | 21.6 lbs. Glyphosate<br>.75 lbs. Imazapyr                           | 4 gal. Rodeo Concentrate <sup>(5)</sup><br>48 oz. Arsenal <sup>(3)</sup>  | 96 gal. Water                |
| HE 708  | 21.6 lbs. Glyphosate<br>1.8 oz. Metsulfuron Methyl                  | 4 gal. Rodeo Concentrate <sup>(5)</sup><br>3 oz. Escort XP <sup>(4)</sup>   | 96 gal. Water                |

(1) Trademark of Arborchem Product Company

(2) Trademark of Monsanto Company

(3) Trademark of BASF Corporation

(4) Trademark of E.I. DuPont DeNemours & Co., Inc.

(5) Trademark of Dow Agrosiences LLC

## **Section 8 – Quality Control and Guarantees**

### *8.01 Completion of Work*

Upon completion of the work, the Contractor reviews the job to insure that:

- A. All specified cutting has been completed and all cut-vegetation has been disposed of in accordance with the job instructions.
- B. All areas scheduled for herbicide application have been treated and all areas where incomplete application is discernible have been retreated.
- C. All Re-dos have been completed to specification.

### *8.02 Contractor Work Guarantee*

A. The Contractor shall review the job and insure that:

- 1. All specified cutting has been completed and all cut vegetation has been disposed of in accordance with the instructions.
- 2. The percentage of treatment is 100% within the wire zone and at least 95% in the border zone on each site where herbicide treatment was specified and no live incompatibles over 10 foot height remain. In NYS, new seedlings under one foot are exempt.
- 3. Living incompatible species greater than six feet in height found within the wire zone during the final review shall be cut. Where applicable, the stumps shall be treated. Living incompatible species less than six feet in height in the wire zone may receive and LVF treatment or be scheduled for dormant follow-up, where applicable. All formulations shall be approved by the Company Representative.

Any locations found not in compliance with the above will be corrected as soon as possible or scheduled for follow-up by the Contractor and may jeopardize the Contractor's standing under this contract and their future inclusion on the list of approved bidders.

B. Any re-treatment of sites is subject to all provisions and warranty clauses of this contract. No additional compensation is due for any re-treatment activities.

C. Any contractual quality control issues that cannot be readily resolved at the point of concern will be referred to the Company Procurement Department, who will take corrective action with quality deficient suppliers.

D. Upon completion of this review and any identified necessary correction work, the Contractor shall submit a Contractor Work Guarantee Form (see Appendix 9) certifying that items A, B, and C above have been completed and/or scheduled and that the job is submitted for final acceptance by the Company.

- 1. This statement shall be provided to the Company Representative by December 31 of the treatment year. This is for a review that occurs during the current treatment year and after completion of the work and remedial work able to be performed

within the same year. If it is discovered in the subsequent year that the specified herbicide control was not achieved or the remedial work was not completed, then the Contractor will be obligated to correct any issues.

2. If the review is not completed on time, the Company Representative may have the final review performed and any necessary corrective action completed at the expense of the Contractor.

## **Section 9 – Vegetation Ground Patrols**

### *9.01 General Instructions*

- A. Upon request, the Contractor shall perform a vegetation ground patrol of electric transmission lines.
- B. Patrollers will record Priority 1 and Priority 2 trees, Hazard Trees, and Comments. See Appendix 7.
- C. All patrollers must be pre-approved by the Company Representative.

## **APPENDIX 1 - Wire Zones**

The wire zone for non-bulk lines is the floor of the ROW that is underneath the conductors.

The wire zone for bulk lines is both the floor of the ROW that is underneath the conductors and 15 feet beyond the outside conductors. The 15 feet is measured horizontally from the outermost conductors.

### **Typical Total Arm Length By Construction Type For Tangent Structures**

- 34.5 & 46 kV single pole construction, the arms are eight feet
- 115 kV H-frame, the arms are 25 feet
- 115 kV steel lattice tower, the top and bottom arms are 20 feet 6" and the middle arm is 26 feet 6"
- 230 kV H-frame construction arms are 40 feet
- 345 kV H-frame construction, the arms are 52 feet
- 345 kV steel tower, the top and bottom arms are 42 feet and the middle arm is 50 feet

## **APPENDIX 2 - Undesirable Tall Growing Species**

The following is a representative list of tall growing tree species that are considered undesirable in most right-of-way situations. These trees shall be removed from the right-of-way floor if the tree's mature height would intrude into the Minimum Clearance Achieved At The Time of Maintenance zone, as measured under normal operating conditions.

In sites where the conductor height ensures that a mature tree will never reach the Minimum Clearance Achieved At the Time of Maintenance distances or be able to fall into the line, tall-growing tree species may be retained on the ROW as long as there is no undesirable affect on access, construction, reliability, or public safety.

- Ash
- Aspens and Cottonwood
- Basswood
- Beech
- Birches
- Black Gum/Tupelo
- Locusts
- Black Walnut
- Butternut
- Catalpa
- Cedars (possible exception of Red Cedar)
- Cherries (possible exception of Choke Cherry)
- Chestnuts
- Cucumber Tree
- Elms
- Firs
- Hemlock
- Hickories
- Hophornbeam
- Maples
- Mountain Ash
- Oaks (possible exception of Scrub Oak)
- Pines
- Red Mulberry
- Sassafras
- Spruces
- Sycamore
- Tamarack/Larch
- Tree of Heaven
- Tulip/Yellow Poplar
- Willow



### **APPENDIX 3 - Shrubs and Small Trees to Be Retained Under Specific Conditions**

The following is a representative list of shrubs that generally mature at a height of ten feet or less. They may be retained in the wire zone except where its mature height would intrude into the Minimum Clearance Achieved At The Time of Maintenance zone, as measured under normal operating conditions.

Any plant on the right-of-way shall be removed if its mature height would intrude into the Minimum Clearance Achieved At The Time of Maintenance zone, as measured under normal operating conditions..

|                        |                    |
|------------------------|--------------------|
| Alternate Leaf Dogwood | Jerseytea          |
| American Hazelnut      | Mapleleaf Viburnum |
| Arrowood               | Mountain Laurel    |
| Beaked Hazelnut        | Mountain Maple     |
| Blueberry              | Redosier Dogwood   |
| Brambles               | Rhododendron       |
| Bush Honeysuckle       | Rose               |
| Common Elderberry      | Scarlet Elderberry |
| Common Winterberry     | Silky Dogwood      |
| Gray Dogwood           | Spicebush          |
| Hobblebush             | Spirea             |
| Honeysuckle            | Sweetfern          |
| Huckleberry            |                    |

The following is a representative list of tall shrubs and small trees that generally mature at a height greater than ten feet. They are to be retained primarily along the outer edges of the ROW. Any plant on the ROW shall be removed if its mature height would intrude into the Minimum Clearance Achieved At The Time of Maintenance zone, as measured under normal operating conditions.

|                   |                |
|-------------------|----------------|
| American Hornbeam | Red Cedar      |
| Apple             | Scrub Oak      |
| Autumn Olive      | Shadbush       |
| Buckthorn         | Shrub Willow   |
| Choke Cherry      | Speckled Alder |
| Common Pear       | Striped Maple  |
| Flowering Dogwood | Sumac          |
| Hawthorn          | Witchhazel     |
| Hercules' Club    | Witherod       |
| Nannyberry        |                |

## APPENDIX 4 - NYS Herbicide Restrictions

No herbicide applications shall be made

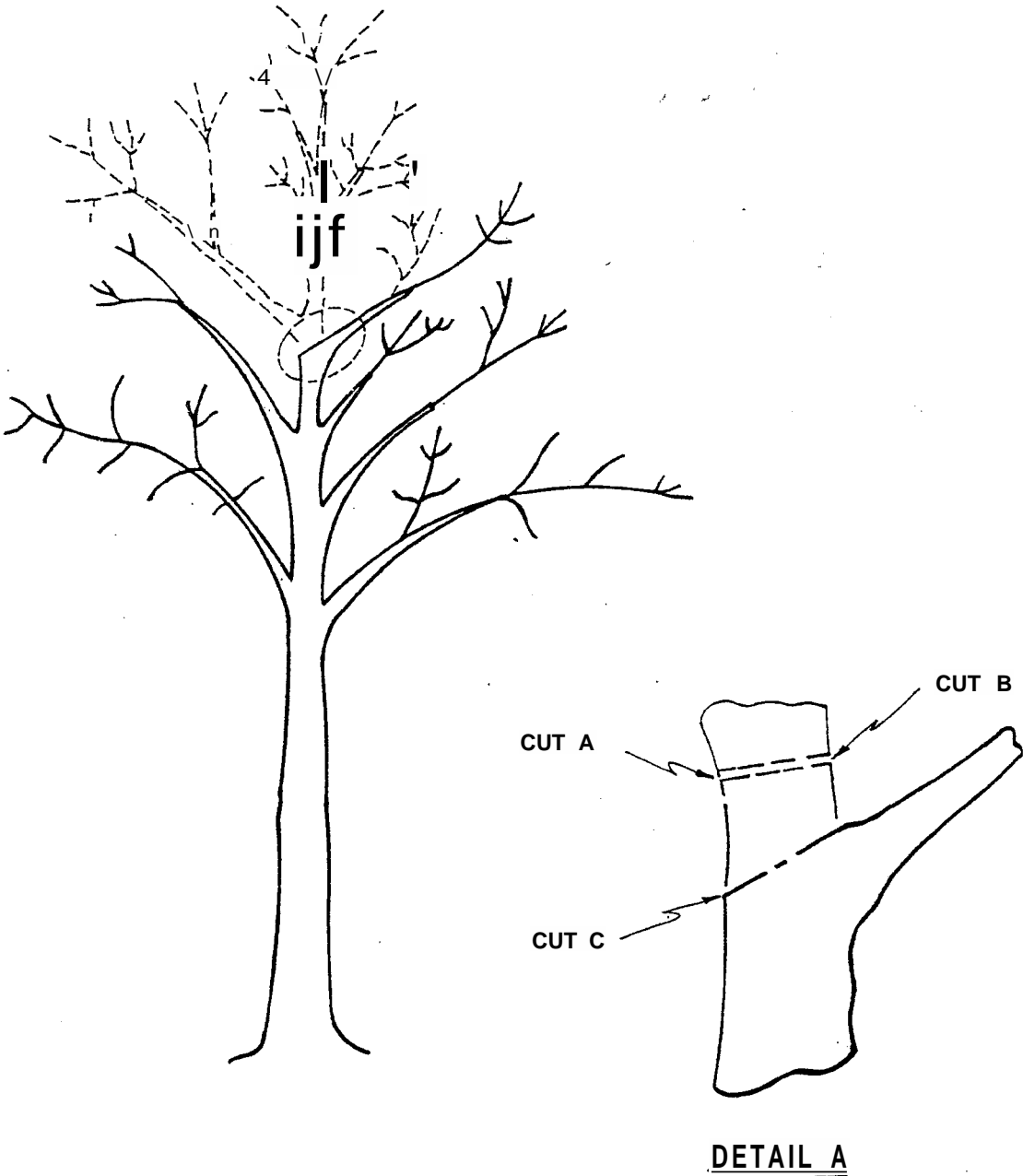
1. Within 100 feet of a NYDEC regulated wetland without a permit
2. Within 100 feet of a potable water supply
3. Within any orchard, or nursery planting, or crop planting
4. Within active pasture areas unless written permission is obtained from the property owner and the application is not a label violation
5. Within areas identified on the Company Treatment Maps or in written instructions to the Contractor
6. Within any of the restricted areas in the chart below

| Method       | Water Restrictions   | Grape Restrictions   |
|--------------|--|--|
| <b>ST</b>    | No applications within 5 feet of any stream or water body  | No applications within 100 ft and applications within 500 ft of grapes shall only be made during the dormant season. Extreme caution shall be exercised when applying herbicides in grape growing areas. |
| <b>Basal</b> | No applications within 15 feet of any stream or water body | No applications within 100 ft and applications within 500 ft of grapes shall only be made during the dormant season. Extreme caution shall be exercised when applying herbicides in grape growing areas. |
| <b>LVF</b>   | No applications within 15 feet of any stream or water body | No low volume foliar applications shall be made within 100 feet of a grape vineyard. Extreme caution shall be exercised when applying herbicides in grape growing areas.                                 |
| <b>SF</b>    | No applications within 50 feet of any stream or water body | No stem foliar applications shall be made within 500 feet of a grape vineyard. Extreme caution shall be exercised when applying herbicides in grape growing areas.                                       |

## **APPENDIX 5 – Company Contact Information**

To be provided and updated regularly.

APPENDIX 6 - Tree Topping Drop Crotch Technique



## APPENDIX 7 – Minimum Clearance Tables

### *New York Clearance Tables for All Rated Operating Conditions*

Minimum Vegetation Clearance Distance MVCD under all rated operating conditions

| Nominal System Voltage(kV) | Maximum System Voltage(kV) | Over sea level up to 500 ft | Over 500 ft up to 1000 ft | Over 1000 ft up to 2000 ft | Over 2000 ft up to 3000 ft |
|----------------------------|----------------------------|-----------------------------|---------------------------|----------------------------|----------------------------|
| 345                        | 362                        | 3.19ft                      | 3.26ft                    | 3.39ft                     | 3.53ft                     |
| 230                        | 242                        | 3.03ft                      | 3.09ft                    | 3.22ft                     | 3.36ft                     |
| 115 and under              | 121                        | 1.44ft                      | 1.47ft                    | 1.54ft                     | 1.61ft                     |

### *Minimum Clearance Achieved At the Time of Maintenance*

For normal operating conditions

| Minimum Clearance Achieved at the Time of Maintenance | Voltage        |
|---|----------------|
| 17 feet   | 34.5 and 46 kV |
| 20 feet   | 69 and 115 kV  |
| 20 feet   | 230 kV         |
| 25 feet   | 345 kV         |

### *Priority 1 and 2 Clearances for Patrols and Inspections*

| Priority #1<br>To Be Removed As Soon As Possible |  |
|--|--|
| Voltage (kV)                                     | Distance between vegetation and conductors |
| 35   | 4' or less                                 |
| 46   | 5' or less                                 |
| 69   | 5' or less                                 |
| 115  | 5' or less                                 |
| 230  | 6' or less                                 |
| 345  | 10' or less                                |

| Priority #2<br>To Be Removed before next growing season after identification |  |
|--|--|
| Voltage (kV)   | Distance between vegetation and conductors |
| 35   | > 4' and < 8'                              |
| 46   | > 5' and < 9'                              |
| 69   | > 5' and < 9'                              |
| 115  | > 5' and < 9'                              |
| 230  | > 6' and < 10'                             |
| 345  | > 10' and < 14'                            |

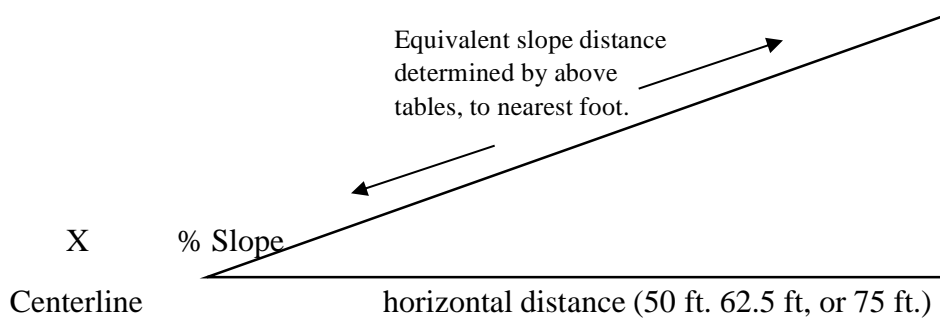
## APPENDIX 8 – ROW Width Tables

Tables to Determine ROW Widths on Slopes When Horizontal ROW Width is Known

| Horizontal<br>50 Feet |                            |
|-----------------------|----------------------------|
| %<br>Slope            | Feet = to 50<br>horizontal |
| 5%                    | 50                         |
| 10%                   | 50                         |
| 15%                   | 51                         |
| 20%                   | 51                         |
| 25%                   | 52                         |
| 30%                   | 52                         |
| 35%                   | 53                         |
| 40%                   | 54                         |
| 45%                   | 55                         |
| 50%                   | 56                         |
| 55%                   | 57                         |
| 60%                   | 58                         |
| 65%                   | 60                         |
| 70%                   | 61                         |
| 75%                   | 63                         |
| 80%                   | 64                         |
| 85%                   | 66                         |
| 90%                   | 67                         |
| 95%                   | 69                         |
| 100%                  | 71                         |
| 105%                  | 73                         |
| 110%                  | 74                         |
| 115%                  | 76                         |
| 120%                  | 78                         |

| Horizontal<br>62.5 Feet |                              |
|-------------------------|------------------------------|
| %<br>Slope              | Feet = to 62.5<br>horizontal |
| 5%                      | 63                           |
| 10%                     | 63                           |
| 15%                     | 63                           |
| 20%                     | 64                           |
| 25%                     | 64                           |
| 30%                     | 65                           |
| 35%                     | 66                           |
| 40%                     | 67                           |
| 45%                     | 69                           |
| 50%                     | 70                           |
| 55%                     | 71                           |
| 60%                     | 73                           |
| 65%                     | 75                           |
| 70%                     | 76                           |
| 75%                     | 78                           |
| 80%                     | 80                           |
| 85%                     | 82                           |
| 90%                     | 84                           |
| 95%                     | 86                           |
| 100%                    | 88                           |
| 105%                    | 91                           |
| 110%                    | 93                           |
| 115%                    | 95                           |
| 120%                    | 98                           |

| Horizontal<br>75 Feet |                            |
|-----------------------|----------------------------|
| %<br>Slope            | Feet = to 75<br>horizontal |
| 5%                    | 75                         |
| 10%                   | 75                         |
| 15%                   | 76                         |
| 20%                   | 76                         |
| 25%                   | 77                         |
| 30%                   | 78                         |
| 35%                   | 79                         |
| 40%                   | 81                         |
| 45%                   | 82                         |
| 50%                   | 84                         |
| 55%                   | 86                         |
| 60%                   | 87                         |
| 65%                   | 89                         |
| 70%                   | 92                         |
| 75%                   | 94                         |
| 80%                   | 96                         |
| 85%                   | 98                         |
| 90%                   | 101                        |
| 95%                   | 103                        |
| 100%                  | 106                        |
| 105%                  | 109                        |
| 110%                  | 111                        |
| 115%                  | 114                        |
| 120%                  | 117                        |



## **APPENDIX 9 - Vegetation Management Forms**

Contract Start Up Meeting – Work Procedure Review Form

NYSEG and RG&E Transmission Contractor Work Guarantee

Tree Removal Permission

## NYSEG/RGE Transmission Vegetation Maintenance Contract Start-up Meeting – Work Procedure Review

Service Center\_\_\_\_\_

Treatment Year\_\_\_\_\_

Contractor\_\_\_\_\_

Crew

Leader\_\_\_\_\_

Check off items that were discussed

|  |  |
|--|--|
|  | Label precautions                        |
|  | Sensitive areas                          |
|  | Equipment inspection and operation       |
|  | Application procedures                   |
|  | Spill prevention and clean-up procedures |
|  | Species identification                   |
|  | Protection of infrastructure             |
|  | Flagging ROW edges                       |
|  | Other-                                   |

### Certified Pesticide Applicators

Name\_\_\_\_\_

ID #\_\_\_\_\_ Expires \_\_\_\_\_

Name\_\_\_\_\_

ID #\_\_\_\_\_ Expires \_\_\_\_\_

Name\_\_\_\_\_

ID #\_\_\_\_\_ Expires \_\_\_\_\_

### Comments:

Company representative's name \_\_\_\_\_

Company\_\_\_\_\_ Date\_\_\_\_\_



## **Transmission (69kV & Greater) Contractor Work Guarantee**

This statement shall be provided to the Company Representative by December 31 of the treatment year. This is for a review that occurs during the current treatment year and after completion of the work and remedial work able to be performed within the same year. If it is discovered in the subsequent year that the specified herbicide control was not achieved or the remedial work was not completed, then the Contractor will be obligated to correct any issues.

For the \_\_\_\_\_ service center, for transmission vegetation management work performed in the year \_\_\_\_\_.

I certify that

- A. All specified cutting has been completed and all cut vegetation has been disposed of in accordance with the instructions.
- B. The percentage of treatment is 100% within the wire zone and at least 95% in the border zone on each site where herbicide treatment was specified and no live incompatibles over 10 foot height remain. In NYS, new seedlings under one foot are exempt.
- C. Living incompatible species greater than six feet in height found within the wire zone during the final review shall be cut. Where applicable, the stumps shall be treated. Living incompatible species less than six feet in height in the wire zone may receive and LVF treatment or be scheduled for dormant follow-up, where applicable. All formulations shall be approved by the Company Representative.

This job is submitted for final acceptance by the Company.

Name (print) \_\_\_\_\_

Signature \_\_\_\_\_

Company \_\_\_\_\_

Date \_\_\_\_\_

## Tree Removal Permission Form

Line \_\_\_\_\_ Str \_\_\_\_\_

Property Owner Name(s) \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

I (we) am (are) the owner(s) of the property at

\_\_\_\_\_

I (we) hereby grant permission to remove the following danger trees from my (our) property:

\_\_\_\_\_

\_\_\_\_\_

Property Owner(s) Signature(s)

\_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

Name & Company of Permission Person

\_\_\_\_\_

\_\_\_\_\_

## **ARTICLE 2. Maine (CMP) Detailed Specifications for Distribution Vegetation Maintenance**

Document No: FOP 400A

### **Section I – General**

#### **1.0 VEGETATION MANAGEMENT OVERVIEW**

The Specifications for Distribution Vegetation Management (SDVM) defines the policies and guidelines that will provide for the efficient implementation of AVANGRID' S (COMPANY) vegetation management program. The Vegetation Management Department is committed to improve power reliability, and to maintain a safe environment for the public, employees and other utilities. When vegetation makes contact with energized conductors then power quality is diminished, power outages increase, and the potential of human injury escalates.

When managed on a designated cycle, electric circuits experience fewer power quality issues. Trees that have the potential to contact the wires must be pruned or removed on a periodic basis. Power lines can be maintained at a lower annual cost over time if the tree work is completed before the limbs overtake the conductors. Vegetation clearances are based on the average growth rates of the most common tree species growing in the Northeastern United States.

#### **1.1 OBJECTIVES & SAFETY**

COMPANY intends to manage CMP distribution programs on a vegetation maintenance schedule and shall prioritize the circuits so those with the greatest risks are addressed first each year. CMP distribution program will be managed by creating the annual plan based on recent outage history, number of customers, growth conditions and regulatory metrics. Additional pruning and hazard tree removals shall be conducted as required.

COMPANY is committed to environmental stewardship and shall seek to select the most benign treatments possible. COMPANY will only use pesticides registered by the local State Board of Pesticide Control and the U.S. Environmental Protection Agency. Landowners and abutters rights will be considered and alternatives will be offered, whenever practical, without impacting reliability or safety. COMPANY District Arborist shall cooperate and coordinate work as necessary with state and municipal representatives.

Safety shall be incorporated into the departmental work culture. Regularly scheduled safety meetings shall be conducted with CONTRACTOR work force.

## **Section II – COMPANY Work Methods**

### **2.0 OBLIGATIONS - VEGETATION MANAGEMENT WORK FORCE**

COMPANY district arborist shall be responsible for supervising the vegetation management program in their service territory. COMPANY district arborist shall hold and maintain a State Arborist and Pesticide Applicator Licenses.

COMPANY district arborist shall hold a valid driver's license, a four-year degree in a related field, have a thorough knowledge of arboriculture, understand appropriate regulations, possess an awareness of electrical safety, a complete understanding of ANSI pruning standards (Ref. Glossary), and an appreciation for customer service. Annual compliance training will be required. Aspects of COMPANY responsibilities are as followed, but are not limited to:

- A) Efficiently share resources between functional areas. Ensure that contractor tree crews (CONTRACTOR) perform quality work and comply with COMPANY safety requirements.
- B) Efficiently monitor Vegetation Management Program.
  - i. Provide informational maps to CONTRACTOR.
  - ii. Field check/review all tree work by CONTRACTOR.
  - iii. Check crew timesheet weekly for accuracy and make proper corrections
  - iv. Pre-plan work as needed.
- C) COMPANY may use technology to develop and advance programs to monitor and improve vegetation management tools.
- D) Manage customer service requests for tree work
  - i. After service requests are generated in SAP and are evaluated by COMPANY district arborist, the tree work should be scheduled, or denied. Tree work may be deferred due to workload or scheduling conflicts.
  - ii. Wood clean-up is generally the landowner's responsibility.
  - iii. Once an assignment for work is made, COMPANY district arborist is responsible to update SAP.
- E) Assist in unusual complaints or difficult property owner when requested to do so by CONTRACTOR. COMPANY district arborist will attempt to negotiate proper clearance at locations where landowners refused tree work and will require a follow up visit. If customer refuses tree work an Incident Report Form must be completed on the COMPANY system.
- F) Coordinate work with other departments, e.g. substations, telecommunications, distribution line, transmission operations, resiliency, DG/solar, real estate.

- G) Assist with power quality complaints and provide assistance to other departments.
- H) Support power restoration efforts by coordinating tree crews for District.
- I) Work with state representatives, municipal officials, and landowners to explain vegetation management policy issues.
- J) Evaluate new ROW maintenance products and procedures.
- K) Observe and follow all federal, state, municipal, and tribal ordinances (Appendix F).
- L) Participate in educational opportunities
- M) The Vegetation Management Operations Department will manage an annual budget. Budget allocations will be based on district size, power outage history, outage indexes, power quality problems, required removals, required trim, and herbicide applications. Budgets will be determined at the discretion of the Manager of VM, and are not tied to any maintenance contract award in any individual district.

## **2.1 Ancillary Tree Clearance Program**

The Ancillary Tree Clearance Program (ATCP) is designed for circuits, or segments of circuits, that are experiencing a high number of tree-caused power outages. The objective of the ATCP will be to reduce possible tree caused outages by pruning and removing overhanging branches and focus on danger tree removal. The tree crews may be instructed to clear beyond normal specifications (ex. to the maximum aerial lift working height and remove large trees and branches that are outside the standard clearance zone) that pose a risk to overhead COMPANY equipment. This program incorporates what the COMPANY may call “Hot Spot” or “Hazard Tree/Enhanced” work.

## **2.2 Record Keeping**

- A) Incident Report Form (Appendix A)  
Contractor caused outages, safety violations, accidents, refusals, property damage and complaints shall be documented on CMP Incident Form. A copy of the report shall be sent to COMPANY Manager of Vegetation Management and Vegetation Management District Arborist within 24 hours of being aware of the event. Final reports should be received by COMPANY representatives within 2 weeks of incident.
- B) Damage Claims  
If a property owner or abutter reports damage due to a vegetation management activity, the person receiving the complaint shall notify COMPANY District Arborist and contract supervisor immediately. In turn, COMPANY district arborist shall notify the Manager of Vegetation Management. CONTRACTOR supervisor shall contact landowners with property

damage or complaint within 24 hours of being notified of a problem. CONTRACTOR will document the event on Incident Form. Compensation for damage shall be determined by COMPANY district arborist and CONTRACTOR supervisor if the situation warrants it.

### **2.3 Customer & Municipal Notification**

The COMPANY and CONTRACTOR will follow the vegetation management notification guidelines established by Federal, State and local regulatory bodies.

- A) Customer Contact Log: Customers who wish to be notified prior to non-emergency line clearance activities on their property can be placed on the company contact log. The information shall be made available to crews for the CONTRACTOR'S access, and the CONTRACTOR is required to make the proper notifications. In the even they can't reach a customer on the log, they shall notify the COMPANY District Arborist.
- B) Municipal Notifications: CONTRACTOR is required to notify town public manager or Public Works Department prior to commencing maintenance mileage work.
- C) The COMPANY will notify towns and public of maintenance activities via newspaper advertisements and the COMPANY'S website.

### **2.4 Completion of Maintenance Work**

- A) When all work has been complete, CONTRACTOR supervisor shall review the job to ensure that all specified pruning, ground cutting and removals are complete and that all cut vegetation has been disposed of in accordance with the job instructions.
- B) After this review, CONTRACTOR supervision shall notify the company representative that work has been completed in accordance with all job instructions.
- C) CONTRACTOR shall submit a circuit sign off sheet to signify that the work is complete.
- D) COMPANY district arborist shall then review the completed work, within 30 days, and communicate to the CONTRACTOR whether rework is needed.
- E) The CONTRACTOR has 30 days from when re-work is issued to complete and notify COMPANY for re-inspection.
- F) The COMPANY then has 30 days to do a final inspect and identify any outstanding redo's that may have not been completed. If a redo is found not complete, it will be added to the rework count.
- G) Upon completion of rework, and circuit sign off sheet, COMPANY will process necessary files for payment.

## 2.5 Storm Restoration

Vegetation Management Department will actively support all power restoration efforts. In general, the line departments will coordinate restoration activities in each service center.

- A) All costs will be charged to an established cost collector. Special work orders may be opened for major storms.
- B) Storm work will consist of all tasks required to restore power and the associated follow-up work necessary to remove immediate threats to utility facilities.
- C) COMPANY district arborist shall dispatch crews normally assigned to the service center and notify the Manager of Vegetation Management.
- D) Tree work shall be performed by contract crews with established contracts.
  - i. Tree crews from out of state shall be used to assist in the restoration effort after the Area Incident Commander authorizes the request. All companies, outside of current COMPANY system, sending crews to COMPANY must send proof of qualifications, insurance, and rates.
    - a. Under extreme conditions tree service contractors who do not hold negotiated agreements with the Company may be employed with the approval of the Manager of Vegetation Management to ensure the contractors meet COMPANY guidelines.
    - b. If this situation occurs, experienced COMPANY personnel shall be assigned to assist the foreign crews in the field.
  - ii. All outside crews will report to a staging area where COMPANY policies and procedures will be explained.
  - iii. All crew movements between service centers shall be discussed with Manager of Vegetation Management and the designated Incident Commander or storm manager. A crew roster shall be submitted to COMPANY when crews enter onto COMPANY system, or are transferred between districts, using COMPANY provided template.
  - iv. Crews may be placed on standby if severity of storm warrants it. Crews should be fueled and fed before arriving on standby.
- E) All crews will report daily time, and work locations which will be noted by town, road, and pole.
  - i. Crews will be responsible for recording all line, pole, and task locations. It will be the CONTRACTOR'S responsibility to submit timesheets upon being demobilized from storm.
  - ii. CONTRACTOR shall submit electronic and paper forms for crews not currently on the system.
    - a. Start and stop time is to be recorded.
    - b. One weekly time sheet shall be entered per crew for the duration of storm.
- F) All vendors must have a valid purchase order.

- G) Tree work necessary in areas beyond the restoration of lines shall be the responsibility of the municipality or property owner.
- H) COMPANY will make all possible efforts to arrange for lodging for tree crews sent to work in areas outside of their awarded district.
- I) Tree crew must be released at end of each day by COMPANY district arborist.
- J) Crews shall be released from the service territory after coordinating with the COMPANY.
- K) COMPANY or crews contracted by COMPANY will not perform wood clean up nor brush removal of any debris resulting from storm or the associated restoration effort.
- L) All tree crews shall follow the COMPANY storm schedule workday. See COMPANY Safety Handbook (Exhibit F) for restoration daily maximum work hours.



## **Addendum A Maine- CMP Contractor Technical Specifications**

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## **1. Safety and Obligation of Contractor**

- A) CONTRACTOR operates independently and not as an agent of COMPANY.
- B) All distribution vegetation management maintenance work shall be performed by a COMPANY approved utility CONTRACTOR. CONTRACTOR, and at least one member of each crew, shall hold valid local State arborist and pesticide applicator licenses (category 6).
  - a. New foremen shall have ninety (90) days in which to complete requirements of both arborist and pesticide licenses, when working alone.
  - b. Crews who are not fully licensed at the end of the 90 period may not work on the system until the licenses are obtained, unless under direct supervision of a fully licensed Foreman.
- C) Safety is considered of paramount importance and all employees and contractors working for COMPANY are expected to observe all safety rules
  - a. CONTRACTOR employees performing line clearance work near energized conductors shall be line clearance qualified in accordance with OSHA standard 29 CFR 1910.269 and with the ANSI Standard Z133
  - b. CONTRACTORS must comply with all OSHA safety requirements, and shall, at a minimum, wear hard hats and safety glasses. When operating a chainsaw while standing on the ground the CONTRACTOR shall also wear appropriate fitting chainsaw protective chaps and other appropriate PPE
  - c. All equipment needed to complete vegetation work safely shall be in good working order and shall be provided by CONTRACTOR
- D) CONTRACTOR will complete the work according to approved arboricultural standards and within governmental regulations.
- E) At a minimum, equipment for a distribution crew shall include a truck and chipper, chain saws, pruners, pruner poles, ropes, saddles, flashlights or spotlights and OSHA required safety equipment. Supplies shall include tire chains, saw chains, saw blades, files, chain saw oil, COMPANY maps and paperwork, etc. Chainsaws are part of the equipment that goes with the truck that is being used and billing for saws will not be accepted.
- F) The CONTRACTOR shall give the COMPANY a minimum of (2) two weeks notice to starting work on a circuit, and prior to adding any new crews. CONTRACTOR and COMPANY will complete Pre-Circuit Signoff Form prior to commencing work.
- G) The CONTACTOR supervisor shall arrange for weekly consultation with COMPANY, advising of crew work location, work planned and submit a daily crew roster to COMPANY District Arborist.
- H) CONTRACTOR shall maintain liability and property damage insurance holding COMPANY free from damage and accident claims related to their work.

- I) COMPANY shall partner with all approved CONTRACTORS in order to maximize mutually beneficial goals. The partnering process may include meetings and achieving COMPANY, corporate goals.
- J) CONTRACTOR shall designate a full time General Foreman / Supervisor responsible for project completion during the course of the work.
- K) CONTRACTOR is responsible to meet all work load requirements within an award for the entire year. Work load schedules may vary amongst Districts and it is the CONTRACTOR'S responsibility to meet these demands.
- L) It shall be the responsibility of the CONTRACTOR to notify COMPANY of any crew changes and provide new foreman with necessary training.
- M) The foreman shall be expected to be reasonably accessible by mobile phone and shall provide the mobile phone number to COMPANY district arborist during regular business hours.
- N) The CONTRACTOR Supervisor (GF) should be accessible by cell phone after hours for trouble/ARCOS calls.
- O) At least one member of each crew shall speak English and be able to communicate work practices and answer questions.
- P) It is the sole responsibility of the CONTRACTOR to leave all property in the condition it was found prior to maintenance.
  - a. The CONTRACTOR shall protect existing structures, communication lines, power lines, roads, etc., as well as private property within and adjacent to the work area
  - b. It shall be the CONTRACTOR responsibility to restore conditions back to original condition if damage occurs.
- Q) CONTRACTOR should be the first contact for customer inquiries and complaints
  - a. Report and attempt to settle any inquiry, complaint or claim received during the course of the work
  - b. It is the responsibility of CONTRACTOR to make a reasonable attempt to resolve all complaints that occur.
  - c. The CONTRACTOR will respond to any customer inquiry or complaint no later than two business days from the time they become aware of the inquiry or complaint
  - d. All complaints will be brought to the COMPANY District Arborist's attention immediately and documented in writing within 2 days. Final resolution must be provided in writing within 2 weeks of the complaint.
- R) Refusals will be brought to the attention of COMPANY District Arborist within (2) two business days and using the following guidelines. All refusals shall be documented using Incident Report Form. Documentation shall include location and any unusual notes.

- S) Signs displaying the CONTRACTOR'S company name for all vehicles used on the right-of-way and for vehicles used while contacting property owners for access or notification will be provided.
- T) CONTRACTOR crews shall not solicit private tree work while working for the COMPANY.

## **2. Common Practice**

- A) Work is subject to company and landowner authorizations if trees are outside road limits or easements.
- B) All vegetation next to COMPANY equipment shall be cleared to comply with COMPANY specifications and is included with Lump Sum pricing.
  - a. De-energized equipment shall be maintained
  - b. AMI devices and poles
  - c. Guy Cables and push braces to be clear of vines
- C) Approved methods of wood and brush disposal will meet or exceed standards established by State and Federal Laws.
- D) Toxic vegetation that presents a hazard to livestock, such as cherry, shall be disposed of outside of active pasture areas.
- E) Adjacent to streams or waterways, cut vegetation shall be placed beyond the high water mark or more than 30 feet from the stream, whichever is less.
- F) Cut Surface Treatment (CST) shall be applied within one (1) hour after all incompatible hardwood ground cutting and removals, within legal limitations. CONTRACTOR will be responsible for all necessary notifications.
- G) Invoicing and work quality is approved by the COMPANY District Arborists. If CONTRACTOR work performed does not meet COMPANY standards, then CONTRACTOR shall go back and complete the work to COMPANY standards at the cost of CONTRACTOR
- H) The following towns shall have police flagging in Lump Sum: Portland, South Portland, Auburn, Westbrook, Sanford. For any towns not included in this list that require police flagging, CONTRACTOR is permitted to charge COMPANY police flagging costs.

## **3. Maintenance Work**

- A. Lump Sum
  - i. Primary Line
    - 1. Clearance
      - a) The clearances do not change for different primary conductor types
      - b) Minimum of eight (8) feet of side clearance from the conductor.

- c) Minimum of fifteen (15) feet of overhead clearance from the highest electrical conductor.
- d) Minimum of ten (10) feet of clearance will be provided from the lowest electrical conductor to any vegetation, when ground clearing is not permitted.
- e) In limited situations concerning landscape and ornamental trees for branches below the wires, crews may taper lower branches back towards woods edge to improve efficiency of wire restoration
- f) Smaller limbs below ten (10) feet from the lowest electrical wire will be cut to the ground level so that vegetative shelves are not created or maintained.
- g) In limited situations, sturdy mature limbs which are a minimum of ten (10) feet below the lowest electric wire which do not pose a hazard to the conductors, may remain provided that re-sprout growth has been removed and minimum side clearance is obtained for the entire limb.
- h) Dead limbs that could present a hazard to the line will be removed even if they are outside of the zone to be cleared.
- i) No limbs will be left that overhang the wires and could potentially contact the wires when loaded with snow or ice even if they are outside the established clearance zone.
- j) All "hangers" must be removed and properly disposed.

## 2. Removals

- k) COMPANY requires that tree crews remove or cut to safe height, hazard trees that pose an obvious threat to overhead conductors within 8 feet of the primary conductor.
- l) When a tree is removed, the stump height will be no taller than six (6) inches.
- m) Trees beyond the road limits or outside the easement require landowner permission.
- n) All non-compatible tree species shall be removed within a minimum of eight (8) feet from the outside conductor.
- o) When working roadside, CONTRACTOR shall promptly remove or chip the brush resulting from removals and pruning operations.
- p) Large wood over three (3) inches in diameter may be left on site, in accordance with Maine Slash and Timber Theft laws.
- q) Large sturdy trees that do not pose a hazard to conductors can remain within the right of way, provided side and overhead limbs have been removed, with COMPANY district arborist approval. COMPANY requires removal of as many hazard trees as possible.

## 3. Ground Cutting

- r) COMPANY requires ground cutting of all incompatible tree species within the designated right of way.
- s) Each stump shall be treated with an approved cut surface herbicide treatment (CST).

4. Debris Removal

- t) All debris three (3) inches in diameter or less shall be chipped.
- u) In off road right of way locations brush may be wind rowed according Maine State rules.

5. Vines

- v) All vines not in contact with any electrical conductors shall be removed by creating a minimum 2 foot separation between the ground and vines growing up the pole. For vines in contact with electrical conductors the COMPANY must be contacted.
- w) Base of cut vine shall be treated with CST, in areas without no spray ordinances.
- x) A basal spray application may be used in situations where COMPANY deems appropriate.

ii. Secondary Wires and Service Cables

- 1. COMPANY requires a minimum of two (2) feet of clearance from secondary and service conductors at the time of maintenance or construction pruning
- 2. All debris three (3) inches in diameter or less shall be chipped.
- 3. All vines not in contact with any electrical conductors shall be removed on secondary or stub poles, minimum 2 feet of separation between ground and any vines remaining on the pole For vines in contact with electrical conductors the COMPANY must be contacted.

iii. Completion of Work

- 1. After completion of work and review by the CONTRACTOR, CONTRACTOR supervision shall notify the company representative that work has been completed by submitting the Circuit Signoff-sheet. (Appendix C).
- 2. COMPANY representative shall then review the completed work, within 30 days, and communicate to the CONTRACTOR whether or not rework is needed.
- 3. Rework that has been claimed as being complete, but is found to be incomplete, shall be documented as additional rework.
- 4. The CONTRACTOR has 30 days from when re-work is issued to complete and notify COMPANY for re-inspection.
- 5. The COMPANY then has 30 days to do a final inspect and identify any outstanding redo's that may not have been completed. If a redo is found not complete, it will be added to the rework count.
- 6. Upon completion of rework, COMPANY will process necessary files for payment.

B. Time and Material

Additional Maintenance work that is outside of the Lump Sum specifications may be completed under time and material, within the same contract year, under the direction and approval of COMPANY.

### C. Unit Foliar

Areas that are ground cut in one year may be designated by the arborist for foliar application the following year

- iv. Foliar treatment may be prescribed for the following growing season.
  - 1. All incompatible softwood species over two (3) feet tall shall be cut at ground level.
  - 2. All incompatible hardwood species over six (6) feet tall will be cut and stump treated with approved herbicide formulation.
- v. Buffer zones shall be used to protect sensitive areas. A minimum 25 foot no spray zone along water
- vi. A minimum 100-foot no spray zone will be maintained on all drinking water supplies
- vii. Discretion will be used before herbicide applications are made near homes or sensitive areas
- viii. CONTRACTOR will be responsible for all necessary notifications
- ix. 100 % of all non-compatible species over six (6) feet tall must be controlled
- x. 95 % of all non-compatible species under six (6) feet tall must be controlled
- xi. CONTRACTOR is required to review herbicide control from previous year, by August 1st of current growing season, and re-treat where control does not meet specifications
- xii. A low drift agent will be used in all tank mixes
- xiii. Foliar work will not be paid in full until all work is audited and the rework is complete

## 4. Construction

### A) General

- i. The clearance zone may extend beyond the standard widths under certain circumstances - new clearing, hazard trees, etc
  - 1. Permission is required if trees are located outside road limits or easement rights
  - 2. Service trim is included when trimming for a primary or secondary span.
- ii. CONTRACTOR must work with COMPANY to complete work by the Customer Service Guarantee (CSG) date
- iii. CONTRACTOR is expected to start work no later than 3 days of receiving a construction order, unless otherwise agreed to in writing. CONTRACTOR may be expected to start within the 3 days in order to meet CSG dates or operational priorities.
- iv. The service center must notify the District Arborist a minimum of three (3) working days prior to installing the conductor once the poles have been set
- v. For planning purposes, allow one day of tree work for every span of new work
- vi. The District Arborist will notify the line department by updating work management system

### B) Unit

#### i. Primary

##### 1. Clearance

- a) The clearances do not change for different primary conductor types
- b) Minimum of eight (8) feet of side clearance from the conductor
- c) Minimum of fifteen (15) feet of overhead clearance from the highest electrical conductor

- d) Minimum of ten (10) feet of clearance will be provided from the lowest electrical conductor to any vegetation, when ground clearing is not permitted
- e) In limited situations concerning landscape and ornamental trees for branches below the wires, crews may taper lower branches back towards woods edge to improve efficiency of wire restoration.
- f) Smaller limbs below ten (10) feet from the lowest electrical wire will be cut to the ground level so that vegetative shelves are not created or maintained
- g) In limited situations, sturdy mature limbs which are a minimum of ten (10) feet below the lowest electric wire which do not pose a hazard to the conductors, may remain provided that re-sprout growth has been removed and minimum side clearance is obtained for the entire limb
- h) Dead limbs that could present a hazard to the line will be removed even if they are outside of the zone to be cleared
- i) No limbs will be left that overhang the wires and could potentially contact the wires when loaded with snow or ice even if they are outside the established clearance zone
- j) All “hangers” must be removed and properly disposed
- k) Service trim is included in Primary unit

## 2. Removals

- a) COMPANY requires that tree crews remove or cut to safe height, hazard trees that pose an obvious threat to overhead conductors
- b) When a tree is removed, the stump height will be no taller than six (6) inches
- c) Off ROW hazard vegetation are trees greater than four (4) inches in DBH, and are to be removed or cut to a safe height in woodlots, as part of routine maintenance vegetation management work (when trees greater than 30.1 DBH must be removed, contact the COMPANY representative)
- d) Trees beyond the road limits or outside the easement require landowner permission
- e) All non-compatible tree species shall be removed within a minimum of eight (8) feet from the outside conductor. CONTRACTOR will maintain the established right of way width, with landowner approval
- f) When working roadside, CONTRACTOR shall promptly remove or chip the brush resulting from removals and pruning operations
- g) Large wood over three (3) inches in diameter may be left on site, in accordance with Maine Slash and Timber Theft laws
- h) Large sturdy trees that do not pose a hazard to conductors can remain within this zone provided side and overhead limbs have been removed, with COMPANY representative approval. COMPANY requires removal of as many hazard trees as possible

## 3. Ground Cutting

- a) COMPANY requires ground cutting of all incompatible tree species within the designated right of way



- b) Each stump shall be treated with an approved cut surface herbicide treatment (CST)

4. Chipping and Debris Removal

- a) All debris three (3) inches in diameter or less shall be chipped
- b) In off road right of way locations brush may be wind rowed according Maine State rules

5. Vines

- a) All vines not in contact with any electrical conductors shall be removed, there shall be a minimum of 2 feet of separation between ground and any vines on pole.
- b) For vines in contact with electrical conductors the COMPANY must be contacted
- c) Base of cut vine shall be treated with CST, for areas without no spray ordinances
- d) A basal spray application may be used in situations where COMPANY deems appropriate

ii. New Secondary and Service Cable Construction

- 6. Minimum of two (2) feet of clearance from the conductors shall be cleared
  - 7. Dead or hazardous branches outside of the minimum two (2) feet clearance shall be removed
  - 8. Trees or limbs rubbing on or deflecting the service conductor shall be removed at the time of maintenance
  - 9. Incompatible tree species directly under cable should be removed rather than topped.
- Service trim is included in secondary unit.

**C). Time and Material**

Additional Construction work that is outside of the Unit specifications may be completed as Time and Material, under COMPANY direction.

**5. Hazard Tree Program**

- A) Trees targeted for removal, that are hazards to COMPANY lines, are generally dead trees, trees in decline, trees with weak or damaged crotches, uprooted trees, trees that are storm damaged, diseased trees or species known to have a high failure rate
- B) COMPANY will select areas for the hazard tree program using the tree-caused outage data, field observations and other inspection information
  - i. Target circuits will be chosen using the most recently available outage data. The list may be adjusted as new data becomes available throughout the year
  - ii. Hazard tree work shall start in Zone 1 first, located from the substation to the first protective device (recloser)
- C) COMPANY representative may review the enhanced tree work with municipal officials and adjust work specifications as necessary

- D) Removals outside the private easements or Public Right-of-Way will require landowner notification/permission
- E) Work shall be performed as "Hazard Tree" Unit, unless otherwise agreed to in writing between COMPANY and CONTRACTOR.

## **6. Hot Spot Program**

- A) Circuits that need work, but do not fall into the Hazard Tree Program, shall be performed as "Hot Spot" Unit, unless otherwise agreed to in writing between COMPANY and CONTRACTOR.
- B) Work shall be evaluated by COMPANY before work is issued.

## **7. Service Requests**

Customer and COMPANY generated notifications (commonly known as service requests) shall typically be evaluated by COMPANY representative

- A) COMPANY shall schedule, deny or defer the work.
- B) Wood clean-up is generally the responsibility of the landowner

## **8. Herbicide Use**

- A) As a best management practice, COMPANY shall use integrated pest management to discourage undesirable vegetation from growing in COMPANY right-of-ways, and to encourage desired plant growth. In certain areas, low volume herbicide use has shown to be less invasive than mechanical methods of vegetation management
- B) Herbicide Use and Procedures:
  - i. Where environmentally acceptable, CONTRACTOR will treat all vegetation capable of re-sprouting with an approved herbicide to prevent re-growth from the root system.
  - ii. Read and adhere to all labels before starting work. Review SDS sheets. CONTRACTOR is to follow all label requirements
  - iii. All application equipment will be tested and calibrated before work starts
  - iv. Hand pressurized equipment must be used
  - v. If an area to be treated is occupied at the time CONTRACTOR intends to treat the area, CONTRACTOR shall postpone treatment until the area is vacant
  - vi. All spray applications will cease if wind is likely to carry spray droplets out of target area. All activity will cease once wind speed reaches 15 MPH
  - vii. All spray applications will cease in heavy rain or if heavy rain is likely within one hour
  - viii. CONTRACTOR shall take all precautions to protect desirable vegetation on Company property and on adjacent property from damage resulting from these operations
  - ix. Application crew will maintain a spray log for all applications
  - x. All herbicide formulations must be approved by COMPANY

- xi. Cut Stump Treatment: Herbicide treatment is to be applied within one (1) hour after cutting.
  - xii. CONTRACTOR will be responsible for all necessary notifications.
  - xiii. CONTRACTOR shall supply to the COMPANY a unit price per span that does not include the cost of the chemical along with a price of the cost per gallon of the chemical.
  - xiv. CONTRACTOR invoices for herbicide will be paid once COMPANY has audited the work and deemed it acceptable.
- C) CONTRACTOR shall guarantee that treated areas meet COMPANY minimum specifications. CONTRACTOR shall retreat all areas exhibiting less than satisfactory control
- i. For areas requiring rework, additional herbicide used may be charged but additional labor may not be charged
  - ii. Invoices will be approved for payment once the COMPANY has audited all initial work and rework.

## 9) Storm

- A) All crews will report daily time, and work locations which will be noted by town, road, and pole
- i. Crews will be responsible for recording all line, pole and task locations
  - ii. It will be the CONTRACTOR'S responsibility to submit timesheets upon being demobilized from storm
  - iii. It will be the CONTRACTOR'S responsibility to submit electronic and/or paper forms for Crews not currently on the system
    - 1. Start and stop time is to be recorded by CONTRACTOR
    - 2. One weekly time sheet shall be entered per crew for duration of storm.
- B) All vendors must have a valid purchase order
- C) Tree work necessary in areas beyond the restoration of lines shall be the responsibility of the municipality or property owner
- D) COMPANY may arrange for lodging and meals of all tree crews not assigned to that area. Tree crews should strive to eat on the same schedule as line crews. The Company may elect to provide a meal per diem in lieu of meals, up to 3 per day depending on hours worked.
- E) Crews shall NOT be released from the service territory unless directed by a Company Representative- generally communicated via VM Manager level.
- F) Tree crews must be released at end of each day by COMPANY district arborist
- G) COMPANY or crews contracted by COMPANY will not perform wood clean up or brush removal of any debris resulting from storm or the associated restoration effort
- H) All tree crews will follow the COMPANY storm schedule workday. See COMPANY Safety Handbook for restoration daily maximum work hours
- I) Chippers and chainsaws shall not be billed unless otherwise approved by COMPANY. Safety supervisor billing must be approved by District Arborist in advance. Safety supervisors and Contractor General Foremen/Supervisors can only bill the company for straight time outside normal working hours during the work week, up to 17 hours of straight time on Saturday, Sunday and holidays. Exceptions may apply in storm emergency where personnel can work up to 24 hours.

# **10) Record Keeping, Timesheets, and Invoicing**

- A) CONTRACTOR shall accurately record daily activities, labor and equipment hours performed in each span. Data is to be referenced by town, road, and pole, using an electronic system provided by COMPANY, unless otherwise agreed upon in writing by both the COMPANY and CONTRACTOR.
- B) Timesheets shall be submitted electronically to COMPANY on a weekly basis. Time sheet data is to be used to invoice and track all crew production
  - i. Time sheets should include:
    - i. Start/Stop Times
    - ii. Crew Information
    - iii. Town/Road/Pole
    - iv. Equipment Detail
    - v. Labor
    - vi. Work Order Number
    - vii. PO Number
    - viii. activity and unit codes
  - ii. Timesheets shall not be accepted 14 days after work completion date.
  - iii. Contractor shall submit their weekly time by COB every Monday. Company will provide any corrections within 5 days of receiving the timesheet. Once corrected, the CONTRACTOR timesheet reports are processed.
- C) The CONTRACTOR shall prepare an invoice and work detail report to be submitted to the COMPANY for approval by the COMPANY district arborist. Any CONTRACTOR submitted invoices shall not be accepted 30 days after work completion date
- D) The COMPANY Accounts Payable will be authorized to send payment for all approved invoices to CONTRACTOR within a specified timeframe per contract
- E) Invoice correction policy and procedures for CONTRACTOR discrepancy
  - i. CONTRACTOR shall inquire about a discrepancy by sending COMPANY District Arborist an e-mail stating the date, type of work, crew, location, and their specific inquiry, within 5 days of invoice corrections.
  - ii. COMPANY District Arborist will investigate and will inform CONTRACTOR of the outcome
- F) Mileage reports shall be sent to COMPANY by COB every Monday. Vendor shall use Company supplied format (Exhibit E).

# **11) Customer and Municipal Notification, Damages and Complaints**

- A) COMPANY shall follow the vegetation management notification guideline established by Federal, State and local regulatory bodies
  - i. Annual notices shall be sent to municipalities where maintenance tree trimming activity will occur. Two newspapers covering each portion of the service territory shall publish tree trimming advertisements to notify area customers

- ii. CONTRACTOR shall notify municipal/town office 2 weeks prior to relocating to that area for maintenance work, in accordance with the pre-circuit signoff form.
- B) Tree work performed where COMPANY possesses line easements does not require customer notification, unless the customer is on the contact log
- C) Customers who wish to be notified prior to line clearance activities on their property can be placed on the company contact log
- D) The COMPANY shall maintain a customer contact list of all landowners who wish to be contacted before tree work is started at their specific location
  - i. Customer Contact List will be provided to the CONTRACTOR
  - ii. CONTRACTOR is responsible to obtain permission when necessary and any required permits when necessary
  - iii. If CONTRACTOR is unable to contact the customer within a reasonable time and 3 attempts, then COMPANY can send the customer a certified letter as a sufficient means of contact
- E) The routine customer notification policy is exempt during emergency restoration efforts
- F) All customers listed on the contact log will be notified by the CONTRACTOR in advance of starting tree work
- G) CONTRACTOR will consult with all landowners, when a shade or ornamental tree is to be removed, or for trees outside of the right – of -way, before any tree work is started
- H) CONTRACTOR shall communicate to the customer when major changes to the trees or landscaping are required to achieve the required clearance to the conductors
- I) CONTRACTOR shall not remove trees in landscaped areas without customer approval
- J) COMPANY door hangers shall be provided for CONTRACTOR use
- K) CONTRACTOR shall treat all landowners professionally
- L) CONTRACTOR shall report and attempt to settle any inquiry, complaint or claim received during the course of the work
- M) It is the responsibility of the CONTRACTOR to make a reasonable attempt to resolve all complaints that occur
- N) CONTRACTOR should be the first contact for customer inquiries and complaints
- O) CONTRACTOR shall respond to any customer inquiry or complaint no later than 2 business days from the time they become aware of the inquiry or complaint
- P) All inquiries or complaints will be brought to COMPANY Representative's attention immediately
- Q) The CONTRACTOR shall be required to complete an Incident Report form for each inquiry, complaint, outage, accident, or injury that requires medical attention that occurs while working on COMPANY system. This shall be reported to COMPANY Manager and District Arborist within 24 hours of the event. (Incident Report)
- R) Failure to report the incident to the COMPANY MANAGER and fill out the Incident Report form within 24 hours is a violation of a Company Performance Measurement (Reference Schedule E of MSA).

### **ARTICLE 3. New York (NYSEG & RG&E) Detailed Specifications for Distribution Vegetation Maintenance**

#### **1. Safety and Obligation of Contractor**

- A. CONTRACTOR operates independently and not as an agent of company
- B. Safety is considered a paramount importance and all employees and contractors working for the company are expected to observe all safety rules.
- C. All distribution contract work will be performed by a company approved utility contractor. In the event that a tree crew does not meet the company minimum standards they will be removed from the company system.
- D. Contractor employees performing line clearance work near energized conductors shall be line clearance qualified in accordance with OSHA standard 29 CFR 1910.269, and work in accordance with ANSI A300 and ANSI Standard Z133.1.
- E. CONTRACTOR shall provide a written health and safety plan for each project scope they are awarded.
- F. CONTRACTORS shall, at a minimum, wear hard hats and safety glasses when operating a chainsaw. Secure a drop zone and while performing groundwork, the contractor shall also wear appropriate fitting footwear and chainsaw protective chaps according to their policies.
- G. CONTRACTOR will complete the work according to approved arboricultural standards and according to federal, state and local regulations.
- H. All equipment needed to complete vegetation work safely shall be in good working order and provided by CONTRACTOR.
- I. CONTRACTOR shall maintain liability and property damage insurance holding company free from damage and accident claims related to their work.
- J. CONTRACTOR shall arrange for daily consultation with a Company Representative or as directed by Company Representative, advising of crew work location, work planned and submit a weekly crew roster to Company Representative.
- K. CONTRACTOR shall designate a full-time foreman providing a name and contact number responsible for project/circuit completion during the course of the work.
- L. CONTRACTOR shall provide the foreman with appropriate tools (including devices, paper work and maps) for the work to be performed. If it becomes necessary to change foremen or crew personnel, it shall be the responsibility of CONTRACTOR to provide the new foremen with the training necessary.

- M. The foreman shall be expected to be reasonably accessible by mobile phone and shall provide the mobile phone number to Company Representative.
- N. At least one member of each crew shall speak English and be able to communicate work practices and answer questions.
- O. CONTRACTOR shall provide signs/magnets displaying the Contractor's company name for all vehicles used on the right-of-way and for vehicles used while contacting property owners for access or notification.
- P. It is the sole responsibility of the CONTRACTOR to leave all property in the condition it was found prior to maintenance.
  - 1. The CONTRACTOR shall protect existing structures, communication lines, power lines, roads, etc., as well as private property within and adjacent to the work area.
  - 2. It shall be the CONTRACTOR responsibility to restore conditions back to original state if damage occurs.
- Q. CONTRACTOR may be the first contact for customer inquiries and complaints.
  - 1. CONTRACTOR shall report and attempt to settle any inquiry, complaint or claim received during the course of the work.
  - 2. It is the responsibility of CONTRACTOR to make a reasonable attempt to resolve all complaints that occur.
  - 3. The CONTRACTOR will respond to any customer inquiry or complaint no later than (2) business days from the time they become aware of the inquiry or complaint.
  - 4. All inquiries or complaints will be brought to the Company Representative's attention immediately.
- R. Refusals will be brought to the attention of Company Representative with follow up documentation submitted within (2) two business days and using the following guidelines.
  - 1. All refusals shall be documented using the electronic device and/or submitted to the company using the Refusal Documentation Form or by e-mailing same information. Documentation shall include location and detailed description of events.
- S. CONTRACTOR crews shall not solicit private tree work from NYSEG/RGE customers while working for the company.
- T. The billing rate for a bucket truck is to include all chainsaws necessary to complete work, pruners, wiz saws, hydraulic saws, pruner poles, ropes, climbing gear, lights and OHSA required safety equipment. Itemized billing for chainsaws will not be permitted.

## **2. Vegetation Maintenance**

### **A. Primary and Neutral Wire- Pruning**

1. The intent of this specification is not to allow encroachment of the existing Rights-of-Ways (ROW). In situations where the ROW is wider than the current distribution specifications; Company specifications requires full ROW width to be maintained.
2. Minimum of (10) ten feet of side clearance. Less clearance must be a minimum of (5) five years growth to the side of conductor and Arborist approval must be obtained.
3. Minimum of (15) fifteen feet of overhead clearing. Branches extending over conductors shall have enough clearance to swing/hinge if broken without touching conductors (i.e. under snow and ice load).
4. Dead limbs, diseased, or structurally unsound limbs that could present a hazard to the line (overhanging or adjacent) will be removed even if they are outside of the zone to be cleared.

### **B. Secondary Wire**

1. The CONTRACTOR, shall prune secondary and service drops if strain or abrasion is present from surrounding vegetation. Requires Arborist approval.
  - i. Trimming of secondary wires will be paid by Time and Material (T&M) or Unit Rates, separate from contract if not parallel or under built with primary wires. Requires Arborist approval.

### **C. Ground Cutting**

1. 100% of capable vegetation species shall be cut at ground level within a minimum of (10) ten feet from center line. Stumps shall be cut as level with the ground as possible and not exceed 2-4 inches in height.
2. 100% of all low growing vegetation shall be cut at ground level within 5' radius of infrastructure.
  - a. Stumps capable of re-sprouting may be treated with an approved herbicide when; approved by a Company Representative, environmentally appropriate and upon proper notification to the resident and property owner.



## **D. Removals**

1. The company requires the CONTRACTOR to remove or cut to safe height, on ROW hazard trees that pose a threat to overhead conductors up to 30" in diameter. Den trees/Habitat Trees may be left with prior company approval as long as no public safety threat will be generated as a result.
2. The CONTRACTOR shall notify Company Representative of hazardous trees identified off ROW while working immediately. The CONTRACTOR shall remove identified hazardous vegetation and/or cut to a safe height. The completed tree work will be paid using T&M or Unit Rates and shall be completed during time of routine contract work. Requires Arborist approval.
  - i. When a tree is removed, the stump will not exceed (2-4) two to four inches in height.

## **E. Yard Tree Removal (exception)**

1. T&M or Unit Rates may apply for any actively maintained yard trees that, due to species, location or pruning requirements, will interfere with the electrical facilities within a 5 year period from the date of pruning and with a DBH of 18" or greater located in the immediate yard locations of a residential dwelling only during the maintenance of lump sum circuits. Requires Arborist approval.
  - i. It is the responsibility of the CONTRACTOR to obtain written acknowledgement from the property owner for all removals.

## **3. Vines**

Vines growing on natural or man-made structures such as poles, stub poles, guy wires, adjacent trees etc. shall be severed in the following ways listed below:

1. Every stem of the vine shall be severed in (2) two locations so as to leave an approximate (3) three foot gap that will make it easily visible that the stem has been cut
2. The first cut will be located (2-3) two feet to three feet above the ground with the second cut at (5-6) five feet above the ground, or as high as can be safely achieved.

3. The cut section shall be removed.
  - i. Cuts may be treated with an approved herbicide when; approved by a Company Representative, environmentally appropriate and upon proper notification to the resident and property owner.

#### **4. Chipping and Debris Removal**

##### **A. Maintained or Residential Roadside areas.**

1. It shall be the responsibility of the CONTRACTOR to remove and dispose of all logs, brush and debris resulting from tree maintenance operations.

##### **B. Chipped and left on site by permission.**

1. At the discretion of the Company Representative and/or by written consent of the property owner, chips and debris shall be left on property.
2. Chips shall not accumulate to depths greater than (4) inches when blown on or adjacent to the ROW.

##### **C. Non-Maintained Areas.**

1. Debris shall be windrowed along the edge of the ROW keeping the wire zone clear and access paths of debris.
2. Piles shall have a maximum height of (2) two feet and shall be void of any excessive protruding material.
3. Piles shall have a (20) twenty foot break every (100) one-hundred feet of pile length to serve as a fire break

##### **D. General Debris removal.**

1. Toxic vegetation that presents a hazard to livestock, such as cherry, shall be disposed outside of active pasture areas.
2. Adjacent to streams or waterways, cut vegetation shall be placed beyond the high water mark or more than (30) thirty feet from the stream whichever is less
3. All hangers shall be removed.

## **5. Record Keeping**

1. Accurately record daily activities, labor and equipment hours performed in each span. Data is to be referenced by town, road, and pole, using the method of data entry specified by the company from any device. Any changes in labor or equipment (i.e. treeman pay class change, equipment removed from production for maintenance) the CONTRACTOR should notify the company representative
2. Timesheets shall be submitted electronically to the company on a weekly basis, no later than the Monday following the end of day on the last scheduled work day of the week.
3. The COMPANY may issue a stop work order and/or withhold payment for work performed until all reports have been submitted when these reports become delinquent.
4. Numerous time sheet errors will not be tolerated. The arborist will review a timesheet report with the GF or contract supervision at the beginning of each week documenting all time submitted for the week prior. It is CONTRACTOR responsibility to review the reports for accuracy and submit required documents. Numerous and repeat corrections will not be accepted. No corrections will be accepted after 10 billing days

## **6. Customer and Municipal Notifications**

- A. The CONTRACTOR shall give the company a minimum of (4) four weeks' prior notice to commencing work on a circuit.
  1. The Company Representative shall mail notification of maintenance to all customers on the circuit.
    - i. Approximately (2) two weeks prior to performing work, the CONTRACTOR shall make at least (2) two attempts to contact the property owner to notify them of the work. One of the attempts shall be made after 5:00pm. If the second attempt is unsuccessful, the CONTRACTOR Representative will leave written notification along with a telephone number of work to be done. All notification attempts and verbal exchanges shall be recorded in a notification log.
- B. CONTRACTOR shall be responsible to notify New York State Department of Transportation (NYSDOT) of daily locations and follow permit language
- C. The CONTRACTOR shall contact the Company Representative a minimum of once per week to review progress and to discuss how to proceed with difficult customers or unsuccessful notifications

- D. Documentation of notifications and attempts shall be made available to the Company Representative upon request and submitted at the completion of every circuit
- E. The company shall maintain a customer contact list of all landowners who wish to be contacted before tree work is started at their specific location.
- F. CONTRACTOR will consult with all landowners on the customer contact list at least one day in advance or prior to any maintenance work.
- G. The customer notification policy is exempt during emergency restoration efforts.
- H. The CONTRACTOR shall be the first point of contact for all customer inquiries and complaints. It is the responsibility of the CONTRACTOR to make a reasonable attempt to resolve all complaints that occur, including complaints that occur when the contractor has trimmed in accordance with the specifications. The CONTRACTOR shall respond to any customer inquiry or complaint no later than (2) two business days from the time they become aware of the inquiry or complaint. All inquiries or complaints will be brought to the Company Representative's attention immediately.

## **7. Construction**

### **A. Primary Wire**

- 1. New construction shall be cleared to full ROW width and in accordance with these specifications unless otherwise noted on the work order by the Company Planning Representative
- 2. Clearing widths are the same regardless of primary conductor type.
- 3. Clear all branches to the ground below the lowest electric wire. All capable tree species shall be removed from the clearance zone at the time of pruning.
  - i. No shelf is to be left unless specified by Company Representative.
  - ii. Compatible species shall be removed in ROW to improve access for Operations.
- 4. The clearance zone may extend beyond the conductors when conditions dictate under company authorization. The landowner may request for trees to be left, which the crew will record as limited clearance with prior company approval.

## **8. Completion of Work**

- A. When all work has been complete, CONTRACTOR supervision shall review the job to ensure that all specified pruning, ground cutting and removals are complete and that all cut vegetation has been disposed in accordance with the specifications and contract. Failure to review work will result in immediate penalty.

- B. CONTRACTOR shall accurately document all work completed using the form provided.
  - 1. This is to include all rework submitted by the company.
- C. After CONTRACT OR supervisory review, CONTRACTOR supervision shall notify the Company Representative via the work completion form that work has been completed in accordance with the contract specifications.
- D. Upon approval of work and completion of any identified rework, the company shall process the necessary files for payment.
- E. All work is subject to verification by the company prior to the creation or payment of invoices.

## **9. Storm**

- A. Division Arborist or ARCOS will dispatch crew(s) for minor storm events. Manager of VM will dispatch crews in preparation or in response to major storm events.
  - 1. A major storm crew is defined as a street bucket and 2 workers.
  - 2. Any other crew make-up or equipment must be authorized by a company representative prior to CONTRACTOR mobilization.
- B. The CONTRACTOR shall make arrangements for crew rosters to be sent to the company prior to arrival of crews (no longer than 1.5 hours).
  - 1. CONTRACTOR shall record and submit the company supplied storm roster with updated task log spreadsheet daily to division arborist (via email).
- C. CONTRACTOR shall report daily time and work locations which will be noted by town, road and pole.
  - 1. Crews released from other service territories will be responsible for recording all line, pole locations and task. It will be contractor responsibility to input all data prior being demobilized from storm, in addition to transmitting all crew timesheets.
    - i. Start and stop time is to be recorded.
    - ii. One supercrew time sheet shall be the preferred method of entry spanning the duration of storm (separated by WE for longer duration storms).
- D. The company shall arrange for lodging of all tree crews part of the restoration effort unless otherwise authorized by a company representative.
  - 1. Tree crews will receive eligible meal stipends, which shall be recorded on the storm roster task log and on electronic time sheet entry. Tree crews should strive to eat on the same schedule as line crews.
- E. Crews shall NOT be released from the service territory unless directed by a Company Representative- generally communicated via VM Manager level.

- F. All tree crews will follow the company dictated storm schedule work day
- G. Tree crew must be released at end of each day by Company Representative
- H. All required storm work shall be done in accordance with the guidelines set in the Debris Removal section paragraphs C and D for unmaintained areas and general debris.
  - 1. Neither the company or CONTRACTOR will perform wood clean up or brush removal of any debris resulting from storm or the associated restoration effort unless directed by a Company Representative.
  - 2. Chippers will not be paid for unless requested by the Company Representative and used.

## Appendix G. Regulatory Preferences

All federal, state and local laws, regulations, and guidelines must be adhered to when employed by the company including, but not limited to the following:

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|--|
| ANSI Z.133.1-1988, American National Standard Pruning Standards - A300; Tree Care Operations, Part 1 to 7  |
| <i>ANSI A-300 Best Management Practice</i> Utility Pruning of Trees, by ISA  |
| High Voltage Safety Act "An Act to Create the Overhead High-voltage Line Safety Act" (Section 1. 35-A MRSA C.7-A). (H.P. 894 – L.D. 1247)  |
| Tree Care Industry Association Best Practices  |
| National Electric Safety Code Section 218  |
| OSHA Standard 29 CFR 1910:269 - Electric Power Generation, Transmission, and Distribution 29 CFR 1910:269(R) - Line Clearance Tree Trimming 29 CFR 1910:1200 - Hazard Communication Standard |
| Slash Law "An Act to Amend the Laws Relating to Slash Disposal along Highways and Railroad and Utility Corridors "(Section 1. 12 MRSA §9332 and §9333.)                                      |
| COMPANY Accident Prevention Manual   |
| Tribal Regulations   |

## **ARTICLE 4. Connecticut – (UI) Detailed Specifications for Transmission and Distribution Vegetation Management**

Work v. 01.23

### **1. Introduction**

The United Illuminating Company remains committed to providing high levels of reliability, while simultaneously ensuring customer safety and satisfaction, and controlling cost. In 2013, the Company completed the sixteenth year of the Performance-Based tree trimming program. All customer requests and concerns about tree conditions are investigated and tree work is performed as required to eliminate those concerns whether from an electric safety or reliability point of view.

From 1997 to 2013 the overhead distribution line clearance program consisted of a split four-year and eight-year cycle for planned tree trimming. The three-phase portion of the system was trimmed on a four-year cycle, while the single-phase portion of the system was trimmed on an eight-year cycle or where performance triggered more frequent trimming. Any single-phase portion of the system that experienced two or more tree related outages in a 36-month period was, at a minimum, trimmed to minimize the potential for future outages. Other system modifications, such as reconductoring bare wire with covered conductor, may also be performed to help minimize the potential for future tree related outages. In addition, tree work is completed at new construction sites as needed.

Beyond the Line Clearance planned circuit miles program, the Company implements the following vegetation management programs to maintain or enhance the reliability of the electric distribution system:

- Hazardous Trees: The Hazardous Tree program requires the complete removal to ground of all identified trees. Hazard trees are identified in several ways including; UI vegetation management resources, contractor permissions personnel, tree trim crews, town tree wardens and customers. The hazard tree removal program is designed to remove trees identified as dead, dying, diseased or structurally defective and located outside of the normal trim area, but pose a potential hazard to UI facilities. The process involves identification of hazardous trees through the circuit trimming program, reliability engineer, and Line Clearance Arborist and Technicians followed by communications with customers, CDOT and/or municipalities to inform them of the hazard and to obtain their consent to remove.
- Vine Management: Vine Management is the removal of various vines from poles and guy wires.
- Distribution Rights-Of Way Line Clearance: Rights-of-Way Line Clearance is the removal of overgrowth on the distribution rights-of ways. Typically, such work is identified and generated through ROW inspections and maintenance trim cycles.



Transmission lines are trimmed on a four year cycle (approx. 25% per year). The cycle based trimming is supplemented with inspection of 100% of the overhead transmission lines. UTs Transmission Vegetation Management Program (TVMP) complies with the North American Electric Reliability Corporation (NERC) FAC-003-4 Standard, covering all the transmission lines operated at 200kV and above, and specific lower voltage lines designated by the Northeast Power Coordinating Council (NPCC) as being critical to the reliability of the electric system in the region. Transmission line ROW are inspected annually for the purpose of identifying vegetation conditions that could encroach the vegetation to conductor clearance requirements, impact electric service reliability or create a hazard to the public.

UI continues to work with local tree wardens, as well as civic and professional groups, to help educate customers about the proper selection and care of trees that may be planted near UI's electric facilities. In addition, safety brochures are distributed annually through bill inserts, and other events are held to educate the public on the dangers associated with energized wires and the importance of having qualified tree contractors or UI line clearance crews remove hazardous tree growth. We believe that we can continue to provide safe, reliable service in a cost-effective manner by working together with our customers in matters of line clearance and vegetation management

## **2. Scope**

The scope of this specification is to provide requirements and guidelines for line clearance pruning and the removing of trees, brush and other vegetation in close proximity to overhead electric distribution facilities located on public and/or private rights-of-way.

### **General:**

- The Company: The United Illuminating Company (UI)
- Contractor: The firm that has been awarded a formal contract to perform work

## **3. Regulations**

All work practices and definitions, except as otherwise specified herein, shall be in accordance with all applicable Industry, Federal, State and Local laws and regulations, approved standards and safety practices.

These include all applicable sections of the following but are not limited to:

- OSHA 29CFR 1910.269 Electric Power Generation, Transmission & Distribution  
NERC FAC-003-4 Transmission Vegetation Management Program or current standard
- ANSI A300 "Standard Practices for Trees, Shrubs and Other Woody Plant Maintenance"
- ANSI Z133.1 "Pruning, Trimming, Repairing, Maintaining and Removing Trees, and Cutting Brush - Safety Requirements"

- NESC
- Connecticut General Statutes
- Department of Transportation
- Local Ordinances
- “Pruning Trees Near Electric Utility Lines” by Dr. Alex L. Shigo
- Best Management Practices, Utility Pruning of Trees

#### **4. Evaluation**

Each tree must be evaluated individually at least 15 days prior to any non-emergent tree work being performed by contractor work planners and/or crew personnel. At the time of the evaluation, consent will be obtained from the property owner. Consideration must be given to the tree species, condition, growth rate and failure characteristics, PROW limitations, tree location, the potential combined movement of vegetation and conductors during routine winds, and sagging of conductors due to elevated temperatures or icing when performing line clearance. This evaluation should include growth rate, species, shape, condition and location of the tree and the likelihood of encroachment to the UPZ. When requesting written consent for tree pruning or removal from municipal tree wardens, the State Department of Transportation, abutting property owners and private property owners, UI's tree contractor Work Planners will use the 8 foot line clearance dimension as the starting point for evaluation of the UPZ and will normally request the removal of all encroaching trees and limbs. The actual distance will result from the required cut of the tree so that a healthy tree remains.

Pole mounted electrical equipment such as transformers, capacitors, switches, etc. should be provided at least ten (10) feet of clearance and in accordance with the DLCS – UPZ.

##### Secondary and Service Conductor Clearances

Secondary conductors without primary above and pole to pole service lines shall be cleared to obtain 2' clearance around.

Do not clear service lines (pole to house). Service line clearing is the responsibility of the property owner.

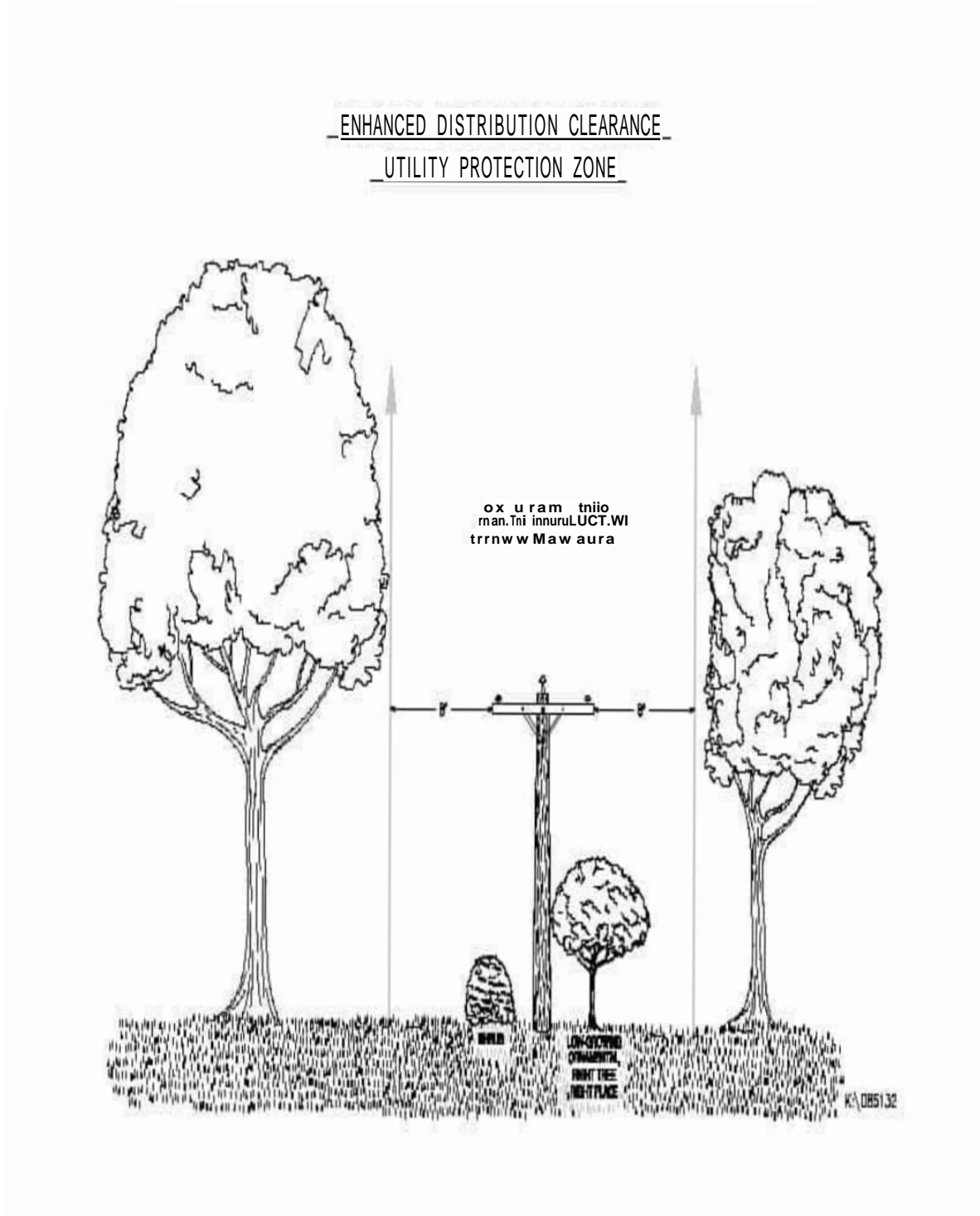
#### **A. Distribution Line Clearance Specifications – Utility Protection Zone (DLCS)**

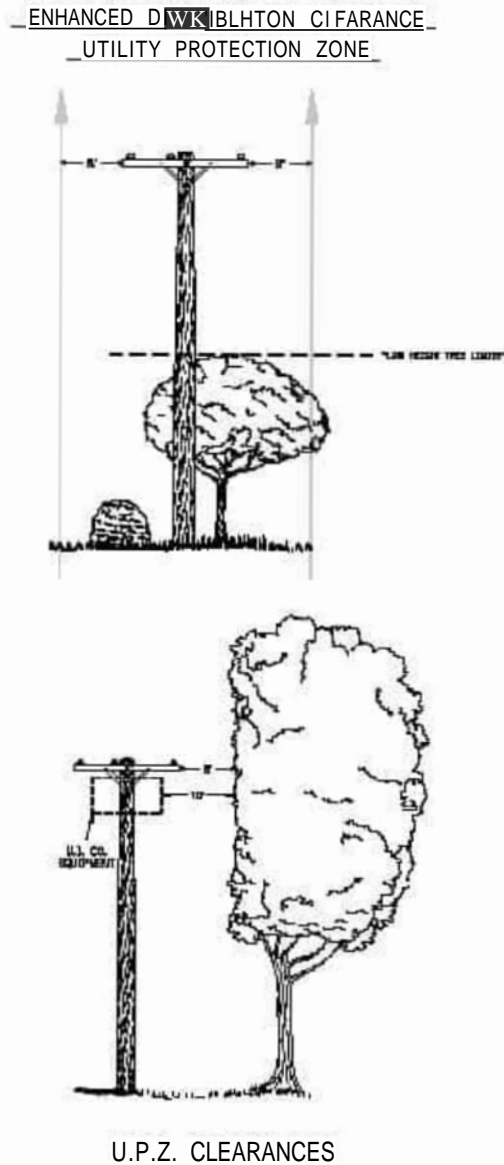
DLCS establishes the "utility protection zone" which is the rectangular area extending horizontally for a distance of eight feet from any outermost electrical conductor or wire installed from pole to pole and vertically from the ground to the sky.

DLCS includes cutting, trimming and removal of tree limbs or trees within the utility protection zone and retaining desirable low height or ornamental trees that are already within the zone or those that are planted under a Right Tree – Right Place program. Additionally, the Company

would identify and remove in whole or in part hazardous trees that could fall from outside of the zone causing damage to utility infrastructure, facilities or equipment.

The following drawings illustrate the Utility Protection Zone:





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### Utility Protection Zone Maintenance (UPZM)

UPZM maintains the previously established UPZ, or clearance within the rectangular area extending horizontally for a distance of eight feet from any outermost primary electrical conductor. Additionally, removal in whole or in part of hazardous trees that could fall from inside or outside of the zone causing damage to utility infrastructure, facilities or equipment.

## **B. Other Clearance And Operational Requirements**

Trees or limbs imminently hazardous to any part of the Distribution System shall be patrolled and mitigated with notification to and approval from qualified UI personnel. Photographic evidence of the imminent threat is secured prior to threat mitigation, where possible or practical.

Pole mounted electrical equipment such as transformers, capacitors, switches, etc. should be provided at least ten (10) feet of clearance in accordance with the DLCS.

Secondary conductors should be cleared such that tree limbs do not rub conductors or entangle the wire.

Remove hazard trees within the UPZ and on private property after obtaining written consent from the abutting private property owner.

Pruning cuts shall be performed in a manner that retains the structural integrity and health of the vegetation.

Consideration shall be given to critical loads and the number of customers served by the circuit segment where tree work is performed.

No tree work shall be performed (pruning or removal) within the public right-of-way without a permit from the municipal tree warden or the State Commissioner of Transportation.

Any non-hazardous tree located in whole or in part within the UPZ may be retained, provided that its species, condition and growth rate indicate that pruning without removal will reduce the risk of harm to the utility infrastructure.

Written consent shall be obtained from the tree owner to prune or remove a tree on private property.

“Brush” is defined as an undesirable woody plant normally maturing at 20 feet or more in height, with single or multiple stems, and with a small, minimal, or no crown. It shall have a diameter at breast height (DBH, 4.5 feet above ground) of 6 inches or less. Brush shall be cut to the ground line where topography and obstructions will permit.

Vines shall be removed from down guys and poles. If vines are in contact with energized wires, the worker while in an aerial lift shall cut out a section of the vine stem measuring approximately one (1) foot in length starting at a point approximately 30 inches below the lowest electric wire. Then, the worker shall ground cut the vine(s) a minimum 5 feet from pole or down guy.

Street Lights – The local municipality is responsible to perform routine maintenance trimming to maintain street light patterns on sidewalks and roadways. Conflicts with energized lines shall be referred to UI by the municipality. Limbs in direct contact with street light mast or head shall be pruned clear to reduce possibility of equipment damage.

Private Area Lights – During routine maintenance, pruning should clear any vegetation on the pole which is obstructing the pole-mounted fixture.

### **C. Substation Vegetation Maintenance Requirements**

Substation facilities are maintained year-round to ensure security and safety of workers and the public. Trap rock within the fenced-in and energized areas must always be kept free of vegetation, at the direction of UI representative.

Maintaining a vegetation-free, substation ground surface reduces ground potential to workers in the substation yard. It also eliminates tripping hazards. The Contractor will perform manual, mechanical, and pesticide application to maintain a bare ground for the substation facilities.

All Substation perimeter fences must be kept clear of all vegetation on both inside and outside. Substation equipment, facilities, security equipment are to be maintained free of vegetation assuring safe operation of equipment, safety to public and workers, and secure facilities.

Property boundaries and terrain permitting, a minimum of 10 feet outside of perimeter fences is to be kept clear of all tall-growing vegetation including no overhang to any fence from abutting trees or vegetation. Any potential climbing access to the substation yard is to be eliminated. For erosion control, grasses, ferns and other low-growing species are allowed in the 10 foot perimeter fence buffer zone with the exception of any invasive species (vines, olive, multi-flora rose, etc.). This buffer zone area is maintained once annually, with spot clearing as necessary.

### **D. Transmission Rights-of-Way Clearance Requirements**

Rights-Of-Way (ROW) clearing and maintenance shall be performed in accordance with “The United Illuminating (UI) Transmission Vegetation Management Program” (TVMP). The TVMP is in compliance with and adheres to guidelines set forth in NERC FAC-003-4.

#### **Floor Maintenance:**

All ROW will be cleared of tall-growing and invasive species; leaving low-growing shrubs, ferns, forbs and grasses.

To provide for inspection of facilities, where terrain permits, vegetation will be cleared to allow for foot and/or vehicle access.

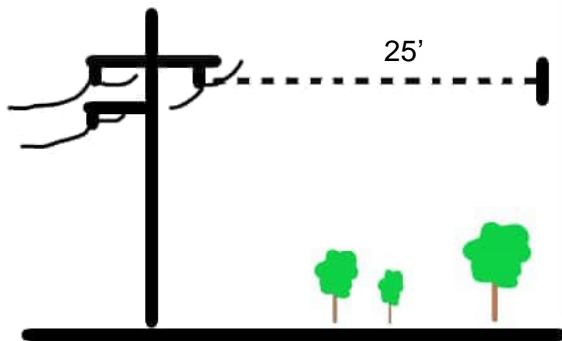
#### **Side Maintenance:**

All encroaching side vegetation will be pruned back in accordance with ANSI A300 pruning standards and to a minimum of 25 feet where ROW, Easement, or private property owner consent permits.

While performing rights-of-way cycle maintenance, floor and side, and where possible/accessible, off ROW trees are to be inspected for their potential fall-in risk and hazard to the conductors, towers, and facilities. UI Vegetation Management Lead shall be notified for follow-up inspection, immediately after a potentially hazardous tree is located.

Site conditions dictate the best and most efficient method to clear utility ROW. No right-of-way terrain is level for its entire length. Additionally, UI ROW traverse a variety of field conditions including grades greater than 45 degrees, wetlands, landscaped private property, railways, and areas inaccessible by vehicle. Consequently, the use of manual, mechanical, herbicide, or other vegetation control methods will be implemented where most practical.

The Contractor working on the United Illuminating's ROW is to adhere to all applicable federal, state and local laws and ordinances.



Brush shall be ground cut and stump treated. All brush debris and woodchips resulting from ground cutting shall be removed from the right-of-way. Cedars shall not be treated or ground cut. Herbicide applications shall be restricted from the following areas:

- Within 400 feet of a public water supply well
- Within 50 feet of a private well
- Within wet wetland areas (10 feet from standing water)
- Within 10 feet of a river, stream or other body of water

It is the responsibility of the Contractor to determine locations of public and private wells, wetland areas and other bodies of water.

### **Railroad Personnel and Contractor Training**

The transmission lines are located along the Metro North and Amtrak railroad corridor. Contractors must be escorted by a Metro North or Amtrak employee while performing work on railroad property.

*It is the responsibility of the Contractor to secure a railroad entry permit*, set up necessary funds, and coordinate availability of Metro North and Amtrak safety personnel prior to start of work.

When billing is received for the Metro North, Amtrak personnel, and permit fees, the Contractor shall pay the bill and invoice UI as a separate line item along with the lump sum invoice.

Metro North requires that all anticipated funds for railroad safety personnel be deposited into a Metro North drawdown account prior to beginning work.

In addition to safety flagging personnel, per railroad regulations, groundmen must be hired for work on any vegetation within 10' of the railroads energized feeder/signal wires. Funds for these personnel must also be anticipated and submitted to Metro North in advance.

Contractors must complete online Metro North and Amtrak Contractor Orientation prior to entering railroad property. It is the responsibility of the Contractor to ensure that all personnel who will be on railroad property complete online training prior to the start of work. Expenses related to online contractor training will be the responsibility of the Contractor.

In the event that Metro North or Amtrak is unable to provide safety personnel on a particular day, the UI Arborist will provide the Contractor with a non-railroad right-of-way work location for that day, and hourly rates shall apply.

#### Private Property Owner Consent and Abutting Property Owner Notification

The Contractor is responsible for surveying work and creating work orders in the Fulcrum mobile application. A portion of the work is located on Railroad property, for which UI possesses a lease agreement allowing right-of-way maintenance. Remaining work within the prescribed 25' maintenance area is located on non-railroad private properties. The Contractor is responsible for determining ownership and for obtaining consent from property owners for work on their property outside of the railroad lease agreement area in order to achieve the 25-width work area. The Contractor is responsible for documenting communication with property owners.

If the first attempt to contact a property owner is not successful, the Contractor shall make two documented additional attempts, in person or by phone, to contact the property owner. In the event that the Contractor is unable to secure consent for full completion of work scope on privately owned property, the Contractor shall notify the UI Arborist, who will attempt to negotiate with the land owner.

The Contractor is responsible for coordinating access with property owners to reach work locations.

The Contractor is responsible for notifying adjacent property owners of herbicide treatment per Connecticut State Statute 22a-66k, which states:

*(b) Any electric distribution company, as defined in section 16-1, telephone company, as defined in section 16-1, or telecommunications company, as defined in section 16-1, which provides for the application of a pesticide within a right-of-way maintained by such company shall ensure that owners, occupants or tenants of buildings or dwellings that are located on property which abuts such right-of-way, or property within which such right-of-way lies, are notified at least forty-eight hours prior to the application. Notice may be made by any method, including telephone, mail or personal notification. Any such company which provides for the application of pesticides in connection with removal of trees or brush from private property*



*shall obtain the consent of the owner, occupant or tenant of such property prior to the application.*

#### Workflow Management

The Contractor is responsible for providing each crew and each supervisor with a mobile device – either Android or iOS operating systems – to create and review work orders using the Fulcrum mobile application. The contractor shall create work order records in the Fulcrum mobile application, and update the work planning records by changing the status to *Work Complete* when the work for that record is 100% complete. Go-backs to complete or correct work that does not comply with the work specification (as determined by the UI Arborist) shall be completed within 15 business days and before the work is invoiced.

#### Wood Disposal

The Contractor is responsible for removing all wood debris and woodchips from the right-of-way. All logistics, are the responsibility of the contractor.

#### Safety, Environmental and Damage Notification

All safety, environmental and damage claim incidents shall be reported to the Owner's Representative within 24 hours. These incidents include but are not limited to the following:

- Vehicle and/or equipment accidents and/or malfunctions
- Oil, gas, hydraulic fluid and herbicide spills
- Property damage, incidents/claims

#### Work Assignments

UI has no plans to re-assign crews from the lump sum project except for emergency restoration during a major storm event.

#### Reports and Invoicing

The contractor shall record all units, labor and equipment hours worked on this project each week. Work hours shall be validated by contractor supervision by 9am Monday of the week following the work week. For example, if the work week ends on Saturday the 13<sup>th</sup>, the crew's timesheet shall be validated by 9am on Monday, the 15<sup>th</sup>.

Invoices shall be submitted monthly throughout the project, showing work completion by transmission structure span.

#### **Communication**

Maintain an ongoing dialogue with the Owner's Representative. Report the following immediately:

- Contractor incidents including accidents or injuries, spills and claims
- Escalated customer complaints
- Contractor caused outages
- Interaction with the municipal tree warden or other public official

## **T&M AND UNIT PRICING**

All T&M and Unit pricing shall be pre-approved by the Owner's Representative.

## **TRAFFIC CONTROL**

In limited cases, traffic control may be necessary to allow brush removal. Where the municipality requires a police officer to perform traffic control, the contractor shall pay the bill and invoice UI as a separate line item. In all other locations, the Contractor shall perform traffic control in compliance with the ATSSA and MUTCD standards.

### **E. Distribution Rights-Of-Way Clearance Requirements**

#### **I. General**

Distribution ROW are to be maintained clear of trees to permit access for line maintenance and provide for safe operation. Such land strips are usually occupied and maintained under long term easements. The Contractor shall contact the Line Clearance Arborist or designee if at any time during ROW maintenance there is uncertainty as to easement rights to prune or remove trees on a private ROW.

#### **II. Tree Pruning and Removal**

Vegetation management of ROW will adhere to the new Distribution Line Clearance Specification.

Vines on poles, towers and fixtures shall be ground cut, cleared, and removed.

Brush, when access prevents chipping, shall be handled in such a manner as to avoid obstructing roadways, pathways, and waterways or leaving a distinct fire hazard. Brush is to be wind-rowed at right-of-way edge.

Potential hazard trees outside an established R.O.W. shall be removed as directed by UI's Line Clearance Personnel, or designee, or crew foreman after the customer's permission has been obtained.

## **5. Workflow Management**

UI has established a Distribution Line Clearance Specification and VM Program with an objective of improving the efficiency and effectiveness of Vegetation Management.

Some key areas of focus for this program include:

- The creation and scheduling of all line clearance activities in a single, mobile enabled system

- Providing the ability to access and report on information in a timely and accurate manner
- A reduction or elimination of paper based processes

This program supports the Company's ability to establish the DLCS and adhere to the processes outlined in Public Act 14-151 and the Decision in Docket No. 12-01-10.

UI has developed a paperless, computer tablet based workflow to manage the property owner consent, objection and request for modification, and quality control processes.

The success of this program is dependent upon the ability to improve performance on a daily basis, the ability to document and manage the vegetation management workflow process, and the ability to become a data driven organization for the purpose of continuous improvement.

Areas of focus will be on:

- Identification of tree pruning and removal needs
- Obtaining municipal Tree Warden permits and property owner consent
- Objections and requests for modification and documentation of same
- Work order creation
- Scheduling of crews
- Close-out and reporting
- The process should be "paperless"

## **6. Methods/Practices**

### **I. General**

Directional pruning, as defined in ANSI A-300 shall be used as a guide to achieve required clearances for trees that are to be maintained and not removed.

Qualified Line Clearance workers are to use their professional judgment and knowledge to obtain the necessary clearances based upon the specification for the circuit being worked on.

Climbing irons or "hooks" should not be used except in cases involving tree removal work or where field conditions make vehicular access impossible.

The completed job shall result in adherence to clearances specified in Section A, correctly pruned trees per accepted arboricultural standards as described in ANSI A-300, all required reporting forms (time sheets, approval and production forms, etc.) completed accurately, and the satisfactory and safe operation of the overhead distribution system.

## **7. Tree Removal**

For any tree removal, the Contractor will follow the Customer Consent Process. Tree crews shall not undertake any work involving hazardous conditions that could lead to potential outages or damage to equipment. All concerns or uncertainty of risk should be directed to UI Vegetation Management.

## **8. Tree Stump Removal**

Tree stump removal, if desired, is the jurisdiction and responsibility of the tree's owner: CT State DOT, the local municipality, or private property owner.

Stumps on private R.O.W.'s shall be cut low enough to permit unhindered travel of motorized equipment.

## **9. Brush**

“Brush” is defined as an undesirable woody plant normally maturing at 20 feet or more in height, with single or multiple stems, and with a small, minimal, or no crown. It shall have a diameter at breast height (DBH, 4.5 feet above ground) of 6 inches or less. Brush shall be cut to the ground line where topography and obstructions will permit.

## **10. Clean-Up & Disposal**

All brush and debris resulting from all planned work and scheduled cyclical maintenance work shall be completely removed from the work area (e.g. fine twigs and litter removed from lawns, the street, sidewalks and driveways).

Brush or wood shall not be allowed to remain on public thoroughfares or on private property overnight unless arrangements have been made by the contractor's crew leader or UI Vegetation Management personnel, or designee with the tree's owner.

All line clearance by-products (e.g. brush, wood chips, logs, wood, etc.) must be disposed of at approved sites and in the most economical way. Brush or wood shall not be burned.

The removal of brush, debris, or wood resulting from an unplanned event, (e.g. Tree or limb failure, naturally occurring limb abscission, minor or major weather event) is not the utility contractor's or UI's responsibility to remove. It is the responsibility of the tree's owner. Every effort shall be made to clear brush, debris, and wood generated from an unplanned event, from

roadways, sidewalks, and driveways to allow for vehicle and pedestrian passage. Door-hangers provided by UI, are to be used to communicate to UI customers the procedures regarding clean-up and/or follow-up for unplanned events.

## **11. Contractor Responsibilities**

### **I. General**

The Contractor shall provide the Company with workers that are properly trained to perform their work safely and competently and interact with the public with professional courtesy at all times.

All work shall be in accordance with recognized and approved arboricultural standards and performed in accordance with all Federal OSHA, ANSI, State and Local requirements appropriate for such work. The contractor will also comply with the Contract terms, rules and specifications established by United Illuminating for such work.

Contractor is to obtain all permits and licenses imposed by law, pay all charges and fees, and give notices necessary and incidental to the due and lawful prosecution of the work.

Contractor is to provide certified copies of liability insurance coverage for public and private liabilities which may arise in connection with their work.

Contractor is to provide all supervision, labor, tools, equipment, transportation and materials to perform line clearance work. Apparatus shall be in proper operating condition and adequately maintained.

Contractor shall provide employees with suitable foul weather gear and other apparatus necessary to perform night emergency work, including emergency lighting. The contractor's equipment shall be neat appearing. Appropriate first-aid supplies, as required by OSHA, shall be a part of the standard equipment on all vehicles.

Adequate spare equipment and tools shall be readily available to insure that workers are not delayed in performing the required work. The billing rate for equipment shall be all-inclusive including, but not limited to: fuels, lubricants and maintenance, hand and power tools.

Each crew is to have a copy of these standards and specifications and Dr. Shigo booklets ("Pruning Trees Near Electric Utility Lines) on each crew truck/work location.

Each crew is to be trained to understand and retain this specification, have knowledge of all procedures and policies, understand all glossary definitions and perform all work compliant with all company applicable specifications/requirements.

## **12. Safety**

The contractor shall take the necessary precautions to prevent personal injury or damage to property and shall conduct operations with a minimum of interference to traffic or inconvenience to the public.

In this area of safety and health, the contractor shall:

- a. Observe the contractor's safety rules at all times.
- b. Treat every circuit and/or line as energized.
- c. Observe all applicable Federal, State, and Local laws.
- d. Adhere to all company safety rules.

If in the judgment of the contractor's foreman, it is hazardous to perform the assigned work with the circuit or conductors energized, UI supervision shall be contacted. The necessary protective line hardware or de-energized and grounded circuit(s) or conductors will be provided by UI.

ANY tree that is observed to have potential child access to any conductor, equipment, or UI facility, is to be reported immediately to the UI Arborist, or designee.

## **13. Damage Notification**

The contractor crew foreman and/or General Foreman is to notify the UI Arborist or designee, as soon as possible, of all defects, damage, etc., observed on UI overhead facilities (e.g. leaking transformer, wire off pin, pole top pin, broken basket, etc.). This notification is required regardless of cause. Dangerous conditions should be reported immediately. Any damage caused to private property, at any time, shall be reported immediately to UI Vegetation Management personnel or designee and resolved as soon as practical with the aggrieved party, with courtesy and professionalism.

## **14. Work Assignments**

Line clearance work addresses four major categories:

- DLCS
- New Capital Construction
- Customer Requests
- Special Projects

UI will provide necessary maps and report forms to the contractor indicating the planned work area.

UI Supervision reserves the right to re-assign a crew(s) from their scheduled work area to a temporary work area as conditions and needs warrant, at any time.

## **15. Traffic Control**

The Contractor will be responsible for coordinating and scheduling of traffic control for all work. This work shall be invoiced monthly as a separate line item and passed through to UI with required back up (invoices, sign-off slips, etc.). A monthly Traffic Control Invoice Status Summary sheet will be provided to UI indicating individual municipal charges and payment status.

## **16. Reports**

The foremen of each crew shall record required billing and production information on the contractor daily time sheet or applicable forms. All reporting forms and time sheets are to be delivered to the UI Line Clearance personnel at the end of each working week, normally by the following Monday. In addition, the Contractor shall provide monthly reporting via electronic format on safety, productivity, customer objections, and summary report of performance as required by UI.

**NOTE: UI and its contractor(s) will work together to further define additional reporting requirements and methods of tracking.**

## **17. Public Contact**

### **A. Consent**

#### **1. DLCS**

The contractor, as an agent for UI, shall request consent from the abutting property owner to prune or remove trees around electric conductors on public or private property. In the interest of public relations:

- a. Confirm that the person you are speaking to is the property owner.
- b. Clearly convey exactly what needs to be pruned or removed to establish the UPZ and maintain safe, reliable electric service.
- c. Once an agreement has been reached, repeat and confirm the plan, and have the property owner sign the consent form.
- d. If the property owner is not home, leave a customer door hanger package (hanger, brochure and consent form) on the door.

Contractor shall not obligate UI to make any payments to another party, nor make any promises or representations of any nature to another party for, or on behalf of UI, without prior approval of UI.

2. State Highway

Each crew must have a copy of the State Tree Trimming Permit with Permit Number when performing tree work on a State Highway.

**B. Complaints**

In managing complaints, the contractor shall use its best effort to maintain and promote good public relations. The contractor shall not make payment to local inspectors, property owners or any other persons for any right to trim or remove trees.

The contractor shall immediately inform UI of any damage complaints from a customer, regardless of the cause or extent of damage and of all resolutions and settlements.

The contractor shall give immediate attention to, and shall use its best efforts to promptly, courteously and equitably respond to, adjust and/or settle, without obligation to the UI, all complaints received by the contractor from third parties arising out of, or in connection with, performance of their work.

**C. Customer Relations**

Contractor crew members are UI representatives to our customers. Consequently, each person is expected and required to treat the customer in a professional and courteous manner.

If any crew member is approached by the abutting property owner, State, or municipal official and cannot properly address their concern; they are to contact their supervisor immediately who will immediately respond to the customer's concerns. The contractor shall notify UI of all customer complaints and damage claims.

Numerous contacts with local municipalities and customers provide an excellent opportunity to make a positive impression. A worker's appearance, attitude and methods of approach must reflect creditably upon the Company. They must possess a good knowledge of human nature, arboriculture and have the ability to quickly evaluate situations to secure tree work permissions and, at the same time, establish friendly relations.

At no time shall tree contractor personnel solicit or accept requests for tree work from private property owners or managers.



## **18. UI Lump Sum Contract Special Conditions**

The following special conditions shall apply to the UI Distribution Line Clearance Lump Sum Contracts.

## **19. Owner's Representative**

A listing of the Owner's Rep by circuit is included. Once the contract is awarded, all operational questions regarding the performance of this contract shall be addressed to them.

## **20. Vegetation Management Specifications**

UPZ establishes the "utility protection zone" which is the rectangular area extending horizontally for a distance of eight feet from any outermost primary electrical conductor or wire installed from pole to pole and vertically from the ground to the sky.

UPZ includes pruning and removal of tree limbs or trees within the utility protection zone and retaining desirable low growing or ornamental trees that are already within the zone or those that are planted under a Right Tree – Right Place program. Additionally, removal in whole or in part of hazardous trees that could fall from outside of the zone causing damage to utility infrastructure, facilities or equipment.

Utility Protection Zone Maintenance (UPZM) maintains the previously established UPZ, or clearance within the rectangular area extending horizontally for a distance of eight feet from any outermost primary electrical conductor. Additionally, removal in whole or in part of hazardous trees that could fall from inside or outside of the zone causing damage to utility infrastructure, facilities or equipment.

### **1. Secondary and Service Conductor Clearances**

Secondary conductors without primary above and pole to pole service lines shall be cleared to obtain (2') clearance around.

Do not clear service lines (pole to house). Service line clearing is the responsibility of the property owner.

## **21. Vine Management**

Vines shall be cut from down guys and poles. If vines are in contact with energized wires or equipment, the worker while in an aerial lift shall cut out a section of the vine stem to establish a one (1) foot gap starting at a point approximately 30 inches below the lowest electric wire. Then, the

worker shall ground cut the vine(s) to establish a five (5) foot gap between the ground and cut vine from pole or down guy.

1. Brush And Debris

All brush and debris shall be chipped and removed the same day as the work is performed.

2. Wood Disposal

Where wood disposal is requested by the abutting property owner, it shall be picked up within 10 business days. All logistics, including any costs for bulk wood and chip disposal, are the responsibility of the contractor.

## **22. Planning And Consent**

UPZ/UPZM circuits will need to be planned and consented for UPZ/UPZM clearance prior to starting work. The results of those processes shall be recorded in UTs mobile work planning application - Veg Management. The contractor will be responsible for resolving the objections and requests for modification while keeping the UI Owner's Representative abreast. The work orders will be updated to reflect how the objections or modifications were resolved on those circuits. Normally, this results in a reduced specification. Where UPZ clearance could not be achieved, a modified clearance specification shall be negotiated and recorded. Clearance shall be obtained using one of the following modifications as agreed to by the abutter:

- Remove all limbs overhanging the conductors.
- Clear to achieve (20') overhead, (10' below and 8' to the side of the conductors.
- Clear to achieve (15') overhead, (10' below and 8' to the side of the conductors.

Occasionally UPZ abutters will object or request for modification. To accommodate a change in the UPZ specification within this contract's lump sum framework, the contract includes a unit price table for deducting the cost of the work that was bid lump sum and adding the cost of the work that will be performed. The contractor shall notify the UI Owner's Representative of the abutter's change of consent or resolved consent prior to performing the work and shall summarize and report the changes weekly using the Add\_Deduct Unit Pricing mobile application. Hazardous trees outside the utility protection zone shall be added to the work plan utilizing the add\_deduct application and shall be paid for at the unit rate. The Contractor shall add or deduct the net cost differential for all specification changes at the time of final invoicing.

UPZM circuits shall be planned and consented to the previous UPZ clearance by the contractor. If prune to previous was the previous specification, then 8x10x15 shall be the requested clearance. The abutter or tree warden may object or request for modification to the previous established clearance. To accommodate a change to the UPZM specification, the contracts unit price table will be used for deducting the cost of the previous specification and adding the cost of the work that will be performed. Additionally, the unit price and the add\_deduct application will be applied for removal of hazardous trees that could fall from inside or outside of the zone causing damage to utility infrastructure,

facilities, or equipment. The Contractor shall add or deduct the net cost differential for all specification changes at the time of final invoicing.

1. Work Schedule

Scheduled work shall fall between the hours of 7am and 4:30pm Monday – Friday, unless otherwise pre-approved by the UI Owner’s Representative.

2. Workflow Management

The contractor shall update the work planning records in the Fulcrum mobile application by changing the status to the appropriate Consent. Release to Crew when work has been assigned and to Work Complete when the work is 100% complete. The contractor shall update UI’s GIS system with the previous weeks completed work before COB Tuesday.

3. Go-Backs

Go-backs, brown pins to complete or correct work that does not comply with the work specification shall be completed within 15 business days at no additional cost to UI and before the work is invoiced.

4. Invoicing

Contractor shall invoice UI for the previous month on or before the 15th. The monthly invoice shall include a summary representing the mileage completed as documented in the GIS, job number and lump sum tracker provided by UI. The Contractor shall add or deduct the net cost differential for all specification changes at the time of final invoicing using the Add/Deduct reports provided by the UI Owner’s Representative.

## **23. Communication - Safety, Environmental And Damage Notification**

All safety, environmental and damage claim incidents shall be reported to the Owner’s Representative immediately. These incidents include but are not limited to the following:

- Contractor incidents including accidents or injuries, spills and claims
- Escalated customer complaints
- Contractor caused outages
- Interaction with the municipal tree warden or other public official
- Vehicle and/or equipment accidents and/or malfunctions
- Property damage incidents/claims

## **24. T&M and Unit Pricing**

All T&M and Unit pricing shall be pre-approved by the Owner's Representative and shall be invoiced as a separate line item along with the lump sum invoice.

## **25. Traffic Control**

Where the municipality requires a police officer to perform traffic control, the contractor shall pay the bill and invoice UI as a separate line item along with the lump sum invoice. In all other locations, the Contractor shall perform traffic control in compliance with the ATSSA and MUTCD standards.

## **26. Work Assignments**

UI has no plans to re-assign crews from the lump sum project except for emergency restoration during a major storm event.

## **27. Questions**

- Technical questions shall be addressed to UI's Manager of Vegetation Management - Kyle Kleza.
- Commercial questions shall be addressed to AVANGRID's Buyer.

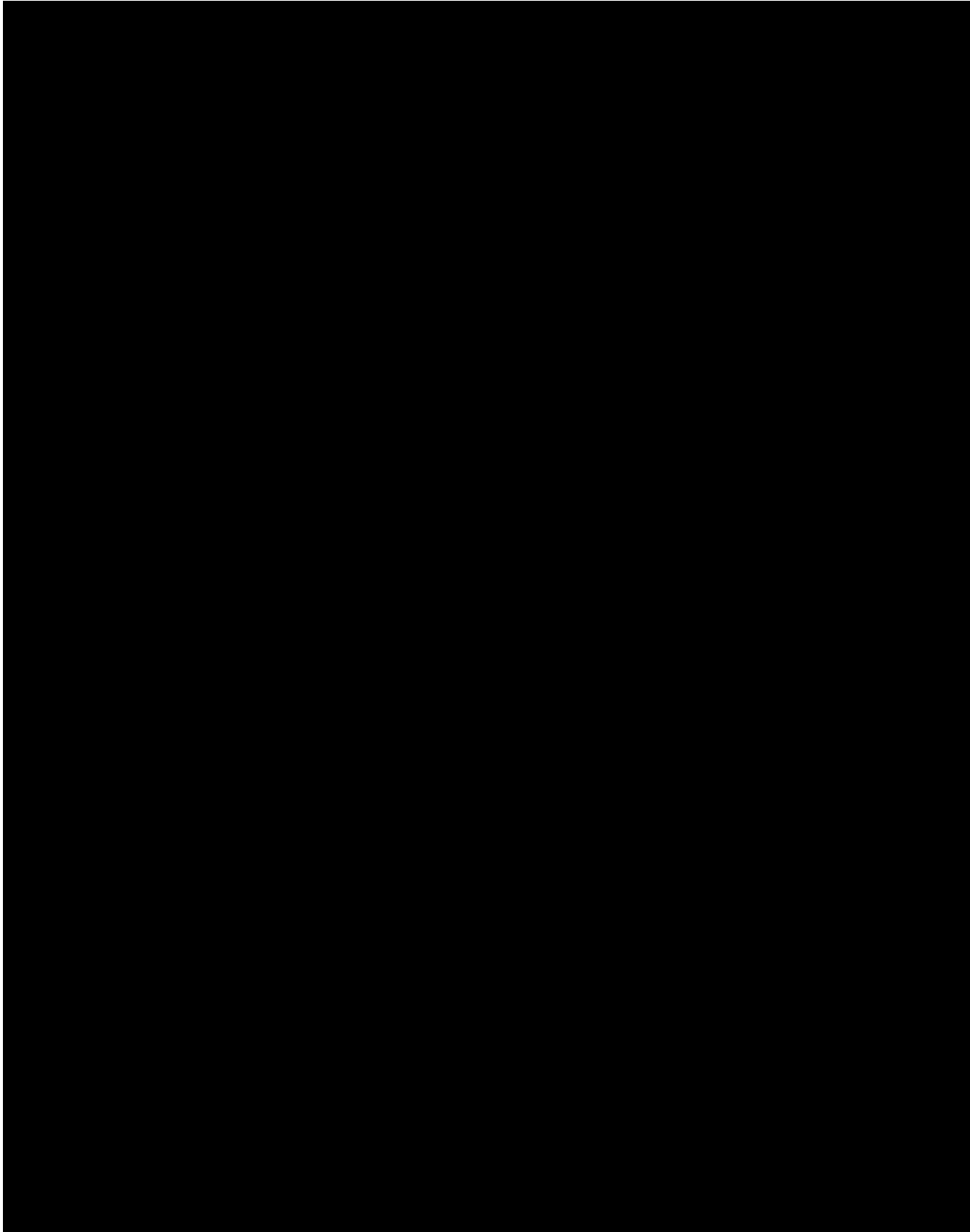
## **28. UI Transmission Contract Special Conditions**

The following special conditions shall apply to the UI Transmission Line Clearance Contracts.

## **29. Transmission Vegetation Management Program**

Vegetation management work shall be performed in accordance with all applicable industry, federal, state, and local laws and regulations, licensing requirements, and approved standards and safety practices, as described in the UI Vegetation Management Specification (Excluding sections A, B, C, E). Work specifications to be followed for this project are described under "Scope of Work" below.

**1. Scope of Work**



### 30. Glossary

|   |   |
|---|---|
| <b>Brush</b>  | “Brush” is defined as an undesirable woody plant normally maturing at 20 feet or more in height, with single or multiple stems, and with a small, minimal, or no crown. It shall have a diameter at breast height (DBH, 4.5 feet above ground) of 6 inches or less.   |
| <b>Clearance</b>  | The distance from the conductor to the part of the tree that will interfere with or grow into the conductor first.  |
| <b>Crew Foreman</b>                                     | The tree contractor’s crew leader working with and supervising the line clearance crews.  |
| <b>Diameter Breast Height (DBH)</b>                     | Diameter of tree or brush at a point 4 ½ feet above the ground.   |
| <b>Distribution Line Clearance Specification (DLCS)</b> | The pruning or removal of vegetation to establish a utility protection zone, without removal of low growing desirable tree species.   |
| <b>General Foreman</b>                                  | Supervisory personnel working for the contractor who has responsibility for work performed by that particular contractor's tree crews.  |
| <b>Ground Cutting</b>                                   | Completely removing trees or brush at the ground level.   |
| <b>Hazardous Tree</b>                                   | "Hazardous tree" means any tree or part of a tree that is (A) dead, (B) extensively decayed, or (C) structurally weak, which, if it falls, would endanger utility infrastructure, facilities or equipment   |
| <b>Hot-Spotting</b>                                     | Assigning tree trimming crews in a manner that does not involve systematic, scheduled program maintenance work.   |
| <b>Line Clearance</b>                                   | Controlling vegetation to maintain proper clearance from conductors. Synonymous with tree clearing, tree trimming or vegetation management.   |
| <b>Natural Trimming</b>                                 | Trimming to reduce the height and/or spread of a tree, while attempting to maintain the tree’s natural form, by cutting branches back to a lateral limb, towards the center of the crown. A method by which branches are cut to the branch collar at a suitable parent limb back toward the center of the tree. This method of trimming is sometimes called “dropcrotching” or “lateral, trimming”. Natural trimming is also directional trimming, since it tends to guide tree growth away from wires. |
| <b>Overhanging Limbs</b>                                | Tree limbs extending over the top of conductors.  |

|                                 |   |
|---------------------------------|---|
| <b>Pruning</b>                  | The removal in a scientific manner of dead, dying, diseased, interfering, objectionable, and/or structurally weak branches using best management practices for utility line clearance.  |
| <b>Removal</b>                  | Completely removing an entire tree to ground level; required when a tree is described as a hazardous tree or when a tree should be removed for other reasons.   |
| <b>Reliability Circuit Trim</b> | The master schedule list of UI's overhead distribution circuits <b>Schedule (RCTS)</b> that is based on reliability performance, time-based maintenance, and Tier 1&2 town and state facility priorities.   |
| <b>Rounding Over</b>            | Not accepted. The making of many small cuts so that the tree top is sheared in a uniform line. This creates an unhealthy tree condition and results in rapid regrowth directly back toward the area intended to remain cleared. Also known as "topping".                      |
| <b>Sag</b>                      | The vertical distance that a conductor will drop due to heavy load current and/or high temperature.   |
| <b>Shearing</b>                 | See "Rounding Over"   |
| <b>Shrub</b>                    | A desirable woody plant normally maturing at less than 15 feet in height, presenting a generally bushy appearance because of its several erect or spreading stems.  |
| <b>Side Pruning</b>             | Pruning back or removing the side branches that are encroaching the utility protection zone; required where trees are growing adjacent to conductors.   |
| <b>Species</b>                  | The basic category of biological classification intended to designate a distinct group or kind of plant or animal having common attributes.   |
| <b>Sway</b>                     | The horizontal distance that a conductor will move due to wind.   |
| <b>Top Pruning</b>              | Pruning back portions of the upper crown of a tree; required when trees are located directly beneath a conductor.   |
| <b>Tree</b>                     | "Tree" is defined as a woody plant normally maturing at 20 feet or more in height, usually with a single trunk, un-branched for several feet above ground, with a definite crown. It shall have a diameter at breast height (4.5 feet above ground) of greater than 5 inches. |
| <b>Tree Crown</b>               | Upper portion of the tree; the branches or leaf area.   |
| <b>Trimming</b>                 | The desired period of time to repeat vegetation management.   |

|                                      |   |
|--------------------------------------|---|
|                                      |   |
| <b>Trim Cycle</b>                    | The desired period of time to repeat vegetation management.   |
| <b>Utility Protection Zone (UPZ)</b> | Any rectangular area extending horizontally for a distance of eight feet from any outermost electrical conductor or wire installed from pole to pole and vertically from the ground to the sky. |



### **31. General Worker Guidelines**

The following items are important to remember at all times:

#### *Crew Image*

- ✓ Be neat in appearance.
- ✓ Have an orderly appearance of the work vehicles.
- ✓ Be professional in conduct and attitude.
- ✓ Have energetic work habits.

#### *Public Relations*

- ✓ Be courteous and sociable.
- S Be attentive to customer's concerns.
- S Have respect for the customer's property.
- ✓ Leave the area as you first found it (or better).

#### *Job Knowledge*

- J Conduct a 'Tailboard Conference' before starting the job (e.g. Confirm what, who, where, why, etc.).
- ✓ Be knowledgeable in utility vegetation management practices and safety.
- ✓ Prepare before approaching a customer (e.g. Have in mind the importance to trim the line, the species of tree involved, type of trim needed, etc.).
- ✓ Have confidence in yourself.

#### *Communication - (for anyone addressing a customer to gain consent to prune or remove)*

- ✓ Control the volume and tone of your voice.
- ✓ Maintain professional body language.
- ✓ Concentrate on what the customer is saying. Don't interrupt.
- ✓ Don't draw premature conclusions. Ask questions.
- ✓ Identify clearly what work is to be done. Confirm it.
- ✓ Prune/clear only what had been discussed.

## **32. CUSTOMER CONSENT PROCESS**

### **1. Preface**

The UI overhead distribution infrastructure requires sufficient clearance from all vegetation to ensure safe, reliable electric service to our customers. Successful Vegetation Management performed on State, municipal, or a customer's property, secured through Notification, Permit, and/or Appeals processes, is paramount and achieved through good communications and public education.

### **2. Purpose**

To provide the Company and its Contractor(s) a formal process for obtaining consent from a property owner to perform enhanced UPZ line clearance work and resolve cases where the property owner objects or requests a modification to the proposed Vegetation Management (VM).

### **3. Scope**

The scope of the Customer Consent Process applies to vegetation management work performed on UI's overhead Distribution System. Connecticut law requires UI to notify the abutting property owner of vegetation maintenance that is planned within the Utility Protection Zone (UPZ). Notification is allowed for the pruning or removal of trees within the public right-of-way. Written consent is required for trees on private property. UI requests property owner consent, Exhibit A, so that we may maintain safe and reliable electric service to customers and so that decisions regarding the extent of tree pruning and removal are made at the local level. Property Owners have the right to object or request a modification to the proposed tree work. If they do not consent, the law gives UI the right to appeal their objection or request for modification to either the tree warden or the State Department of Transportation or the Public Utilities Regulatory Authority.

### **4. Responsibilities**

Contractor:

1. Obtain consent from abutting property owner within planned work area before starting any VM. If the property owner is not home, a "door knob hanger" (See Exhibits B&C), notification information, shall be delivered to the abutting property owner. Two additional attempts shall be made to obtain consent of VM using the best means available and practical (door-hanger, direct phone calls, etc.). All attempts to make contact for the VM shall be logged noting the dates and times that the attempts were made.
2. Where property owner contact for consent cannot be obtained after three attempts, the contractor Work Planner will identify the property as a no contact in the work plan database and visit the town hall and determine who owns the property from the public

land records. Using this information, UI will send no contact letters (See Exhibit D), using US Postal Service CERTIFIED MAIL, to the property owners notifying them of UI's intent to prune and/or remove trees within the UPZ.

3. For the Transmission Vegetation Management Program the Contractor records vegetation conditions with a mobile tablet using a priority scale as follows:
  - a. Priority 1 – Vegetation is an imminent risk. Report immediately to UI via cell phone.
  - b. Priority 2 - Vegetation is expected to encroach within the next (12) months.
  - c. Priority 3 – Vegetation is expected to encroach within the next (18) months.
  - d. Priority 4 - Vegetation is not expected to encroach within the next (18) months.
  - e. Priority 5 – Low risk. Should be re-inspected the following year.

The UI Line Clearance Lead is to review all reports and forms forwarded by the Line Clearance and ROW inspection contractors and will proceed as follows:

- Re-Inspect all locations reported as Priority (1) or (2) to verify the information reported.
- The UI Line Clearance Arborist or designee works with the property owner, the Line Clearance Tree Contractor, UI's Transmission Operations, Real Estate, and Legal Departments to secure permissions/approvals to achieve the clearances necessary to be compliant and meet TVMP specifications.
- Any unresolved and unmitigated clearance conditions are reported by location to UI's Transmission Operations, Real Estate, and Legal Departments for review to explore any alternatives for eventual mitigation and resolution of the non-compliant condition.

#### 5. Objections or Requests for Modification

When there is an objection, the work planner works with the property owner to determine what level of pruning is acceptable using the following guidelines:

- If a removal is objected to, request the removal of all overhanging limbs within the UPZ.
- If the removal of all overhanging limbs within the UPZ is objected to, request the removal of all limbs within (20) feet above, (10) feet below and (8) feet to the side of the conductors.
- If the removal of (20) feet above, (10) feet below and (8) feet to the side of the conductors is objected to, request the removal of all limbs within (15) feet above, 10 feet below and 8 feet to the side of the conductors.
- If the removal of (15) feet above, (10) feet below and (8) feet to the side of the conductors is objected to, request the removal of all limbs to achieve the previously obtained clearance. Remove suckers, deadwood and limbs with structural defects.

Objections that result in requests for modification (RFM) for some of the trees at the property are recorded as Partial Objections. If the property owner objects to all tree work or all work is a request for modification, the objection is recorded as a Full Objection.

For each objected (or request for modification) tree, the work planner will record the tree species, diameter at breast height (DBH), hazard and risk characteristics, reason for the objection or modification, and take a photo of each tree.

This data is included in the Tree Warden Review report. The property owner is then asked to sign the consent form either electronically (via the Vegetation Management mobile application) or on hard copy.

UI reviews the objections and RFMs to determine if the tree conditions merit a review of the electrical system impacts or, if it is a RFM, whether the modification is acceptable. If UI accepts the RFMs, the objection process is complete and a tree crew job assignment is created.

Objections and RFMs deemed unacceptable from the previous step are passed on to UI Operations Engineering to determine the electrical system (ES) impacts and a review by the Tree Warden or the State Department of Transportation (DOT) is recommended if one or more of the following criteria are met:

- Greater than 100 customers affected
- Municipal Priority affected
- State priority affected
- Blocked assisted living center
- Blocked medical customer
- Blocked municipal priority
- Blocked state priority

The objections and RFMs are sent to the Tree Warden or DOT in the form of a Tree Warden Review report and a request for a decision within 10 days. For each tree that requires a decision, the Tree Warden is asked to render a decision as one of the following:

- Hazard
- Sustained
- Sustained with Modifications
- Overturned

When the Tree Warden's rulings are received they will be recorded and reviewed by UI Vegetation Management to determine the next step:

If the Tree Warden rules a tree to be hazardous, the customer will be notified, if time allows due to the hazard, and work will be scheduled to prune or remove the tree as necessary.

If the Tree Warden rules and overturns the objection or RFM, the property owner is notified that UI plans to proceed with the planned work. (The property owner has an opportunity within 10 days of the Tree Warden's ruling to either accept the ruling or appeal to PURA.)

If the Tree Warden rules and sustains the objection or RFM (with or without modifications), UI will either perform the work within the limits of the modification, appeal to PURA, or let the objection or RFM stand.

(UI has 10 days to decide to accept the Tree Warden's ruling or appeal to PURA).

UI will record and review the reasons for the Tree Warden sustaining or overturning a property owner objection or modification and then decide if an appeal of the Tree Warden's decision will be made to PURA. UI has established a guideline for determining when it will appeal a Tree Warden decision to PURA.

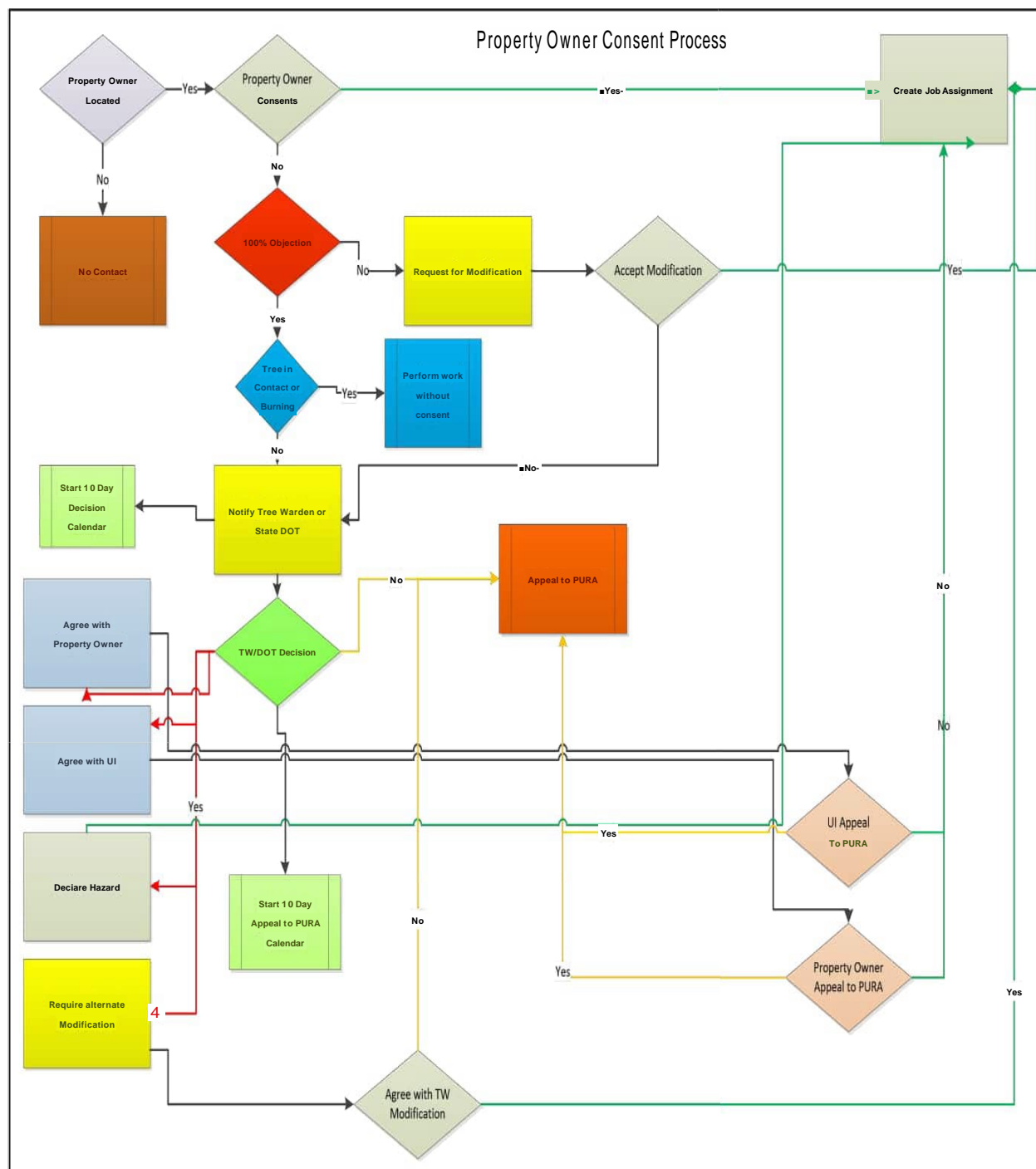
Objections and/or requests for modification may be appealed, if one or more of the following criteria are met:

Communication facilities at risk:

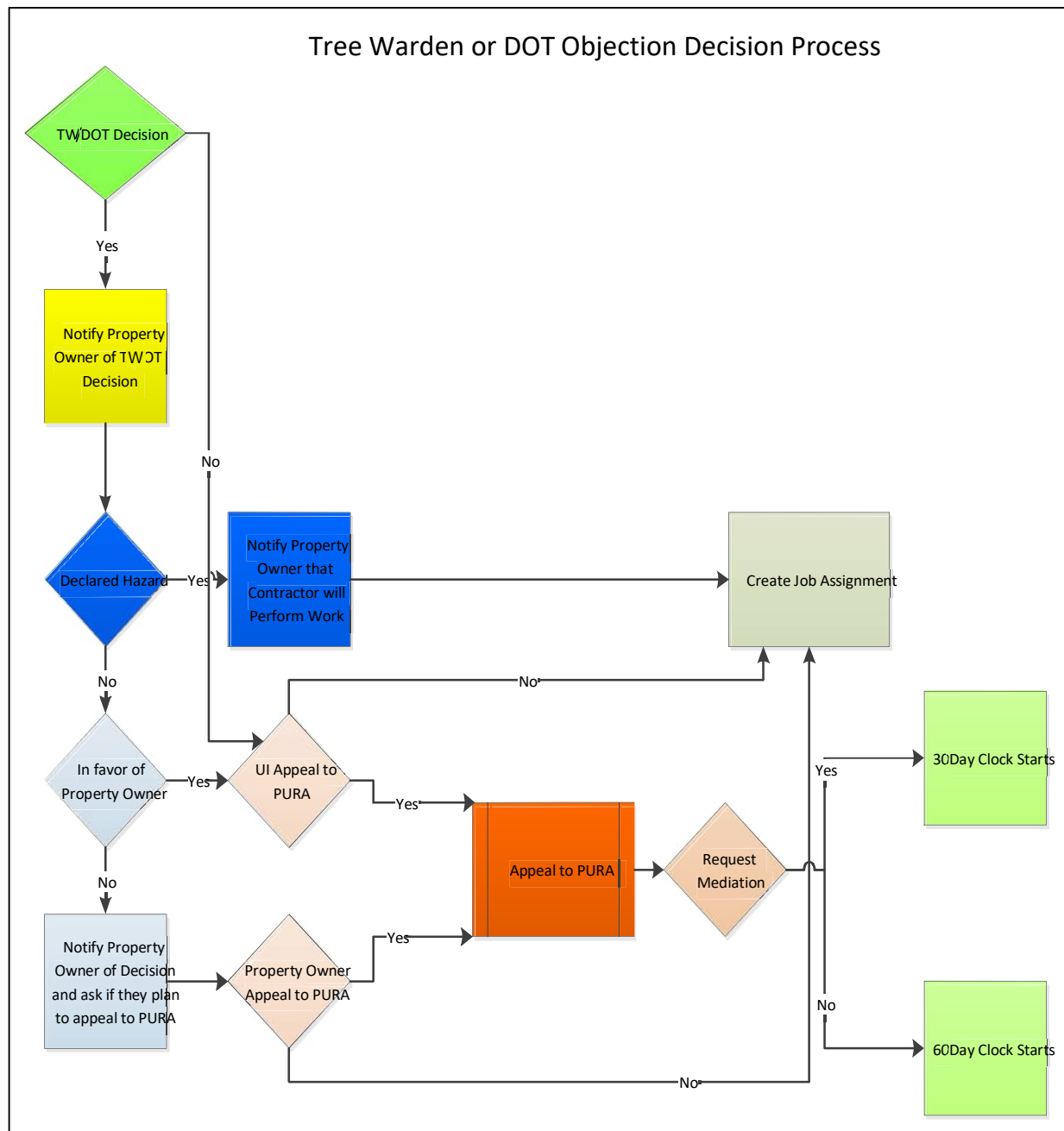
- Hazardous Tree
- High customer impact >500 customers
- High risk customers (medical, assisted living, etc.)
- Major fuel terminal at risk
- Major roadway blockage risk
- Modification does not reduce risk
- Multiple Critical facilities at risk
- Multiple tree risk factors
- Road blockage of critical facilities
- Sewage treatment facility at risk
- Tree warden did not provide a ruling
- Water treatment/pumping facility at risk

Flow charts for the consent, objection and no contact processes are provided in Exhibits E, F and G.

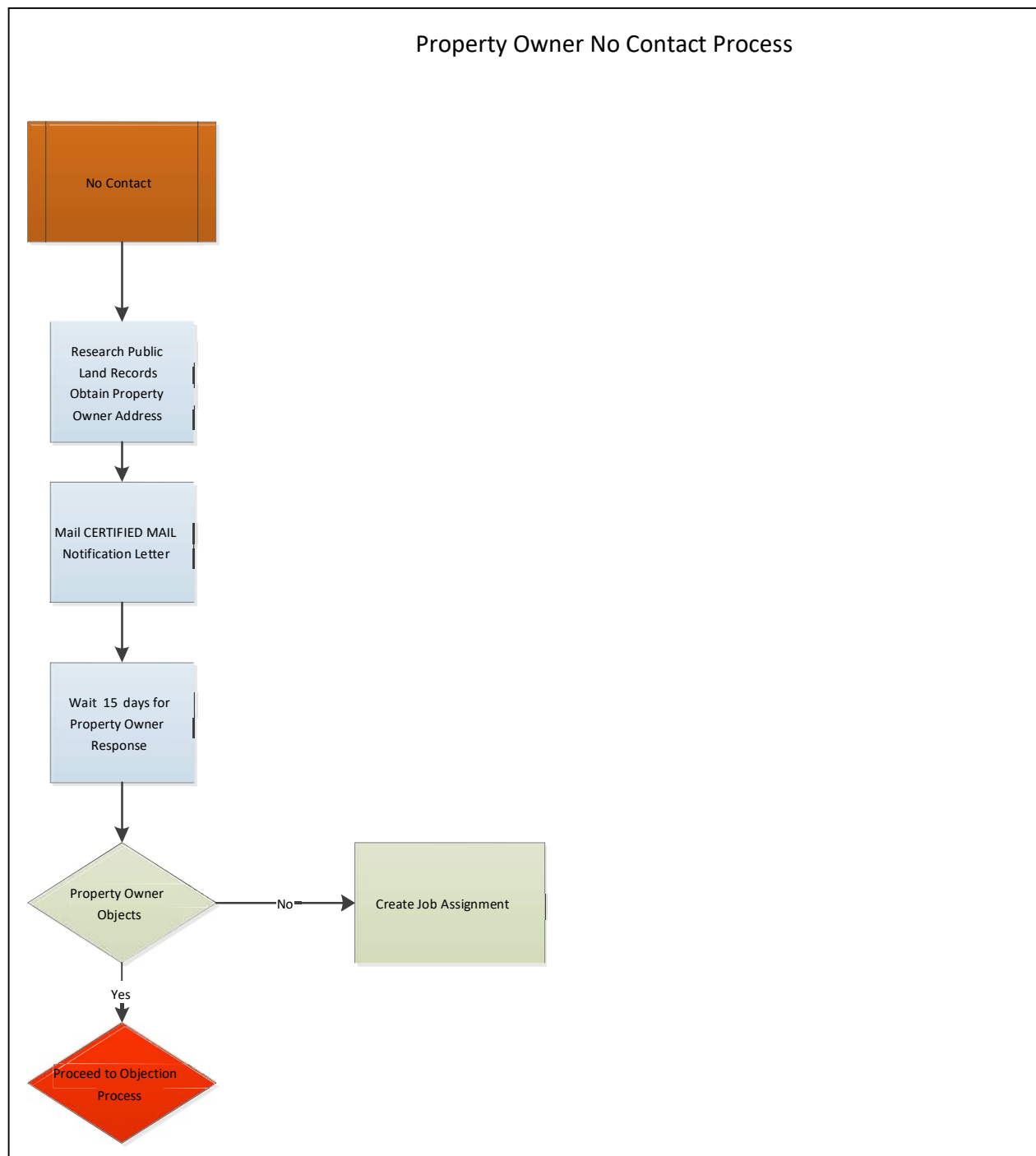
## Appendix 11 Property Owner's Consent Process



## Appendix 12 TREE WARDEN or DOT Objection Decision Process



## Appendix 13 Property owner no contract process





## **ARTICLE 5. (ME, NY, CT, and MA) GAS ROW for Vegetation Maintenance**

### **1. Project Overview**

- A. The Avangrid companies - New York State Electric and Gas (NYSEG), Rochester Gas and Electric (RGE), Southern Connecticut Gas (SCG), Connecticut Natural Gas (CNG), Berkshire Gas Company (BGC) and Maine Natural Gas (MNG) are requesting services for their gas rights of way vegetation management maintenance. **This request for services is for a three-year contract to assist** in the overall maintenance, rehabilitation, and new construction in all aspects of vegetation management.
- B. Contractor shall provide personnel, equipment, and materials for mowing services and all vegetation maintenance to Avangrid for the duration of the three-year contract.
- C. NYSEG/RGE has identified approximately 798 acres to be mowed once or twice per year on maintenance and approximately 15 miles of forested ROW within this acreage that will also require ground-to sky side trimming. The mowing Scope of Work is largely unchanged from the Scope bid in 2018. There have been minor additions and deletions to mowing locations due to changes in field conditions. Review of electronic ROW/Maintenance mapping will be made available upon award.

Use the miles and acres listed the pricing form (Exhibit I-1) for bid calculation. These **NYSEG/RGE ROW'S** have undergone multiple cycles of annual mowing, so woody reclamation work other than the identified Ground-to-Sky side trimming miles are expected to be minimal.

- D. MNG, BGC, SCG and CNG have identified approximately 135 acres to be mowed once per year on maintenance. More than 90% of these acres were mowed within the past three years. CNG has also identified approximately 3.1 miles of ROW (6.7 acres) requiring ground-to 12' side trimming the first year as part of the mowing, with just annual mowing thereafter. Note: BGC has no specific acreage identifies but does occasional as-needed work amounting to < 10 acres/year.

The Contractor shall provide weekly and/or monthly updates (as determined by Company representative) to Avangrid on progress and deliver a plan to remedy should the Contractor not meet the stated objectives within the RFP and Scope of Work.

### **2. Regions of Work To Be Performed (Maps To Be Provided)**

- A. The Company has divided the work into seven regions.
  - 1. **NYSEG East-** Binghamton, Plattsburgh, Oneonta, Mechanicsville, and Brewster (Annual mowing).
  - 2. **NYSEG West-** Elmira, Ithaca/Cortland, Auburn, Geneva, Hornell, Olean, and Lockport (Annual mowing).
  - 3. **RGE-** Rochester (Twice annual mowing of CM Transmission lines, annual mowing elsewhere).
  - 4. **CNG** – The CNG service territory.

5. **SCG** – The SCG service territory.
6. **BGC** – The BGC service territory.
7. **MNG** – The MNG service territory.

### **3. Statement of Work**

- A. The work to be performed by the Contractor is outlined in the Scope of Work section for the contractor. Maps will be provided to the Contractor by the Company and the mileage will be provided as well. (See Exhibits H-1; H-2; and H-3). Detailed mapping and treatment boundaries will be provided after contract is awarded.
- B. All maintenance work will be done on a unit-based work bid for the duration of the three-year contract.
- C. The Contractor is also requested to submit pricing for unit-based work outside of normal maintenance.

### **4. Requirements for Bid**

- A. Bidders may submit bids on one, some, or all of the seven Regions noted above. Therefore, the bidder will submit pricing in one of two ways for the three-year contract:
  1. Unit base price (broken out by Region) for all maintenance work in all divisions for the duration of three years and showing unit pricing for supplemental work.
  2. Unit base price (broken out by Region) for all maintenance work in some divisions for the duration of three years and showing unit pricing for supplemental work. Please include a statement of which Regions are not being bid.

### **5. Company Rights and Attachments**

- A. At any time the company reserves the right to change, alter, and amend any portion of the RFP or Scope of Work. Changes in work scope due to changes in field conditions are likely to occur. This may include both additions and deletions to work.
- B. Company will supply all mileage, acreage, and maps.

### **6. List of Exhibits**

- A. Exhibit H-1 MNG 2021-2023 ROW Mowing Map
- B. Exhibit H-2 CNG ROW Map
- C. Exhibit H-3 NYSEG-RGE 2021 ROW Overview Maps

## **1. Intent of Specifications**

- A. This scope of work sets forth standards for Vegetation Management of Company Rights-of-Way (ROW) that involves the construction, operation, and maintenance of the Gas ROW distribution and transmission system.
- B. These guidelines address activities for the management of vegetation (clearing, mowing, trimming, and other management methods in Company ROW).

## **2. Scope of Work**

### **A. Right-of-Way Maintenance**

- 1. Contractor shall clear a minimum distance as defined and directed by the company representative. Widths of rights-of-way vary and will be clearly defined in total acreage provided to Contractor along with clearing widths. Final product shall be clear of all woody vegetation and all debris, unless otherwise directed by a Company representative.
- 2. On right-of-way where the gas main is near the edge of the right-of-way and clearing would extend beyond the defined company designated edge the clearing shall be to the defined edge unless directed otherwise by a company representative.
- 3. The Contractor shall be responsible for completely clearing all brush, trees and any other debris located along the rights-of-way or as directed by Company representative. Mowing will be the primary vegetation tool used on Company rights-of-way.
- 4. Completed mowing height shall be no less than 2 inches above ground level and shall be no taller than 6 inches in height, unless otherwise directed by Company representative.
- 5. The Contractor shall not disturb agricultural areas without first obtaining the permission of the land owner and the consent of a Company representative.
- 6. The contractor shall weed-eat, hand-cut, or use other mechanical means to clear 3 feet around all permanent gas line markers, regulators, and any other gas ROW equipment. The Contractor is responsible for protecting the gas rights-of-way markers and all other equipment and shall not mow within the 3-foot area.
- 7. All trees along the edges of the rights-of-way shall be pruned to a height of no less than 12 feet above the ground. The contractor shall perform this trimming approximately once every 3 years, as needed, or as directed by a Company representative.
- 8. In addition to elevating trees along rights-of-way, Company may require additional trimming to be performed on all trees along corridor ground to sky. This trimming will be done on a case-by-case basis and will be directed at the request of Company representative. Unit pricing applies.

9. All side pruning and elevation trimming shall be done in accordance to ANSI A-300 pruning standards. If more than 30% of the crown needs to be removed, then tree should be targeted for removal and the Contractor is responsible for obtaining consent from the property owner to remove the tree, unless otherwise directed by the Company representative.
10. The Contractor shall be required to do a courtesy notification to landowners by means of door card, phone call, or verbal communication where visible occupation of landowner is noticed as in house, barn, pasture, business, or any other types of occupation of the land is noticed.
11. Prior to work start, the Contractor shall be responsible for the scheduling and notification to Company representatives the intended work locations. The Company then will be responsible for having the rights-of-way centerline flagged for scheduled work to be completed.
12. Contractor shall not begin work on any work location without prior notification to and permission from the Company representative.
13. When Company electrical rights-of-way and Company gas rights-of-way intersect, parallel, and/or share ROW, the Contractor is responsible for following electrical distance guidelines set forth in ANSI-A300.

Danger trees identified by Contractor and Company representative shall be worked on a case-by-case basis and at the discretion of the Company representative. Unit pricing applies.

### **3. Right-of-Way Reclamation and New Construction**

- A. Company may require reclamation and new construction work to be performed by Contractor in addition to normal maintenance along rights-of-way. These specific situations and projects will be clearly defined and communicated by the Company representative.
  1. Removal of vegetation less than 6 inches (brush) in DBH (diameter at breast height). Vegetation shall be cut/mowed to a maximum stump height of 2 inches above ground and all chipped brush shall be broadcast on ROW not to exceed 4 inches in depth or windrowed when chipping is not feasible.
  2. All vegetation 6 inches DBH and greater shall be removed in a controlled manner by the Contractor. All wood larger than 8 inches shall be cut into manageable lengths and placed parallel to the outside edge of the ROW. All limbs less than 6 inches shall be chipped and broadcast on ROW not to exceed 4 inches in depth. When chipping is not feasible, all brush shall be windrowed along the ROW edge.

#### **4. Wetland and Streams**

- A. The contractor will be responsible for following all environmental laws pertaining to streams, rivers, wetlands, and any other environmental concerns not listed. The Contractor will be responsible for obtaining any environmental permits necessary to completed standard maintenance processes set forth in the scope of work unless otherwise directed by the Company representative. Note: This work has historically been performed in such a manner as to NOT require any stream or wetland permits.
1. The Contractor will be required to comply with New York State DEC Article 15 and 24 when performing New York ROW work. The Contractor will identify and be aware of all defined wetland and waterways as defined per the state of New York. This link shall only aid the Contractor (<http://www.dec.ny.gov/permits/6042.html>).
  2. The Contractor will be required to comply with Connecticut, Massachusetts or Maine stream and wetland protection laws or local ordinances and secure any required permits when performing ROW work. The Contractor will identify and be aware of all defined wetland and waterways as defined per such States or localities.
  3. The Contractor shall avoid crossing streams whenever possible.

#### **5. Timelines for Maintenance**

- A. The contractor will be responsible for clearing Company gas ROW'S in a timely manner prior to snow cover and after snow melt.
1. All maintenance shall be started by April 1 and completed by November 1, unless otherwise directed by a company representative.
  2. It is the Contractor's responsibility to assure quality control of all work completed on all gas ROW. The Contractor will be required to return to previous locations worked to finalize any cleanup that was delayed due to weather events, i.e., snowfall and/or any other weather event unless otherwise directed by a Company representative.

#### **6. Pricing of Work**

- A. All work performed by the Contractor shall be done on units using submitted pricing, unless otherwise directed by a Company representative.

## **ARTICLE 6. (ME, NY, CT) Bareground Weed Control Vegetation Maintenance**

V.1 (February 2022)

### **SECTION 1 GENERAL**

#### **1.01 General Instructions and Precautions**

All work shall be performed in a workmanlike manner according to these specifications. The Contractor shall at all times exercise care to prevent injury to any persons and to prevent damage to any property during performance of the work. Extreme caution shall be taken while working in the vicinity of high voltage electrical equipment and areas where flammable material may be present.

It is the responsibility of the Contractor to bid and perform the work as specified.

#### **1.02 Definitions**

|                                   |  |
|-----------------------------------|--|
| <b>Chemical Treatment</b>         | The application of a chemical herbicide formulation for the purpose of removing or preventing the emergence of undesirable vegetation. |
| <b>Company</b>                    | CMP, NYSEG, RG&E and UI  |
| <b>Qualified Company Observer</b> | Qualified electrical worker designated by the Company to provide access into locked areas.   |
| <b>Company Representative</b>     | Person or persons designated as such by the Company.   |
| <b>Contractor</b>                 | Firm that has been awarded a formal contract to perform work described in these specifications.  |
| <b>Desirable Vegetation</b>       | Plants in the form of grasses, legumes and ornamental trees and shrubs not scheduled to be removed.                                    |
| <b>Weeds</b>                      | Undesirable vegetation that is scheduled to be removed.  |

### 1.03 Scope of Work

#### A. *Obligation of Contractor*

The Contractor shall furnish all supervision, labor, tools, equipment, chemical materials, water, and transportation necessary to perform the contract. The Contractor shall:

1. Arrange for daily consultation with the Company Representative, advising the representative of the work locations and work planned for the day.
2. Complete on a daily basis the Daily Report of Bare Ground Weed Control Applications. This report is to be submitted to the Company Representative prior to invoicing. See *Appendix B*.
3. Chemically treat all substations, gas regulator stations, fence lines, pole yards, and other areas designated for treatment in accordance with these specifications.
4. Abide by all State and Federal laws, rules, and regulations relating to the application of pesticides. For NYS, see *Appendix C, Non Company Owned Sites*.
5. In New York State, provide full time on-site supervision by a NYS certified pesticide applicator certified in the right-of-way category for each crew applying chemicals at separate sites.
6. Notify the Company Representative of areas showing evidence of herbicide damage to desirable vegetation resulting from previous applications. Notification shall be made prior to making any application to the site.
7. Report immediately to the Company Representative any inquiry, complaint or claim received during the course of the work.
8. All Contractor personnel shall wear hard hats and protective eye wear with side shields while working on Company property.
9. The Contractor shall comply with all OSHA requirements and provide for employee Hazard Communication training as required by OSHA standard 29 CFR 1910.1200. All precautions shall be followed as listed on the product MSDS.
10. The Contractor shall provide for work zone traffic control in accordance with State and/or Federal Manual of Uniform Traffic Control Devices.

#### B. *Obligation of Company*

*The Company shall:*

1. Provide Daily Report of Bare Ground Weed Control Application forms for reporting chemical treatment.
2. Authorize in writing to the Contractor any change in the scope of the work.
3. Approve the chemical formulations to be applied.
4. Provide a Qualified Company Observer who shall accompany the Contractor during the performance of work described in these specifications and provide access into restricted areas. The Qualified Company Observer will not be available on Sundays, holidays, before sunrise or after sunset.

#### **1.04 Access to Company Facilities**

The Company shall provide a Qualified Company Observer whose responsibility it will be to accompany the Contractor and provide access into all facilities where work is to be performed. Under no circumstances shall the Contractor enter any facilities (having restricted access) when the Company Observer is not present.

### **SECTION 2 APPLICATION OF NON-SELECTIVE HERBICIDES**

#### **2.01 Method of Application**

A. *Pre-Emergent and Pre-Early Post Emergent Application*

The spray formulation shall be applied through a properly calibrated hydraulic sprayer. Spray applicators shall evenly distribute the spray material over the area to be treated. Each successive application pattern shall overlap the previous application pattern to avoid untreated strips.

B. *Post-Emergent Application*

The spray applicators shall apply the spray material to the foliage of vegetation to be controlled. Spray coverage shall be uniform and complete.

#### **2.02 Timing of Application**

A. *Pre-Emergent and Pre-Early Post Emergent Application*

Pre-emergent application of soil active herbicides shall be made from the time when the ground is frost free in the spring (generally May 1) and completed before weeds reach four inches in height. After weeds reach four inches in height, a pre-early post-emergent formulation, containing soil active and post emergent herbicides shall be applied. Treatment shall be completed by the end of June.

B. *Post-Emergent Application*

Application of foliage absorbed herbicide shall be made when vegetation to be treated is actively growing.



### **2.03 Treatment Areas**

- A. Generally, areas to be treated are enclosed by fences. Unless specified otherwise by the Company Representative, all area within the fence and a band outside the fence shall be treated.
  - The band width for NYS is one foot except for critical 115kV, 230kV and 345kV substations it is 10 feet.
  - The band width for Maine is two feet. Non motorized equipment to be used outside of the fence.
- B. Where all of the area within the fence is not to be treated, specific instructions shall be provided by the Company Representative.
- C. Where fence lines only are to be treated, a band one foot wide shall be treated on each side of the fence line except for critical 115kV, 230kV and 345kV substations it is 10 feet on each side of the fence line.

### **2.04 Mixing**

All mixing shall be performed in accordance with the product label. Equipment must be able to provide the agitation specified on the product label.

### **2.05 Restrictions and Conditions**

- A. Applications shall not be made when wind conditions are such that there is a potential for off-site damage resulting from drift.
- B. The Contractor shall take all precautions to protect desirable vegetation on Company property and on adjacent property from damage resulting from these operations.
- C. All mixing and application of chemicals shall be performed according to the registration of the product label, appropriate governmental regulations, and these specifications.
- D. Water shall not be pumped from a source of surface water directly into a spray tank. Where water must be pumped from a source, a separate nurse truck shall be utilized to supply water to the spray tank. Herbicide shall not be transported on this nurse truck in a concentrated or diluted form.

Water taken directly from a hydrant or other pressurized source may be added directly to the spray tank as long as a backflow prevention device is acceptable to the New York

State Health Department, Bureau of Water Supply.

- E. At the time of application, the area to be treated shall be vacant of all persons except those making the application. If an area to be treated is occupied at the time the Contractor intends to treat the area the Contractor shall postpone treatment until such time as the area to be treated is vacant.
- F. Each vehicle transporting herbicides shall be equipped with a shovel and absorptive material for controlling spills. All herbicide spills shall be reported immediately to the Company Representative.
- G. Special conditions for Maine.
  - 1) For substations that are adjacent to sensitive areas, hand pressurized equipment will be used within 50' of the sensitive area. See Section 2.11 A 2 for herbicide formulation. See *Appendix A Maine Sensitive Sites*.
  - 2) All treatments outside the fence will be treated with non-motorized equipment.
- H. Special conditions for UI.
  - 1. Spray herbicide within the Substation yards onto all trap rock. To assure 100% coverage, be thorough by methodically applying. The 200 gal/acre (highest allowable by the Mohave' Label) has been used in the past. Check the Label.
  - 2. Spray perimeter fence lines – both inner and outer fences for encroaching vegetation. Be sensitive to abutting properties as well as UI landscaped property – if you are spraying near any planted and landscaped areas, use Glyphosate only. This will allow selectivity of your target weed control.
  - 3. On UI property, in outer yard areas, parking lots, fence aprons, etc, spray for control of undesirable weeds/saplings. Be sensitive to abutting properties as well as UI landscaped property – if you are spraying near any planted and landscaped areas, use Glyphosate only. This will allow selectivity of your target weed control.

## **2.05 Visual Notification**

- A. *New York State*: where applications are made within one hundred feet of a dwelling, multiple dwelling, public building or public park, visual notification signs shall be posted in accordance with Section 33-1003 of the NYS Environmental Conservation Law. If the treated site is within a locked fenced area, the visual notification sign shall be placed on the gate to the fenced area. If the treated area is not within a locked fence, visual notification signs shall be posted along the perimeter of the treated area.
- B. *Maine*: all gates used to access substations will be posted with signs stating date of application and products applied.

## 2.07 Security of Equipment and Chemicals

The Contractor shall take the following precautions, as a minimum, to protect equipment and materials from vandalism and unauthorized use when left unattended on Company property outside of a locked fenced area.

- A. Ignition keys shall be removed from all vehicles used for carrying chemical concentrate or spray solution.
- B. The opening to the mixing tank shall be locked.
- C. Any valve which could provide access to chemical concentrate or spray solution shall be locked.
- D. Containers carrying chemical concentrate shall be securely locked or bolted to vehicles.
- E. The Contractor shall notify the Company Representative as to the source of water to be used for mixing prior to withdrawing water from any source.
- F. Equipment used for transporting herbicide concentrate or spray formulation shall not be left unattended within 100 feet of any stream, water body, or wetland.

## 2.08 Damages

The Contractor shall be liable for all damages to Company property resulting from these operations.

## 2.09 Guarantee

- A. Pre-Early Post Emergent Applications  
The Contractor shall guarantee that treated areas shall be essentially free of any living plant growth throughout the growing season until October 30. The Contractor shall retreat all areas exhibiting less than satisfactory control.
- B. Post-Emergent Applications  
The Contractor shall guarantee at least 90% kill of vegetation that was present at the time of application.

## 2.10 (NYSEG & RG&E) Herbicide Formulations

- A. Pre-Early Post Emergent Formulations  
Formulation # 1 is the standard treatment and shall be applied to most sites. On Sites where difficult-to-control weed species are present and where treatment will not be picked up by the roots of desirable plants, Formulation # **2 or # 3** shall be used.

1) *Pre-Early Post Emergent Formulation # 1*

Esplanade 200 SC 5 oz./acre  
 + Method 240 SL 12 oz./acre  
 + Oust Extra 3.5 oz./acre  
 + Glyphosate or Finale at label rates  
 + Marker Dye + Surfactant + 100 gal water

2) *Pre-Early Post Emergent Formulation # 2*

Oust Extra @ 3.5 oz./acre (75% Dispersible Granules)  
 + Karmex IWC @ 5 lb./acre (80% Dry Flowable)  
 + Dye + 100 gal. water

3) *Pre-Early Post Emergent Formulation # 3*

Oust Extra @ 3.5 oz./acre (75% Dispersible Granules)  
 + Karmex IWC @ 6 lb./acre (80% Dry Flowable)  
 + Krovar @ 6 lb./acre  
 + Dye + 100 gal. water

The above formulations shall be mixed and applied according to the product labels. If it becomes necessary to modify any formulation, the Contractor shall obtain prior written authorization for a variance from the Company Representative.

B. Post-Emergent Formulation

1 gal Roundup (or equivalent) + 99 gal water

**2.11 (CMP) Herbicide Formulations**A. Inside Fence Formulations1) *Non-landscaped Areas*

Esplanade 200 SC @ 5 oz/acre  
 +Oust Extra @ 3.5 oz/acre  
 +Accord XRT @ 3 qts/acre  
 +Low drift agent

2) *Landscape Areas and Buffer Zone Formulation*

To be used when spraying inside the fence within 20 feet of landscape plants and for any 50 foot buffer zones for sensitive areas (excluding drinking water areas where no herbicides shall be applied). See *Appendix C Maine Sensitive Sites*.

Makaze @ 3qts/acre  
 +Pendulum 3.3 EC @ 2.4 qts/acre  
 +Low drift agent

B. Outside Fence Formulation

Makaze @ 3qts/acre  
+ Pendulum 3.3 EC @ 2.4 qts/acre  
+Low drift agent

**2.12 (UI) Herbicide Formulations**

Inside Fence and Fence lines

MOJAVE 70 EG per label

Post-Emergent Formulation

Roundup Ultra2® Liquid Herbicide per label

## **Appendix 16 Maine Sensitive Sites**

List of Sensitive Areas to be included on a Substation Site Map:

- Residential buildings, together with any land which is part of the same property and is within (100) feet of such buildings;
- School buildings, together with any land which is part of the same property and is within (100) feet of such buildings, and also together with any playgrounds, athletic fields or other such facilities designed for use by people in the vicinity of school buildings;
- Commercial or other buildings where human use occurs (including without limitation places of business, places of worship, and other commercial and institutional buildings), together with any land which is part of the same property and is within (100) feet of such buildings;
- Developed recreational areas open to public accommodation, including developed public or commercial campgrounds, developed picnic areas, marked roadside rest areas, marked publicly owned or maintained hiking trails, developed park and recreation facilities, playgrounds, playing fields and other areas developed for organized sports or recreation;
- Apiaries, the locations of which are registered with the Department of Agriculture, Food and Rural Resources pursuant to 7 M.R.S.A. § 2701;
- Critical areas designated by the Board of Pesticides Control pursuant to 22 M.R.S.A. § 1471 M(2);
- Public wells, drinking water springs used by the public, and public water supply intake points, provided the location of the same is known or should reasonably be known to the pesticide applicator.
- Private sources of drinking water, where the owner or legal user thereof has given prior notice of the locations of such source to the landowner or lessee of the area which will be subject to a pesticide application;
  - Water bodies, including streams, brooks, rivers, ponds, lakes, estuaries and marine waters, provided that any such water body contains water at the time of the pesticide application and is known to the spray applicator or is reasonably detectable from visual observation, reasonably available maps or reasonable inquiry. cultivated land, cropland or gardens.

## Appendix 17: Non Company Owned Sites – NYS

| Site Name                   | Address            | Town       | Comments                           |
|-----------------------------|--------------------|------------|------------------------------------|
| <b>AUBURN</b>               |                    |            |                                    |
| Columbus St.                | Columbus St.       | Auburn     |                                    |
| Cayuga #1                   | Wheat St.          | Cayuga     |                                    |
| East Auburn Gate            | Rt. 5              | Sennett    |                                    |
| <b>BINGHAMTON</b>           |                    |            |                                    |
| Anitec Line Valve Settings  | Elm Street         | Binghamton | Site visit 1/2010 - no vegetation. |
| Lagrange Street             | Lagrange Street    | Binghamton |                                    |
| Glenwood Road               | Glenwood Road      | Binghamton |                                    |
| <b>BREWSTER</b>             |                    |            |                                    |
| Marvin Mt. Radio Tower Site |                    |            |                                    |
| <b>GENEVA</b>               |                    |            |                                    |
| Sampson                     | Sampson State Park | Romulus    |                                    |
| Sampson Switch              | Sampson State Park | Romulus    |                                    |
| Seneca Ordinance Switch     | Yale Farm Rd.      | Fayette    |                                    |
| Seneca Ordinance            | Summerville Rd.    | Romulus    |                                    |
| Blue Cut Road               | Blue Cut Rd.       | Newark     |                                    |
| Van Aucken Road             | Van Aucken Rd.     | Newark     |                                    |
| O'Brien Road                | O'Brien Rd.        | Newark     |                                    |

|                                      |                         |                 |
|--------------------------------------|-------------------------|-----------------|
| Yellow Mills Road                    | Yellow Mills Rd.        | Palmyra         |
| Silgan Containers (Lyons)            | Cole Rd.                | Lyons           |
| Palmyra City Gate                    | Rt. 31                  | Palmyra         |
| Clyde Gate Station                   | Rt. 31                  | Clyde           |
| East Main St. Clifton Springs        | E. Main St.             | Clifton Springs |
| Phelps Tap                           | Rt. 96                  | Phelps          |
| Arcadia Purchase Station             | Heidenrieck Rd.         | Newark          |
| Guardian (NYSEG Side)                | Forge Ave.              | Geneva          |
| Seneca Stone                         | Hosters Corners Rd.     | Fayette         |
| Five Points                          | Rt. 96                  | Romulus         |
| <b>ITHACA</b>                        |                         |                 |
| Cornell Farms                        | Cornell Lane            | Dryden          |
| Lake Source Cooling Switches         | East Shore Drive        | Ithaca          |
| Peruville Electric Regulator Station | Rte. 34B towards McLean | McLean          |
| Route 281 POD                        | Rte.281                 | Homer           |
|                                      |                         |                 |
| Wilseyville                          | Wilseyville Rd.         | Candor          |



|                            |  |                 |
|----------------------------|--|-----------------|
| Emerson                    | - Ask<br>NYSEG rep<br>for county<br>code/address<br>info - |                 |
| <b>ELMIRA</b>              |  |                 |
| Bradley farms              | 848 Mt.<br>Zoar Rd.  | Southport       |
| Hillcrest                  | 56 Hillcrest<br>Rd.  | Elmira          |
| Watkins Glen Muni Switch   | Cass Rd.   | Watkins<br>Glen |
| <b>LANCASTER/LOCKPORT</b>  |  |                 |
| Alpine Tap                 | Rt. 240  | Aurora          |
| Jamison Road Tap           | Jamison Rd.  | Elma            |
| Bowen Road Switch          | Bowen Rd.  | Elma            |
| <b>LIBERTY</b>             |  |                 |
| Erie St. Regulator Sta.    | Orange<br>County<br>Bldg.                                  | Goshen          |
| Maple Ave. Regulator Sta.  | Police<br>Highway  | Goshen          |
| Houston Rd. Regulator Sta. | Houston<br>Rd./Maple<br>Ave                                | Goshen          |
| Denton Hill Regulator Sta. | Denton Hill<br>& Route<br>17M                              | Goshen          |

|  |                        |                  |
|--|------------------------|------------------|
| Quarry Rd. Regulator Sta.                | Off Rt. 17A            | Goshen           |
| Durland Rd. Regulator Sta.               | Durland Rd.            | Goshen           |
| Gibson Rd. Regulator Sta.                | Gibson Rd.             | Goshen           |
| Walden Regulator Sta.                    | 2448 State<br>Rt. 208  | Montgomery       |
| Hamtonburg Regulator Sta.                | Off Rt. 207            | Goshen           |
| <b>MECHANICVILLE</b>                     |                        |                  |
| Comstock                                 | Route 22               | Comstock         |
| Wynantskill 115V                         | Steamview              | No.<br>Greenbush |
| Austerlitz Radio TWR                     | Austerlitz<br>Mountain | Austerlitz       |
|  |                        |                  |
| Battenkill                               | Schuylerville<br>Road  | Greenwich        |
| Berkshire Farms (School<br>Notification) | Route 22               | Canaan           |
| Raylinski Regulator Station              | Raylinski<br>Road      | Halfmoon         |
| Bailey Hill                              | Route 146              | Halfmoon         |
| <b>ONEONTA</b>                           |                        |                  |
| West Hill (Norwich)                      | County 10A             | Norwich          |
| Sidney Tap Switch                        | Pine Hill Rd.          | Sidney           |

|                             |                 |             |
|-----------------------------|-----------------|-------------|
| Route 12 North (Barrows)    | Rt. 12          | Norwich     |
| Route 12 North (Grove Park) | Rt. 12          | Norwich     |
| Deposit Valve Cluster       | Laurel Bank Rd. | Deposit     |
| Amphenol                    | W. Railroad St. | Sidney      |
| <b>PLATTSBURGH</b>          |                 |             |
| Main Mill Rd.               | Main Mill Rd.   | Plattsburgh |
| Melody Lane                 | Melody Lane     | Plattsburgh |

DW = Driveway

ES =  
Electric  
SubstationFL = Fence  
Line

GV = Gas Valve

O = Other

PL =  
Parking Lot

SA = Storage Area

TB = Tower  
Base

## **SCHEDULE C – Terms and Conditions**

### **ARTICLE 1 – CONTRACT DOCUMENTATION AND DESCRIPTION OF SERVICES**

Pursuant to that certain Master Services Procurement Agreement (the “Agreement”) between **Avangrid Service Company** (hereinafter, “Owner” or “Company”), and [REDACTED] hereinafter, “Supplier” or “Contractor”), the entity (Company) named in the given Purchase Order, engages the Supplier, and the Supplier hereby agrees to perform the Services.

The Services shall be as described in **Schedule B** of the Agreement; as such Schedule may be amended, modified or supplemented and attached hereto for the purposes of the Purchase Order.

The provision of the Services shall be governed by the order of precedence set forth in the Agreement, Section 2.2(c) of the Agreement.

All work shall be invoiced in accordance with the pricing schedule approved by Company for the Services, “Pricing Schedule,” included in **Schedule D**, attached hereto and made a part hereof (unless otherwise agreed to in writing by the Company).

Supplier further agrees to do the following:

A. Supplier, through its experience and the normal course of business, has included full provision for local wage rates, travel and subsistence rates, allowances and conditions, if any, as well as allowances for any other measures necessary to complete the work in a satisfactory manner in accordance with this Agreement.

B. Supplier has read, understands and shall comply with **Schedule E**, hereby referred to as “Special Conditions”, attached hereto and made a part hereof

C. Supplier shall not reject any Purchase Order issued in accordance with pricing terms, delivery terms, and terms as set forth on Schedule B.

D. Upon execution (for purposes hereof execution means when Supplier has begun to provide Services pursuant to the Purchase Order) of a Purchase Order:

1) Supplier has examined all available records pertaining to the work.

2) Supplier further states that the Contract Price and detailed schedule for completion of the work are based on Supplier’s known knowledge and judgment of the conditions and hazards involved, and not upon a representation of the Company. The Company assumes no responsibility for any understandings or representation made by any of their representatives during or prior to execution of this Agreement unless such understandings or representations are expressly stated in this Agreement and the Agreement expressly provides that the responsibility is assumed by the Company.

## **ARTICLE 2 - CONTRACT PRICE**

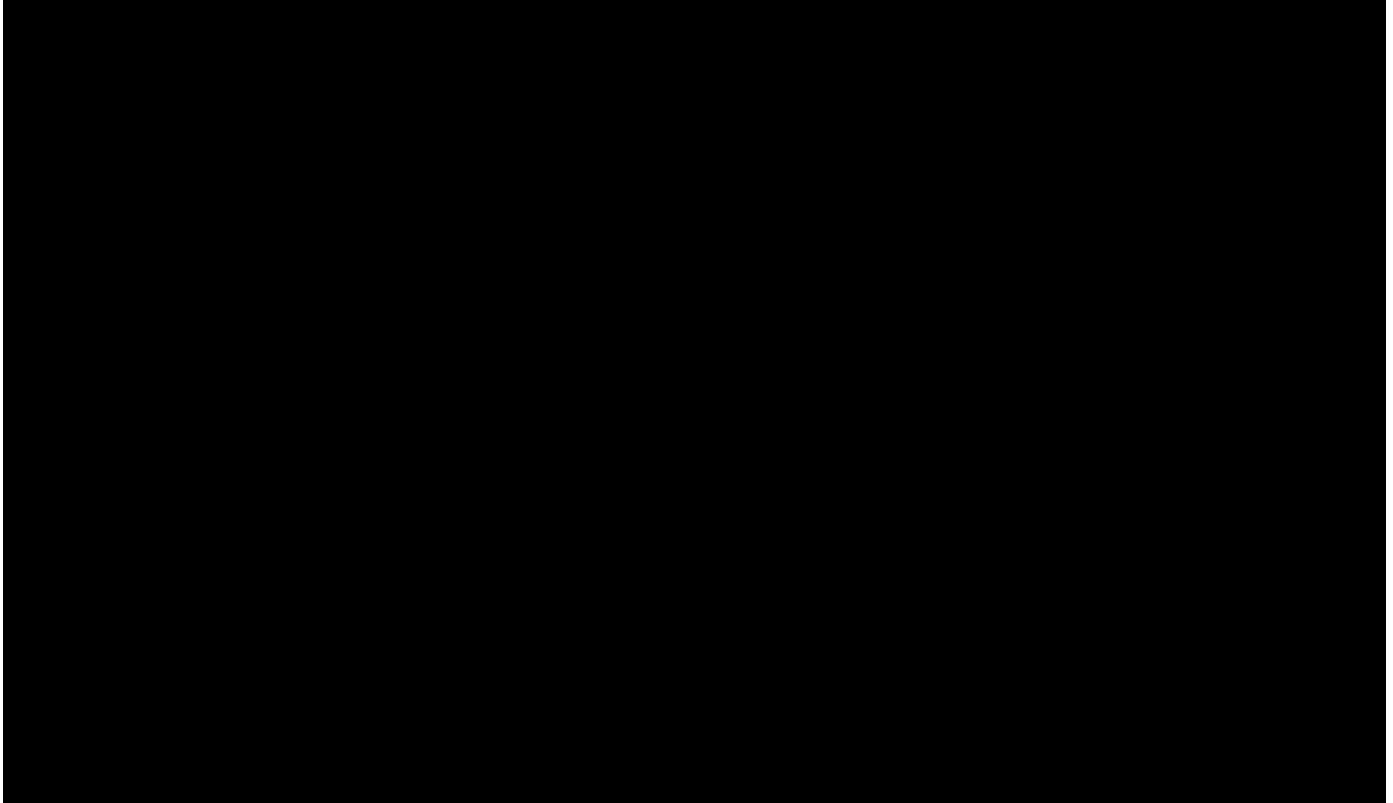
The Contract Price for the Services (made up of the costs, fees and expenses arising under Article 3 below) shall be set forth in the Purchase Order and shall be considered fixed unless stated otherwise (time and equipment, for example) on the face of the Purchase Order and in accordance with *Schedule D*.

## **ARTICLE 3 - REIMBURSABLE ITEMS**

The Supplier shall be reimbursed for the following items for Services performed under this Agreement:

### **A. Fees**

**B. Travel Expenses (excluding UI)**



**ARTICLE 4 - PAYMENTS**

**A.** Payments of any undisputed invoice will be made by the 60<sup>th</sup> day after the receipt by Company of a properly completed invoice, supported by original receipts, and detailing the travel expenses.

**B.** An original and copy of each invoice are to be mailed to the “Bill to Location” provided in the Purchase Order, unless otherwise instructed by Company.

Each invoice shall show the Purchase Order Number, Supplier work location, payment terms and the job name and other information, which may be required or reasonably requested by Company.

The following documentation must accompany each invoice:

(i) Summary statements listing employee name, job classification, hours charged and hourly billing rates (both straight time and overtime if applicable) and total charges for the invoice period.

(ii) Copy of invoices for material, services, rentals, contracts, and other items purchased or rented in connection with the Services.

(iii) Copies of expense account summary sheets for each individual performing Services will be provided. The summary sheet will summarize lodging, meals, transportation and any other expenses. The period of time will also be shown. Supplier shall retain copies of supporting documents for such expense accounts, and these will be made available for Company review upon written request by Company. Supplier shall preserve all pertinent records supporting payment for Services hereunder for a period of two (2) years beyond the final payment for the Services.

(iv) For the initial invoice submitted by Supplier for the Services under this Agreement, the bank account number of Supplier to which payments should be made by Company and/or Company under this Agreement must be provided in writing with evidence of account ownership as provided herein. For any change in such bank account information, Supplier shall at least thirty (30) days prior to the applicable payment date provide Company with an account ownership certificate acceptable to Company for any change to the original bank account information, in addition to the requirements set forth below.

Supplier acknowledges that invoices which do not contain the above information or are not addressed as stated in the Purchase Order may cause payment delay and will not be subject to late payment status.

#### **A) Method of payment**

All payments by Company will be made by bank transfer to the following bank account owned by the Supplier. Supplier must prove the account ownership and the identifying details of the bank account.

Any change in the bank details of the Supplier must be duly notified to Company, including the relevant supporting documentation. Otherwise, Company will not be obligated to make payment to the new account and payment to the former account will constitute a discharge of all obligations by Company. In any case, Company and Company may withhold the corresponding payment, without incurring any type of liability, until the provider proves reasonable evidence of the ownership of the bank account. In the event Supplier owes money to the Company or has defaulted under this Agreement or under any other agreements with the Company, or Supplier has failed to pay any amount owed to the Company whether pursuant to an agreement, a statutory or regulatory fine, the imposition of statutory or regulatory damages, or otherwise (collectively, the "Obligations"), the Company may, at its option, setoff and/or net any or all such Obligations against any amounts owed by the Company to the Supplier.

#### **B) Communications**

Any notifications, requests and other communications by Supplier related to the administrative management and payments under this Agreement shall be made in writing through the secure communication channel implemented for that purpose by Company. If such secure communication channel is not available, such notifications, requests and other such communications by Supplier

must be either: (i) delivered personally; (ii) sent by fax or e-mail (with confirmation); or (iii) sent by mail (with proof of delivery) to the address listed as belonging to each party in the Agreement.

#### **ARTICLE 5 – TAXES**

The Contract Price does not include sales/use taxes. Supplier shall be responsible for payment of and assumes exclusive liability for any and all contributions or taxes imposed by or required under the laws of the State of New York or any other state or Federal law, or the Federal Social Security Act or any other act, now or hereafter in effect, upon or in respect to, wages, salaries, benefits or other compensation paid to employees engaged upon or in connection with the Services. Company shall withhold from any payments due Supplier hereunder any amounts that it is required to withhold pursuant to any Federal or State tax laws.

#### **ARTICLE 6 – CHANGES**

No changes in the Scope of Services or Statement of Work are authorized unless made by Company and sustained by amendment to this Agreement or a written Supplement. A Change is an addition, deletion, or revision in the Services or an adjustment in the Contract Price or the Schedule. Changes made by Supplier, unless authorized by an executed amendment to this Agreement or a Supplement, shall be made at the sole risk of Supplier, there being no financial recourse against Company. No changes in the Agreement will be made without an amendment to this Agreement or a Supplement agreed by Company. Unless otherwise agreed, all amendments to this Agreement or Supplements shall be governed by the conditions of this Agreement.

#### **ARTICLE 7 - CLAIMS/DISPUTES**

**A.** Any claims by Supplier relating to this Agreement, must be submitted to the Company in writing within ten (10) calendar days of initial occurrence of the basis for the claim. Failure to provide such notification shall be deemed waiver of such claim.

**B.** The notice of claim shall include the particulars and shall specify the cause or other basis of the claim, and shall include substantiation of the amount and/or extension to which the Supplier considers itself to be entitled in connection with the Agreement.

**C.** Dispute or claims by the Supplier shall not affect the diligent prosecution by Supplier of the Services.

**D.** The Parties agree to hold a meeting promptly to attempt in good faith to negotiate a resolution of the dispute, such meeting to be attended by representatives of the Parties with decision-making authority regarding the dispute. If, within twenty-one (21) days after such meeting, the Parties have not succeeded in negotiating a resolution of the dispute, either Party may refer the dispute to a court under Article 41 which is to be the sole legally binding forum available to the Parties for resolution of a dispute hereunder.



## **ARTICLE 8 – AUDIT**

Supplier shall check all materials and labor entering into the Services and shall keep full and detailed accounts as may be necessary to provide proper financial management under this Agreement. At all reasonable times, the Company shall have access to the Supplier's offices, work and records pertinent to all charges, for inspection, audit and review. Supplier shall permit such examination and make appropriate adjustments as may be required by the results of the audit. All results of these audits must be kept confidential between the Parties and their agents. This provision shall remain in effect for two (2) years following final payment under this Agreement.

## **ARTICLE 9 - RIGHTS, PRIVILEGES, REMEDIES; NON WAIVER**

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.

## **ARTICLE 10 - NON WAIVER OF RIGHTS**

Any failure by the Company to enforce or require the strict performance of the terms or conditions of this Agreement shall not constitute a waiver of such terms or conditions and shall not affect or impair such terms or conditions in any way.

## **ARTICLE 11 - SET-OFF**

In the event Supplier owes money to the Company or has defaulted under this Agreement or under any other agreements with the Company, or Supplier has failed to pay any amount owed to the Company whether pursuant to an agreement, a statutory or regulatory fine, the imposition of statutory or regulatory damages, or otherwise (collectively, the “Obligations”), the Company may, at its option, setoff and/or net any or all such Obligations against any amounts owed by the Company to the Supplier.

## **ARTICLE 12 - CONFLICTING DOCUMENTS**

To the extent, if any, that the specifications, drawings or other documents that may be referenced herein conflict with the provisions of this Agreement, the order of precedence set forth in Section 2.2(c) of the Agreement shall govern such conflict.

## **ARTICLE 13 - INDEPENDENT SUPPLIER**

Supplier is and shall always remain an independent contractor in its performance of this Agreement. With the exception of staff augmentation engineering services required by Company, where Supplier's personnel work out of Company's offices under Company's direction, the provisions of this Agreement shall not be construed as authorizing or reserving to Company any

right to exercise any control or direction over the operations, activities, employees or agents of Supplier in connection with this Agreement. Neither Party to this Agreement shall have any authority to employ any person as agent or employee for or on behalf of the other party to this Agreement for any purpose, and neither Party to this Agreement, nor any person performing any duties or engaging in any work at the request of such Party, shall be deemed to be an employee or agent of the other Party to this Agreement.

Company shall carry no worker's compensation insurance, health insurance or accident insurance to cover the Supplier, or any of its agents, employees or subcontractors. Company shall not pay any contributions to Social Security, unemployment insurance, federal or state withholding taxes, or provide any other contributions or benefits which might be expected in an employer/employee relationship. The Supplier agrees to report and pay any contributions for taxes, unemployment insurance, Social Security and any other required payments himself or herself.

#### **ARTICLE 14 – SUBCONTRACTS**

If Supplier shall cause any part of the work to be performed by a sub-contractor, the provisions of this Agreement shall apply to such sub-contractor and its officers, agents or employees in all aspects as if they were employees of Supplier, and Supplier shall not thereby be discharged from any of its obligations and liability hereunder, but shall be liable hereunder for all acts and omissions of the sub-contractors. Nothing hereunder shall create any contractual relationship between Company and any subcontractor or any sub-subcontractor.

The Supplier shall submit a list of those work items which it plans to subcontract and the names of Supplier's subcontractor proposed for the work together with all materials for an evaluation by Company's Corporate Security Group. Supplier's subcontractor may not be changed except at the request of or with the written approval of the Company, which shall not be unreasonably withheld. The Company shall promptly notify the Supplier in writing if, after due investigation, Company has reasonable objection to any subcontractor on such list and does not accept it. Copies of all subcontracts shall be furnished to the applicable Company contract management representative.

Supplier shall assign to Company any subcontractor warranties applicable to the Services that extend beyond the applicable warranty period upon the expiration or termination of such warranty period. Contractor shall assign any subcontractor warranties applicable to the Services to Company if Supplier becomes insolvent or files for bankruptcy.

#### **ARTICLE 15 - 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.

## **ARTICLE 16 – SAFETY**

Company may at any time suspend the work or any part thereof, immediately and verbally for reasons of safety. In the event of any work stoppage, Supplier shall properly protect such work as may be liable to sustain injury from any cause.

The Avangrid Networks Contractor Safety Guide is attached hereto and made a part hereof, as entered in *Schedule J* and shall apply to all work performed under this Agreement.

## **ARTICLE 17 – ACCIDENT, SECURITY AND LOSS PREVENTION**

For the protection of workers and the public, the Supplier will take all necessary and advisable precautions for the safety of all persons and property at, on, or near the work site and will erect and maintain all necessary and advisable safeguards as required by the conditions, prudent industry practice, and progress of the work. Supplier is responsible for the security and protection of its own equipment, supplies, and tools used in connection with the Services. Supplier must use due care to protect any of the Company's or Company's property in its possession or under its control at any time while performing the Services, which must not be less than the care exercised by Supplier with its own property, and Supplier is responsible for any damage to such property resulting from its failure to use such care. For the avoidance of doubt, this Article shall be subject to the terms of the Data Security Rider, if applicable.

## **ARTICLE 18 – INSURANCE**

Supplier shall maintain insurance in accordance with the requirements as set forth in *Schedule G* and the cyber insurance requirements set forth in *Schedule H*. Supplier must maintain applicable insurance for the full term of this Agreement. An insurance certificate must be mailed to Company prior to starting Services.

## **ARTICLE 19 – INDEMNIFICATION**

Supplier will indemnify, defend at its expense and hold harmless, to the fullest extent permissible by law, the Company and its Affiliates, directors, officers, employees, shareholders, managers, members, partners, agents, successors, permitted assigns, and all affiliated and subsidiary companies, corporations, trusts, partnerships, joint ventures (including joint venture partners), associated companies, associations, subsidiaries of the foregoing and individuals which are now or may hereafter be owned, controlled, operated, or directed by or a subsidiary to Company (the "Indemnatee"), 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 attorney's 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 Supplier or its agents or subcontractors under this Agreement;

- B. any work-related accident or injury affecting an employee, agent or subcontractor of the Supplier, arising in connection with work 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 Supplier 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 Supplier;
  - ii. the Indemnitee is liable for tax payments or withholding with respect to any employee, agent or subcontractor of the Supplier;
  - iii. any employee, agent or subcontractor of the Supplier 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 Supplier;
- D. bodily injury, including death, to any person or persons due to the negligent, reckless or willful actions or omissions of the Supplier or its agents or subcontractors; or
- 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 Supplier, or its agents or subcontractors.

Individual employees, agents and subcontractors of the Supplier who are performing services for the Indemnitee under this Agreement shall be considered to be employees, agents or subcontractors of the Supplier 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 Supplier under this Agreement shall be deemed to be actions of the Supplier under these indemnities and this Agreement. In furtherance of the foregoing indemnification and not by way of limitation thereof, the Supplier 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 Supplier consents to a cause of action for indemnity.

## **ARTICLE 20 – WARRANTY**

The Supplier warrants that the Services performed under this Agreement shall be performed in accordance with any Company and applicable Company's technical documentation, standards, manuals and procedure or and other procedure specified in the RFP together with the specifications set forth in a Purchase Order or elsewhere herein or Statement of Work, and otherwise in

accordance with sound and generally accepted industry practice by those who render these types of services with that degree of skill and care as required by customarily accepted professional practices and procedures, at the time such services are performed. If the Supplier's Services are faulty, the Supplier shall for a period of one (1) year after completion of Services, without labor charge and adders or other fee to Company, promptly re-perform such Services to the extent necessary to correct the fault therein. This provision shall not be construed to affect or limit the liability of the Supplier to third parties, Supplier's obligation to Company pursuant to the Indemnification clause contained herein or any other remedy which may be available to Company under applicable law. The warranty hereunder is transferable to any assignee of Company's rights under this Agreement, including for any remaining warranty period should an assignment occur.

## **ARTICLE 21 - APPROVAL/ACCEPTANCE**

All work under this Agreement shall be subject to the Company's inspection and approval before payment. Acceptance of Services hereunder by Company does not relive Supplier from any of its obligations under this Agreement or any statement of work, and does not constitute waiver of any of the rights and remedies of Company hereunder.

## **ARTICLE 22 - FORCE MAJEURE**

For purposes of this Agreement, "Force Majeure Event" means, with respect to a Party, any event or circumstance, regardless of whether it was foreseeable, that was not caused by that Party or the negligence of that Party and that prevents a Party from complying with any of its obligations under this Agreement, and that the Party claiming the occurrence of such event has furnished the other Party with prompt notice when it appears that such cause will result in non-performance or shall threaten to impair such Party's performance, except that a Force Majeure Event will not include a strike, workforce unavailability, or other labor unrest that affect only one Party, late delivery or breakage of equipment or materials (except to the extent due to a Force Majeure event otherwise excusable hereunder), lack of funds or change in economic circumstance, a failure of performance of any third party (except to the extent due to a Force Majeure event otherwise excusable hereunder), an increase in prices, a change in market demand, a change in law, weather or climatic conditions within the range of severity as recorded by the *National Oceanic and Atmospheric Administration* over the past twenty-five (25) years in the vicinity of the Site or elsewhere, or actions of a Governmental Authority with respect to the Supplier's compliance, or failure to comply, with Applicable Laws, Permits, or Governmental Authority-imposed measures. Force Majeure may include the following events, (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies in each case within the country; (b) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war in each case within the country; (c) riot, commotion, disorder, strike or lockout in each case within the country, by persons other than the Supplier, the Supplier's Personnel, Subcontractors and other employees of the Supplier; (d) ionizing radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such radiation or radio-activity; or, (e) natural catastrophes, such as earthquake, volcanic activity, hurricane or typhoon (but not any other weather, climate or metocean conditions). Supplier shall have used its best efforts to remedy the delaying cause or condition and recommence performance, and has furnished the Company with prompt written notice when it

appears that such cause will result in non-performance or shall threaten to impair Company's ability to operate. Company shall have the right, at its option and without being under any liability to Supplier, to cancel by notice in writing to Supplier the portion or portions of the work so affected and to take such compensation action as may be necessary. Correspondingly, Company shall be excused for failure of performance herein due to any cause beyond its control and without its fault or negligence. Upon occurrence of a Force Majeure Event, the nonperforming Party shall promptly notify the other Party of occurrence of that Force Majeure Event, its effect on performance, and how long that Party expects it to last. Thereafter the nonperforming Party shall update that information as reasonably necessary. During a Force Majeure Event, the nonperforming Party shall use reasonable efforts to limit damages to the other party and to resume its performance under this Agreement. If the Force Majeure Event extends for more than twenty (20) days and if the Supplier cannot reasonably reschedule or perform any affected element of this Agreement, the Company shall be entitled to terminate this Agreement upon notice to the Supplier. Supplier shall furnish timely reports every ten (10) Business Days during the continuation of each Force Majeure Event with respect thereto and whenever such Force Majeure Event has ceased. If a Force Majeure Event materially affects Supplier's schedule for performance hereunder, Supplier may request an equitable adjustment and the Parties agree to memorialize schedule changes in a change order. If the effects of a Force Majeure Event last longer than twelve (12) months, that shall entitle Company to terminate the Agreement or Purchase Order, as the case may be.

Company and Supplier expressly agree, notwithstanding any provision in this Agreement to the contrary, that: (i) a COVID-19 pandemic or other pandemic(s) exists worldwide as of the execution date of this Agreement; (ii) the existence of such pandemic, and its effects, now, and for the duration of Supplier's performance under the Agreement, including, without limitation, effects upon pricing, schedule, quantities or specifications, if any, shall not be cause for Supplier to rely upon, invoke, or avail itself to, any rights or remedies under this Agreement, at law, or in equity, for a claim, or an adjustment to the price, schedule, quantities, specifications, or other material terms of this Agreement, including the rights and remedies set forth in this Section of this Agreement; (iii) the material terms of this Agreement, particularly terms relating to price, schedule, quantities, availability and specifications, take into consideration, and fully account for, the existence of such pandemic and its effects, now, and for the duration of Supplier's performance under the Agreement; and (iv) such pandemic shall not render Supplier unable to fulfill any of its obligations under the Agreement, and Supplier shall not have any claim, action or cause of action against Company in connection with such pandemic, including any claim for frustration of purpose, change in circumstances, economic balance or impossibility. This provision shall survive the completion or earlier termination of this Agreement.

### **ARTICLE 23 - TITLE AND LIENS**

Supplier represents and warrants that it has title to all equipment or material furnished hereunder free and clear of all liens and encumbrances. Complete legal and equitable title to each item of equipment or material covered by this Agreement shall pass to the Company immediately upon delivery at job site. This provision shall apply irrespective of any terms of payment specified in this Agreement. Passage of title pursuant to this provision shall not release or waive any continuing or subsequent responsibility of Supplier under this Agreement.

Supplier shall take all action reasonably necessary to discharge, remove, or satisfy any lien filed against any property of the Company, or any portion thereof, arising from any work, labor, services, or materials claimed to have been performed or furnished for, or on behalf of, the Supplier or any person or entity by or through the Supplier. Supplier shall forthwith take such action necessary to discharge, remove, or satisfy any such lien filed against the property of the Company, including but not limited to posting of a bond. If the Supplier shall fail to discharge, remove, or satisfy any such lien within ten (10) days after notice of the existence of such lien has been provided by the Company, the Company shall have the right, but not the obligation, to pay the amount of such lien, or discharge the same by deposit or bonding, and the amount so paid or deposited, or the premium paid for such bond, with interest at the maximum allowable by law, may be set-off against any payment due Supplier under this Agreement.

#### **ARTICLE 24 - PROGRESS AND COMPLETION**

It is expressly understood by the Supplier that TIME IS OF THE ESSENCE in the performance of this Agreement. The Supplier shall begin the work on the date of commencement set forth in the Agreement or as stated in the Purchase Order and no later than 24 hours from the time the work has been assigned. The Supplier shall carry the work forward expeditiously with adequate forces and shall complete it by the time work is to be completed as stated in the Agreement or as stated in the Purchase Order.

If the Supplier is delayed at any time in the progress of the work, written notice thereof, including an explanation of the cause and the anticipated duration of the delay, shall be given promptly to the Company by the Supplier, but in no event later than five (5) days after such delay becomes apparent. Failure to give such notice promptly and within such time limit shall be deemed sufficient reason for denial by Company of an extension of time for performance and may be deemed a default.

Failure of Supplier's subcontractor or materials and equipment suppliers to meet schedules shall not be cause for an extension of time. Supplier acknowledges that it has sole responsibility for expediting the efforts of its subcontractors, suppliers, and others.

The Parties acknowledge and agree that because of the unique nature of the performance it is difficult or impossible to determine with precision the amount of damages that would or might be incurred by Company as a result of Supplier's failure to meet the Guaranteed Delivery Dates. It is understood and agreed by the Parties that (i) Company shall be disadvantaged by failure of Supplier to meet such obligations, (ii) it would be impracticable or extremely difficult to quantify the amount of Company's damages resulting therefrom, and (iii) any Liquidated Damages payable hereunder are not a penalty, but instead represent a fair and reasonable estimate of damages for failure to meet Supplier's Guaranteed Delivery Dates.

In no event shall the payment of any Liquidated Damages excuse Supplier from performance of any of its other obligations under this Agreement or prejudice Company's rights under the Agreement or Applicable Law.

Company shall have the right to set off any Liquidated Damages due from Supplier against the payment of any pending invoices to Supplier as further set forth in Article 11.

#### **ARTICLE 25 - EMERGENCIES**

The Supplier 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, Supplier shall notify the Company 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 Supplier on account of emergency work shall be determined by mutual agreement of the parties.

#### **ARTICLE 26 - WORK STOPPAGE**

Supplier's personnel shall not honor any union picket lines or strikes nor take part in any work slowdown 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, it shall be the obligation of the Supplier to supply a qualified work force. Company may terminate this Agreement if Supplier fails to provide a qualified work force within twenty-four (24) hours of Company's notification to Supplier that a qualified work force has not been supplied.

#### **ARTICLE 27 - TERMINATION**

Company may for any reason, with or without cause, on written notice to Supplier terminate all or any part of the unperformed portion of this Agreement without liability to Company except as stated in this Article. Termination of a statement of work or a Purchase Order under this Article 27 does not terminate this Agreement unless expressly stated in the notice of termination. In full discharge of any obligations to Supplier with respect to this Agreement and such termination, Company shall pay Supplier, in accordance with the payment terms of the Agreement, only for Services satisfactorily performed prior to receipt by Supplier of notice of termination; provided, however, that such payment shall not result in a total payment to the Supplier exceeding the maximum amount payable to the Supplier pursuant to this Agreement. Termination shall not



relieve Supplier of any obligation which may arise out of Services performed prior to termination. In no event shall Company be liable to Supplier for lost profit or overhead in respect of Services not performed prior to termination, unabsorbed overhead or anticipated profits on uncompleted portions of this Agreement.

In the event Supplier is in default of any of its obligations under this Agreement, Company shall have the right, on ten (10) days written notice to Supplier, to terminate this Agreement for such default; provided, however, that Supplier shall have the right to cure by submitting a plan acceptable to the Company to cure the default during the ten (10) day notice period in order to avoid termination and providing that such default is, in fact, cured within thirty (30) days after Supplier first received notice of the default from Company or some other period of time acceptable to Company. Without limiting the provisions of this Agreement, the following events shall also constitute a default by Supplier under this Agreement:

- (i) In the event that Supplier is declared to be bankrupt or insolvent, Supplier makes an assignment for the benefit of creditors, Supplier shall file a voluntary petition in bankruptcy or insolvency or an involuntary petition is filed against Supplier, or a receiver shall be appointed for Supplier and such appointment or bankruptcy or insolvency proceedings, petition, declaration or assignment is not set aside within thirty (30) days.
- (ii) There has been a material adverse change in the financial condition of Supplier that affects the ability of Supplier to perform.
- (iii) Supplier assigns or attempts to assign its rights or obligations under this Agreement or any part thereof to any third party without the prior written consent of the Company or Company(ies).
- (iv) Supplier (i) fails or refuses to comply with any applicable laws or regulatory or permitting requirements, and (ii) either (A) within five days after obtaining knowledge of such non-compliance does not commence steps to comply or is not in compliance with such requirements within a reasonable period of time thereafter, or (C) Company(ies) or the Company faces any civil or criminal action or penalty as a result of such non-compliance by Supplier.
- (v) Any data breach as defined in the Data Security Rider, as applicable.

In the event of such termination, the preceding paragraph of this Article shall not apply and Company shall have all rights and remedies provided by law or equity and under this Agreement. In addition, in such event, Company may retain from any money otherwise due for Services rendered prior to termination an amount which Company reasonably determines is adequate to cover all damage resulting from the Supplier's default. In the event that Supplier demonstrates that a cancellation for default is erroneous, the cancellation shall, at Company's option, be withdrawn or be deemed to have been issued as a termination for convenience pursuant to the preceding paragraph and the rights and obligations of the parties hereto shall in such event be

governed accordingly. The value of Services performed not in accordance with this Agreement shall be subject to audit, assessment and approval by Company.

#### **ARTICLE 28 – TERM AND SURVIVAL**

This Agreement shall remain in effect unless otherwise terminated as provided herein, or upon receipt by Company of Supplier's Release and Certificate Form and Final Payment is made as set forth in Article 30 below. Notwithstanding the foregoing, Articles 4 Payments, Article 5 Taxes, Article 7 Claims/Disputes, Article 8 Audit, Article 9 Rights, Privileges, Remedies, Article 10 Non Waiver of Rights, Article 13 Independent Suppliers, Article 14 Subcontractors, Article 16 Safety, Article 17 Accident, Security and Loss Prevention, Article 18 Insurance, Article 19 Indemnification, Article 22 Force Majeure, Article 23 Title and Liens, Article 31 Assignment, Article 36 Public Release of Information, Article 37 Limitation of Liability, Article 38 Confidentiality, Article 39 Equal Employment Opportunities Compliance, Article 41 Governing Laws, Article 47 Ethics, and all other terms which contain 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.

#### **ARTICLE 29 - REMOVAL OF EQUIPMENT**

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

#### **ARTICLE 30 - FINAL PAYMENT**

Final payment under this Agreement shall not be made until successful completion and acceptance of the work by the Company and when requested by Company, Supplier's delivery of a completed Release and Certificate Form, the form of which shall be provided to Supplier at the time of the request.

#### **ARTICLE 31 - ASSIGNMENT**

Supplier shall not assign all or any of its rights or obligations under this Agreement except with the prior written consent of Company. Any assignment made without such consent shall be void ab initio.

#### **ARTICLE 32 - SEVERABILITY**

If any provision of this Agreement is unenforceable under any applicable law or is held invalid, such holding shall not affect any other provision hereof, and this Agreement shall be construed as if such unenforceable or invalid provision had never been contained herein.

### **ARTICLE 33 - NON WAIVER OF RIGHTS**

See Article 10 – Non Waiver of Rights

### **ARTICLE 34 - OWNERSHIP OF PLANS**

All drawings, plans, specifications, reports, designs, design data, technical and scientific data, findings, recommendations and memoranda of every description whether furnished to or prepared by Supplier under this Agreement shall (i) remain the Intellectual Property of Company or Company (as applicable); (ii) be delivered to Company upon completion of the work or termination or cancellation of this Agreement if requested by Company, (iii) be deemed to have been prepared by Supplier for Company on a work-made-for-hire basis, and (iv) shall be the property of Company and may be used by Company for any purpose whatsoever without any claim on the part of Supplier for additional compensation. To the extent any of the foregoing are not deemed a work for hire by operation of law, Supplier hereby irrevocably assigns, transfers, and conveys to the Company without further consideration all of its right, title, and interest in such drawings, plans, specifications, reports, designs, design data, technical and scientific data, findings, recommendations and memoranda of every description, including all rights of patent, copyright, trade secret or other proprietary rights in such materials.

Except as specifically authorized by this Agreement, or as otherwise authorized in writing by Company, information and other data developed or acquired by or furnished to the Supplier in the performance of this Agreement shall be used only in connection with the work under this Agreement.

### **ARTICLE 35 - KEY PERSONNEL**

Personnel assigned to perform work hereunder who are designated as “Key” Personnel in this Agreement specified on *Schedule E* of this Agreement shall devote their working time to the work as required by the Agreement Schedule of Activities and shall not be removed, without the prior written consent of Company, until their assignments are completed. The Company shall have the right to reject replacements for personnel.

### **ARTICLE 36 - PUBLIC RELEASE OF INFORMATION**

Dates, photographs, sketches, advertising and other information relating to the work under this Agreement, which Supplier desires to release or publish, shall be submitted to the Company for approval two (2) weeks prior to the desired release date. As a part of the approval request, Supplier shall identify the specific media to be used as well as other pertinent details of the proposed release. All releases must have the prior written approval of the Company which approval may be withheld without reason or explanation to Supplier.

### **ARTICLE 37 - LIMITATION OF LIABILITY**

To the fullest extent permitted by law, Company shall not be liable for any special, indirect, punitive, exemplary, incidental or consequential damages resulting in any way from the performance of the services hereunder, including lost profits or other business interruption damages, whether based in contract, warranty, tort, negligence, strict liability, or otherwise, and whether suffered by Supplier or by any of its subcontractors, under or in respect to this Agreement or for any failure or performance related to this Agreement howsoever caused. Any damages expressly permitted under Article 24 re: liquidated damages and/or *Schedule E*, as applicable are not deemed to be consequential damages under this Article 37.

### **ARTICLE 38 – CONFIDENTIALITY**

Supplier, and its employees and agents, shall treat any information, (including any technical information, experience or data) regarding Company or Company's plans, programs, plants, processes, costs, equipment, operations, of Company (or of Company's Affiliates), which may be disclosed to, or come within the knowledge of, Supplier its employees and agents in the performance of this Agreement, as confidential, and will not use or disclose this information to others, during the term of this Agreement, and for three (3) years thereafter, except as is necessary to perform the Services hereunder, without Company's prior written consent. The provisions of this Article shall not apply to any information referred to in this Section which (i) has been published and has become part of the public knowledge through no effort by Supplier, its employees, or agents, (ii) has been furnished or made known to Supplier or Supplier's affiliates by third parties (other than those acting directly or indirectly for or on behalf of Company) as a matter of legal right and without restriction on disclosure, (iii) was in Supplier's possession prior to disclosure by Company and was not acquired by Supplier or Supplier's affiliates, its employees and agents directly or indirectly from Company or, (iv) is required by law or by any other governmental regulatory authority to be disclosed.

Any information, which is supplied by the Supplier to Company will be similarly restricted, including clauses (i) through (iv) in the paragraph above. Company will not disclose such information to others or publish it in any form at any time; provided, however, that notwithstanding the foregoing, Company may disclose any such information to its Affiliates, employees, and consultants, to any regulatory agencies or instrumentalities when such disclosure is necessary, or otherwise required by law.

Each Party agrees that they will cooperate with the other in an effort to minimize the amount of such information, which will be disclosed in any such case, and to make reasonable efforts to secure confidential treatment of such information.

In no event shall Company's name and/or logo or the name and/or logo of its Affiliates be used, whether written or verbal, duplicated, reproduced by any means whatsoever without the prior written permission of the Company.

All inquiries by any governmental, business, or other entity, including media, regarding any work performed or to be performed by Supplier for Company shall be directed by Supplier to Company for response.

### **ARTICLE 39 - EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCE**

To the extent, if any, that the provisions of the following executive order and statutes, as amended or supplemented, along with their implementing regulations, apply to the performance of the Services by Supplier, the Supplier will comply with the applicable executive order, statutes and regulations: Section 202 of Executive Order 11246 (41 CFR § § 60, et seq.); Section 402 of the Vietnam Era Veterans Readjustment Act (41 CFR § § 60-250.1, et seq.); Section 503 of the Rehabilitation Act of 1973 (41 CFR § § 741.1, et seq.); and New York Executive Law §§ (5 NYCRR § § 140.1, et seq.). These regulations may require the Supplier to develop an Affirmative Action Compliance Program and file a standard Form 100 Report (EEO-1), or other reports, as prescribed.

Without limiting the foregoing, the Supplier and each of its subcontractors (if any) shall abide by the requirements of 41 CFR 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity or national origin. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability or veteran status.

### **ARTICLE 40 - SURETY BOND**

The Company shall have the right, at all times, to require the Supplier to furnish a bond covering faithful performance of this Agreement and the payment of all obligations arising hereunder (i.e., Performance Bonds, Mechanics Liens), including any damages that may be payable under Article 27. The Company shall be entitled to approve the amount, form, premium cost, and surety Company issuing such surety bond.

### **ARTICLE 41 - GOVERNING LAWS**

The Supplier will comply with all applicable federal, state and local laws, rules, ordinances and regulations of any governmental entity, board or agency having jurisdiction over the work or the premises, including, without limitation, Federal, state, or local laws, rules and regulations and any applicable Executive Orders (state or Federal) in the performance of the Services. All questions concerning the interpretation, validity and enforceability of this Agreement and of its terms and conditions, as well as questions concerning the sufficiency or other aspects of performance under the terms or conditions of this Agreement, shall be governed by the law of the State of New York, without reference to its conflict of law provision and any action or proceeding brought in connection therewith, will be brought in the appropriate court located in the State of New York.

The Parties hereby irrevocably consent to the jurisdiction of such court and hereby waive, to the fullest extent permitted by, any objection which they may now or hereafter have to the venue of any such dispute related to or arising out of this Agreement brought in such court or any defense of inconvenient forum for the maintenance of such dispute. Each Party agrees that a judgment in any such dispute may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

#### **ARTICLE 42 - PERFORMANCE MONITORING**

The Company will continuously monitor the Supplier's performance. Performance by a Supplier that is less than desirable may potentially eliminate this Supplier from bidding on future projects and/or lump sum projects.

#### **ARTICLE 43 - CONTINUOUS IMPROVEMENT**

Continuous improvement is the foundation of this Agreement. Supplier will use its best efforts to improve continuously its performance in all areas. Supplier 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.

#### **ARTICLE 44 - NO DISPUTE**

Supplier represents and warrants 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 Supplier and/or any of Supplier's affiliates and Company and/or and of Company's Affiliates.

#### **ARTICLE 45 - SECURITY REQUIREMENTS**

Supplier shall comply with Company's Security Requirements in their performance of Services as provided herein.

Services that involve access, process, storage or transmission of non-public information, the Parties agree that the Supplier and each of its subcontractors (if any) shall comply with the data security rider and annexes thereto, attached hereto ***Schedule H "Security Requirements"*** and made a part hereof, which includes, without limitation, the following Annexes:

- a) Annex 1 (the "Data Security Rider")
- b) Annex 2 (the "Third Party Lite Assessment"). For purposes of clarity, Supplier and each of its subcontractors (if any) agree to complete the Third Party Lite Assessment that assesses the Supplier's security program and maturity level; provided, however, additional questions may be required by Company based on the answered submitted by Supplier.

#### **ARTICLE 46 - EMPLOYEE SOLICITATION**

Each Party understands and acknowledges that the other Party (the "Other Party") has expended and continues to expend significant time and expense in recruiting and training its employees and that the loss of employees would cause significant and irreparable harm to the Other Party. To the maximum extent permitted under applicable laws, each Party agrees and covenants not to directly or indirectly solicit, hire, or recruit, or attempt to solicit, hire, or recruit any employee who has been employed by the Other Party or its Affiliates during the term of this Agreement, with whom each Party has had contact in connection with the negotiation, execution, or performance of this Agreement (collectively, "Covered Employee"), or induce the termination of employment of any Covered Employee for a period of one (1) year, beginning on the employee's last day of employment with the Other Party or one (1) year after the term of this Agreement, whichever is sooner in the applicable case, except with the prior written consent of the Other Party, and each Party shall not induce or attempt to induce, directly or through an agent or third party, any such Covered Employee to leave the employ of the Other Party 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. Notwithstanding the foregoing, nothing in this clause shall either (i) limit a Party from employing any person who contacts such Party on his or her own initiative and without any solicitation by each Party specifically directed to such employee, or (ii) directly or indirectly prohibit or restrict either Party from soliciting or hiring another Party's current or future employees to the extent such prohibition or restriction is prohibited or impermissible under applicable laws.

#### **ARTICLE 47 – 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](http://www.Avangrid.com)).

#### **ARTICLE 48 – 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.

#### **ARTICLE 49 – 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 Company. 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 Company, Company 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 50 - GRATUITIES PROHIBITED**

The Supplier shall not, under any circumstances, offer or extend any gratuity or special favor to any employee or agent of the Company or its Affiliates or do anything which might reasonably be interpreted as an attempt to influence any employee or agent of the Company in the conduct of their duties.



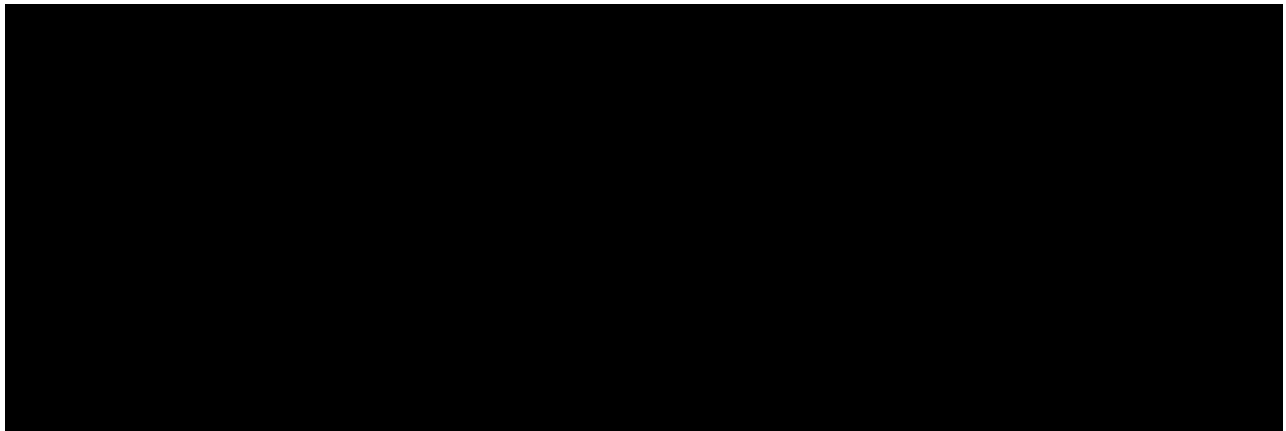
## **SCHEDULE D – Pricing Terms**



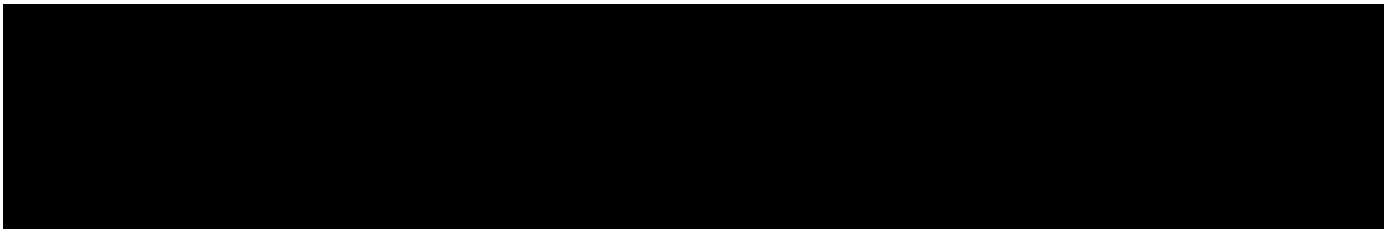
### **Distribution Circuit Line Revisions**

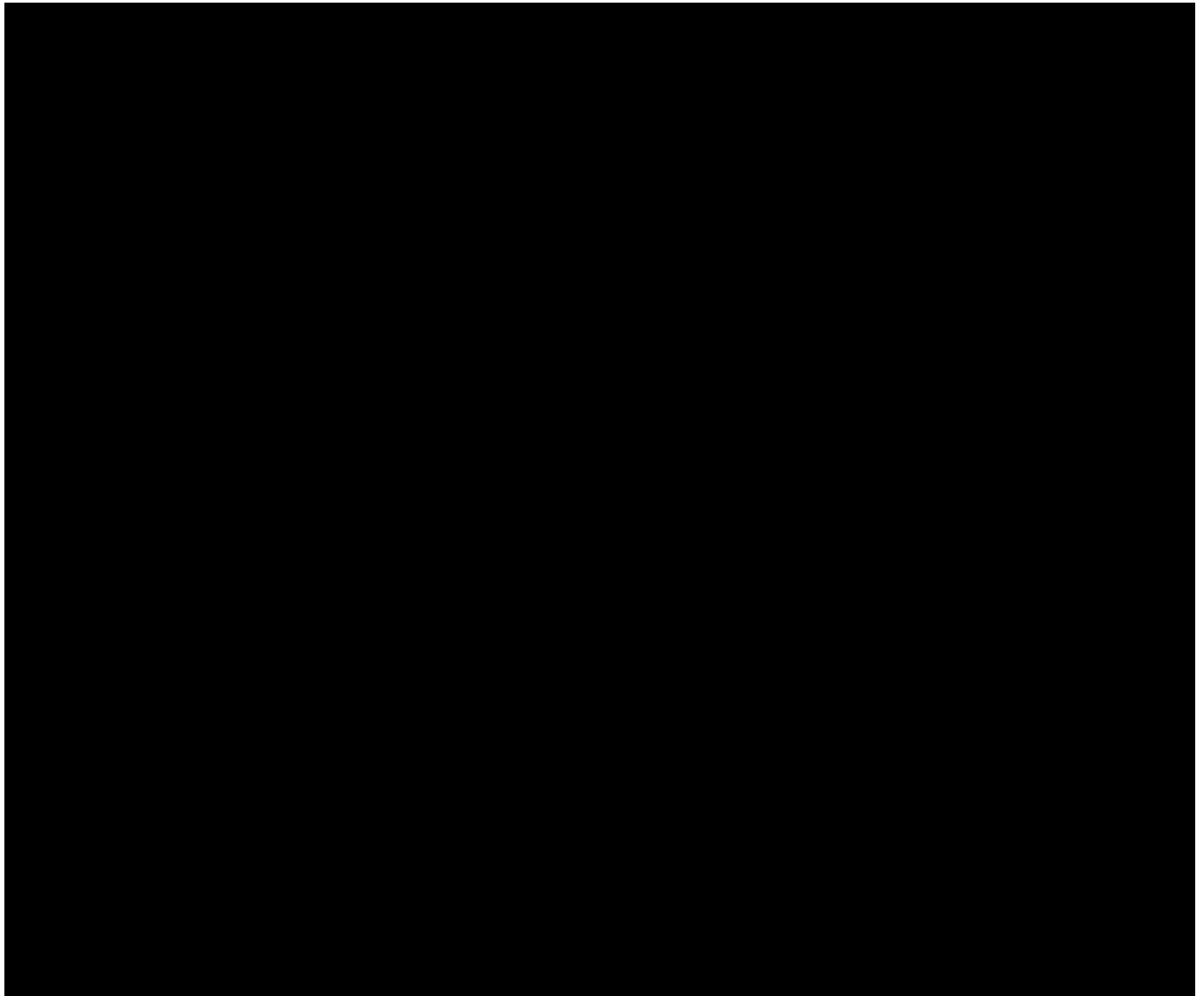
Distribution mileage is subject to change at any time, due to reconfigurations of the system. The lump sum price of the circuit will be determined by the cost/mile pricing provided at the time of the RFP; and the current mileage of the circuit within the scheduled year. Changes of one half (1/2) mile or less will not require adjustments. Mileage will be determined by the Company GIS Mapping reporting. Circuit maps may be provided prior to starting maintenance work on the circuit. Maps provided are for planning purposes only. The expectation is that for any pole with Company equipment in the field at time of work completion will be considered part of the circuit and needs to be completed within the scheduled year. All T-Line work is included in the distribution bid, including low pressure foliar treatment, all herbicides and ground cut of the maintained width of the Right of Way. All edge work will be done utilizing the Transmission Unit Rates.

### **Fuel Adjustment Clause**



### **Pricing, Timesheets, and Invoicing:**





**Regular Work.**

All crews furnished by Supplier will be required to have at least two (2) individuals qualified to perform aerial work unless agreed to, otherwise in writing. All crews will be fully qualified to perform utility line clearance according to OSHA Standard 1910 Subpart R. Supplier must, at the written request of Company, provide records demonstrating compliance with OSHA Standard, such as but not limited to: Safety Training Program, EHAP training program, line clearance skill training etc. All general foremen (supervisors) and foremen shall have with them, at all times, a supplier supplied photo identification, with the Suppliers name, and foreman name and photo. All crews are required to have at least one English speaking worker who is able to communicate with landowners.

Supplier is responsible to complete all distribution mileage (lump sum work) in which PO's are issued by the Company within an awarded District for the entire year. Work load schedules may vary, and as such, it is the Supplier's responsibility to meet any changes in demand. Workload(s) may consist of Lump Sum, Danger Tree, Hot Spot, Construction; including but not limited to local line projects, Distribution Line Inspections, Distributed Generation, Resiliency, Transmission Line Inspections etc., Emergency work and Storm. Supplier is responsible for providing a presence on lump sum work for a minimum of 11 months of the year to ensure compliance and with meeting the demands of provided workload, Hot Spot, Capital, Emergency and Storm work.

The Company will also, at its sole discretion, determine Capital the Monetary award related to Ancillary Trim Programs, such as but not limited to Danger Tree, Hot Spot, Company Service, Incidental T&M, etc., allocated to any approved vendor on the system. The Company will take into consideration preferred Districts for awarded Supplier, and other commitments such as a lump sum award with the Company.

When the Supplier, for their convenience, requests that work be performed outside the regular established workday, the rates paid will be the straight time labor rate as noted in Schedule D.

The Company recognizes the calendar date, not the observed date(s), of the following holidays as qualified to pay overtime for emergency work:

- ◆ New Year's Day
- ◆ President's Day
- Memorial/Decoration Day
- Good Friday
- Independence Day
- Labor Day
- Veterans Day
- Thanksgiving Day
- Day after Thanksgiving Day
- Christmas Day

Company approval is required for any work outside the regular established workday.

Supplier will provide daily crew locations to the Company District Arborist. Supplier will supply to the Company District Arborist and Company VM Manager by COB Monday for the previous work week, a weekly Distribution mileage complete, by circuit, report (example in Exhibit E) or by Companies GIS system at the Affiliates direction.

### **Inclement Weather**

When and if a tree crew decides to halt work due to inclement weather, tree crew is required to immediately call Company District Arborist for instructions.

### **Emergency Rate Work**

Emergency restoration work within the scope and terms of this Agreement, will be paid at standard overtime rates, as outlined in this Schedule D, for all hours worked outside of the regular established work week, approved by Company. Once a worker or assigned crew is in rotation, they will remain on overtime until greater than an eight (8) hour or longer rest break. Additional charges may be approved to cover special additional costs, such as charges for meals furnished to Supplier employees during the scope of the emergency work. Supplier shall not charge for chipper unless equipment is requested in writing and authorized by Company's representative. All costs for storm work will be in accordance with the IBEW agreement for union contractors, unless otherwise set forth in the Agreement. Safety supervisor and General Foreman billing must be approved by Company District Arborist or Company VM Manager in advance. The definition of storm is any weather event when the Company is working under a storm emergency or if the sustained wind speeds exceed 20 miles per hour. Exceptions to this definition maybe made only after consulting with the Company VM Manager. Supplier will have appropriate crews dispatched within one (1) hour of the initial call for storm restoration or out of normal working hour call-outs. Dispatched is defined as crew has left location where truck is based. Supplier should make all reasonable efforts to have a bucket centrally located within the District.

### **Circuit List & Annual Plans**

All circuits that were bid on are included in this contract to document pricing received. However not all circuits may be awarded and will be determined by budget available. It is possible that sometime during the Agreement period, additional funding may become available, or that due to emerging issues the Company will Defer or Advance circuits included in the award and those which pricing was received, but the circuit was not included in the award. In the event schedule alterations are required after January 1<sup>st</sup> of such annual plan, any and all circuit plan alterations will require approval and shall be communicated by Company in Advance. Given these possibilities, the Supplier will hold its Lump Sum pricing firm for all circuits for which pricing was received as outlined in Schedule D.

The Company will issue the work plan to the Supplier a minimum of 60 days prior to the new calendar year. The Company will issue PO's for the new calendar year work plan and the Supplier shall accept them. All work assigned in a given calendar year shall be completed before December 14<sup>th</sup> and all rework assigned prior to December 1<sup>st</sup> must be completed by December 31<sup>st</sup> of the same year, unless otherwise stated within the terms set out in the PO. Rework assigned on or after December 1<sup>st</sup> must be completed by January 31<sup>st</sup> of the following year.



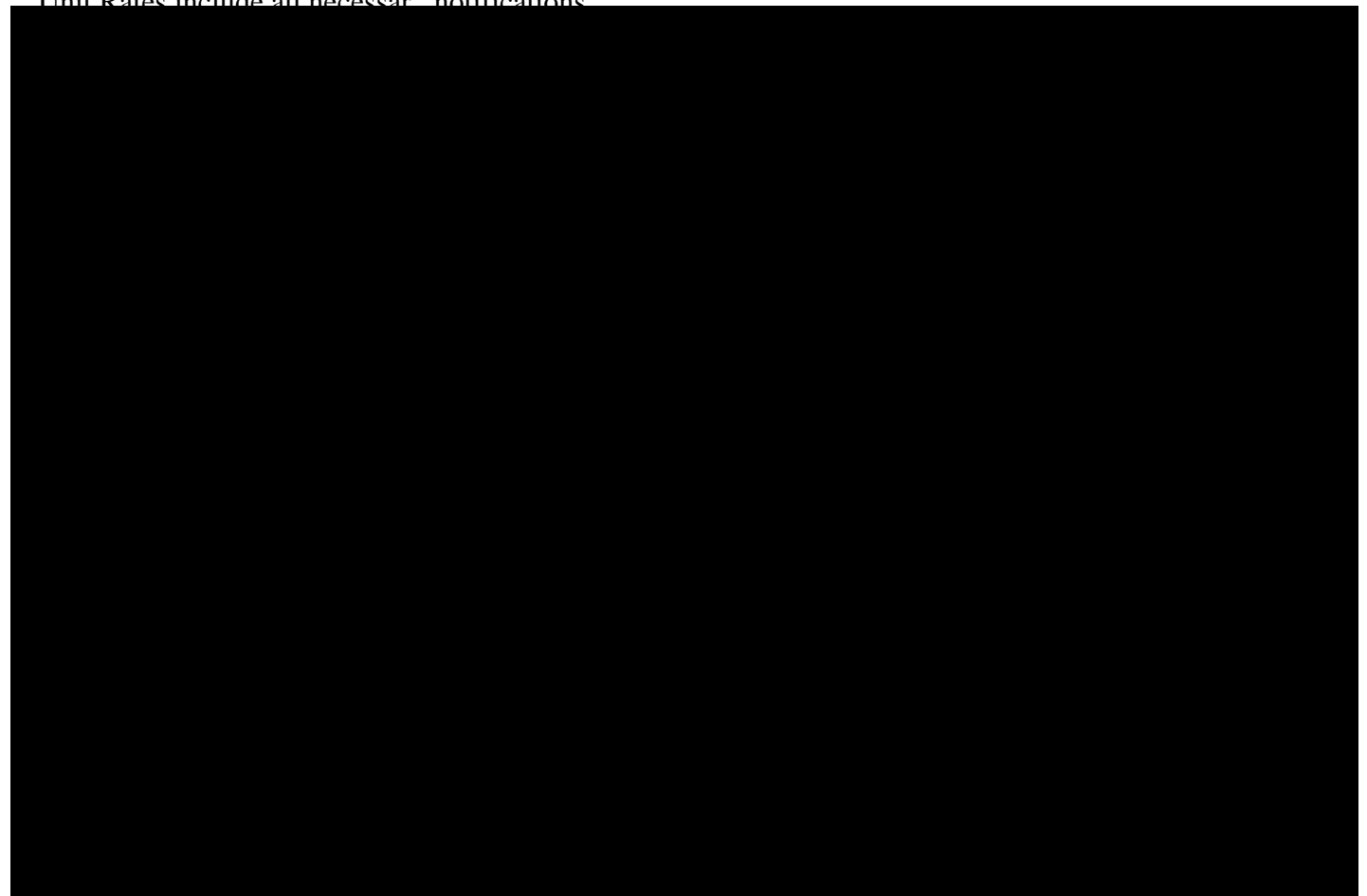
**Hot Spot Unit Pricing**

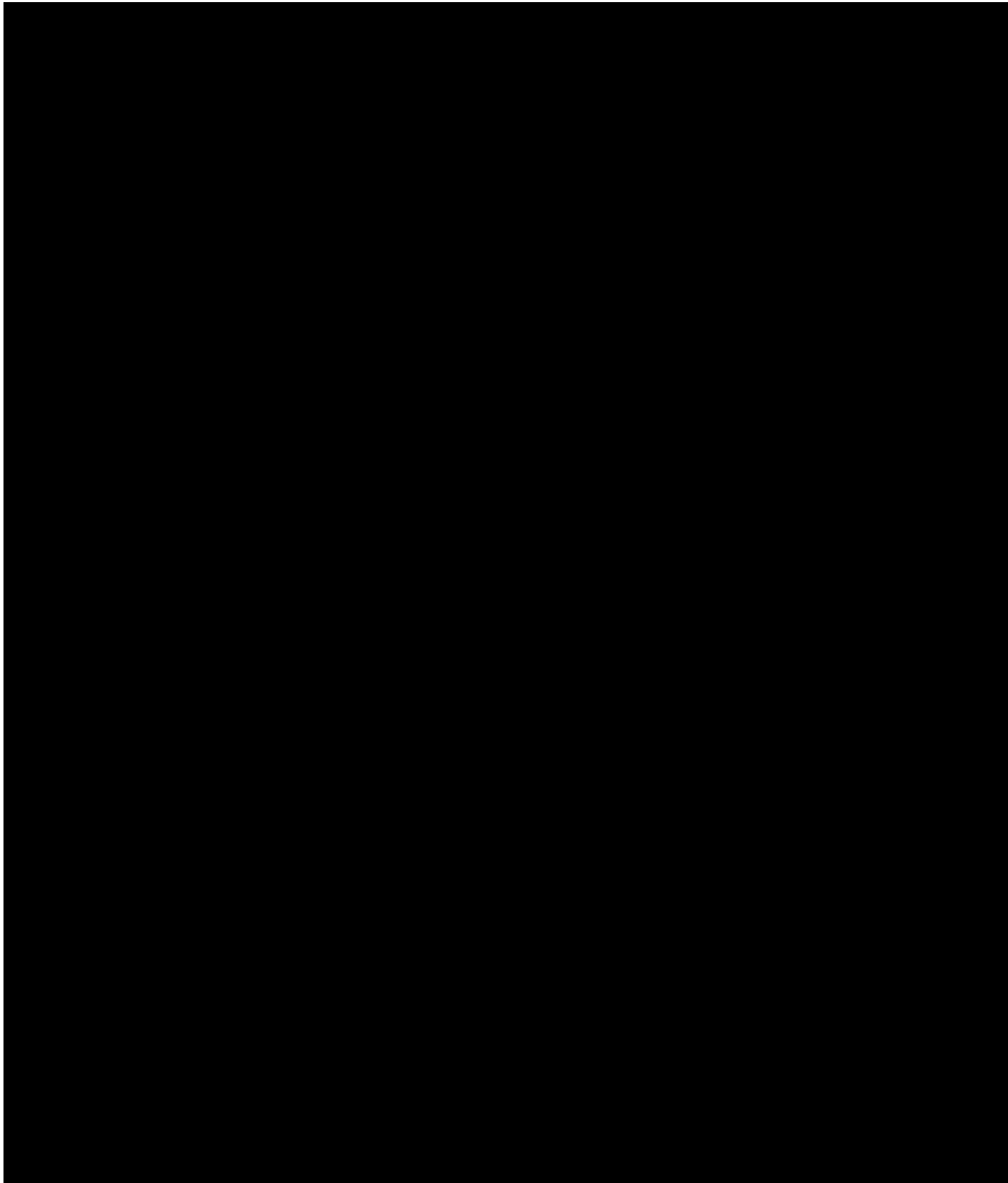
A span is billed as "Roadside" if at least 51% of the span is accessible to a bucket truck.

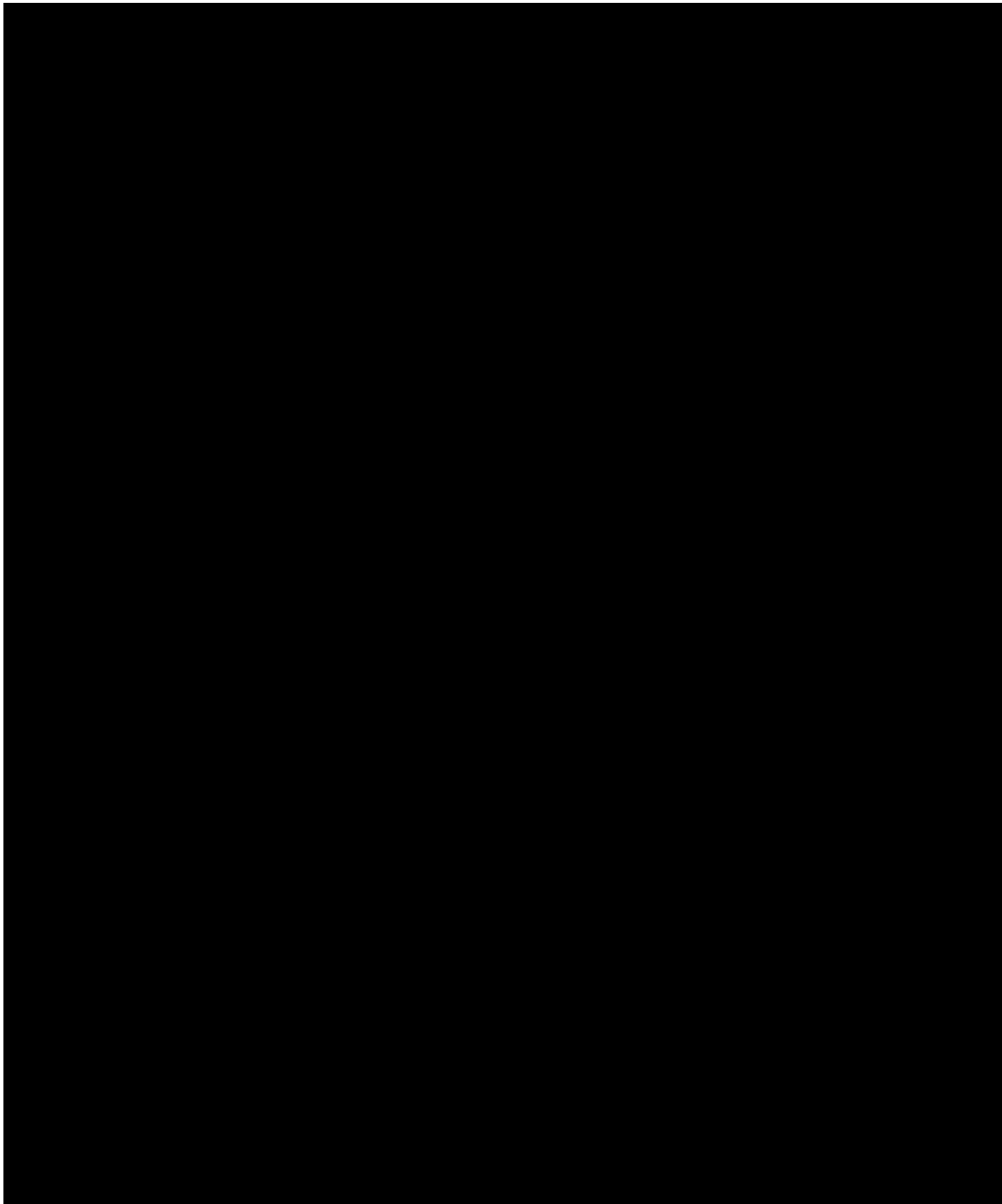
A span is billed as "Off-roadside" if at least 51% of the span is NOT accessible to a bucket truck.

A span is billed as "Rearlot" if at least 51% of the span is not accessible to a bucket truck and runs behind houses.

Unit Rates include all necessary notifications.













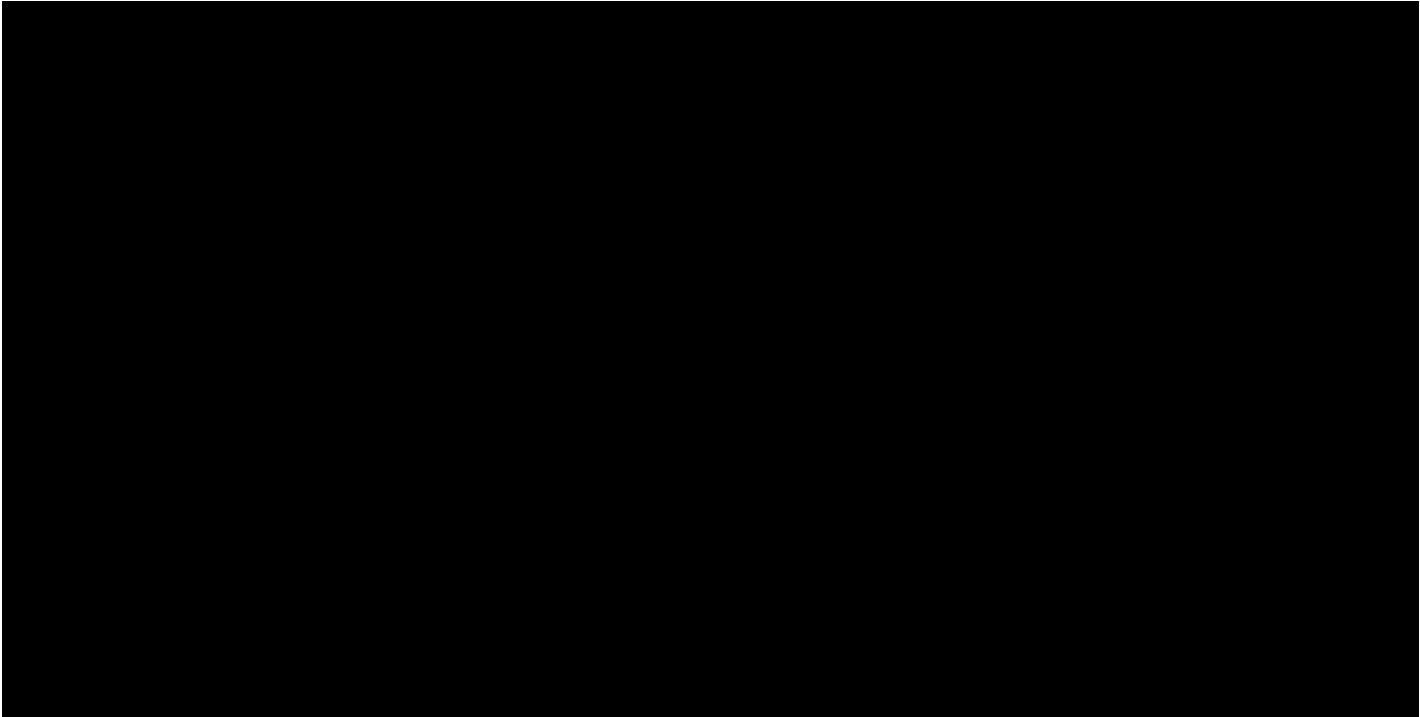
### **Capital Construction Unit Pricing**

A span is billed as "Off-roadside" if at least 51% of the span is NOT accessible to a bucket truck.

Trees larger than 30-inch DBH will be completed using T&M rates

Unit Rates include any necessary notification

Note: Resiliency jobs will be paid on a per span cost, typically utilizing the Primary Enhanced Unit Rate. Solar/ Distributed Generation capital jobs will be paid on a per span cost, utilizing the Primary Unit Rates, unless the Solar/ Distributed Generation team explicitly requests Enhanced Clearance



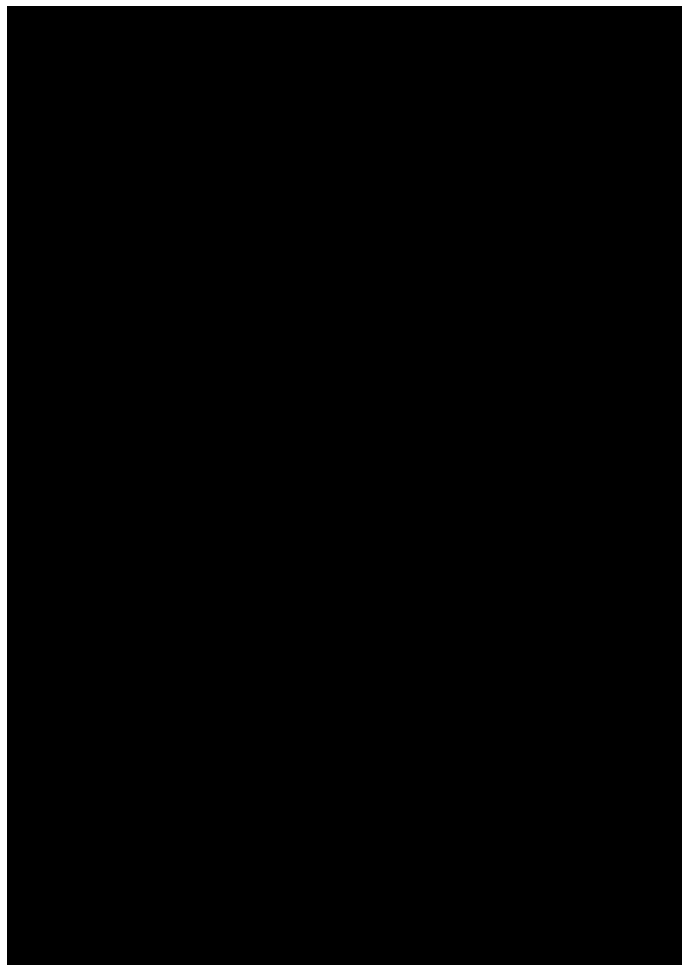


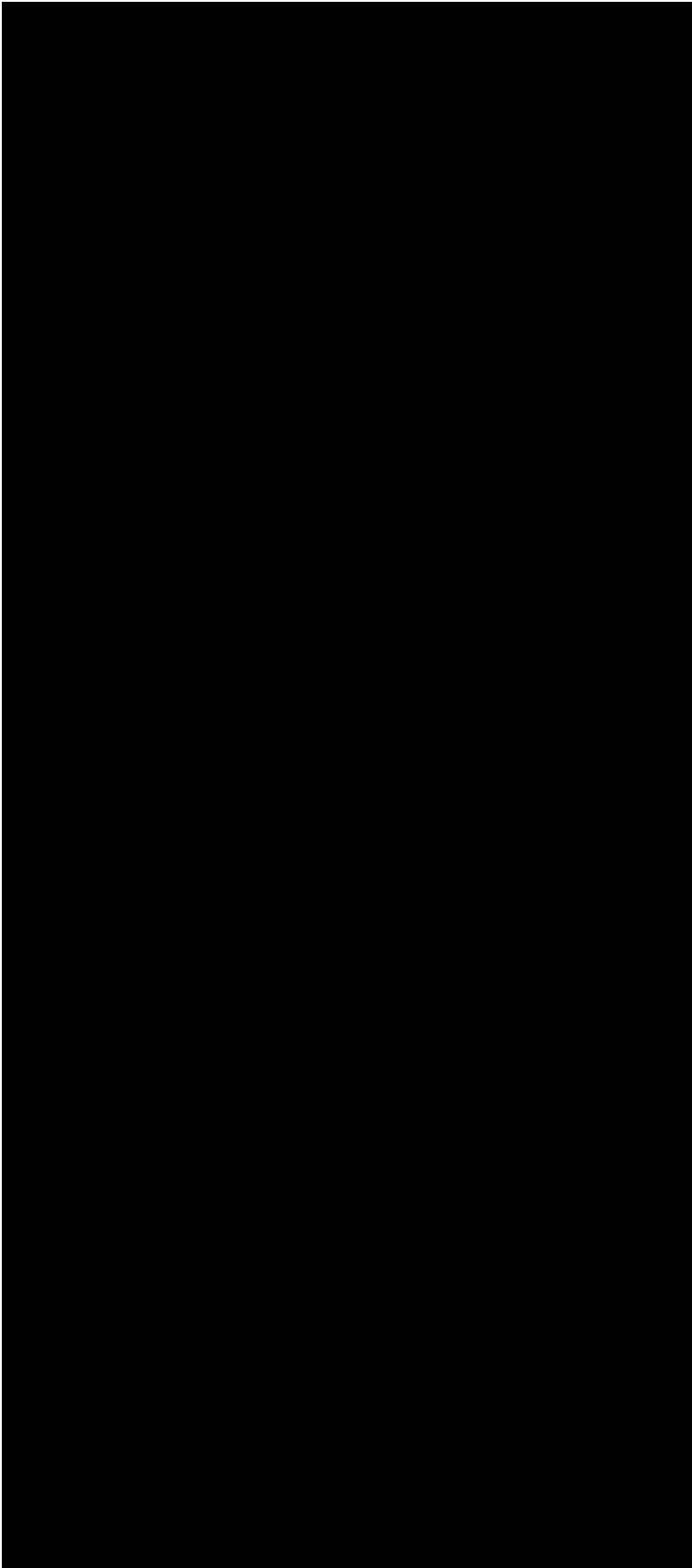
**Labor and Equipment (T&M) Work**

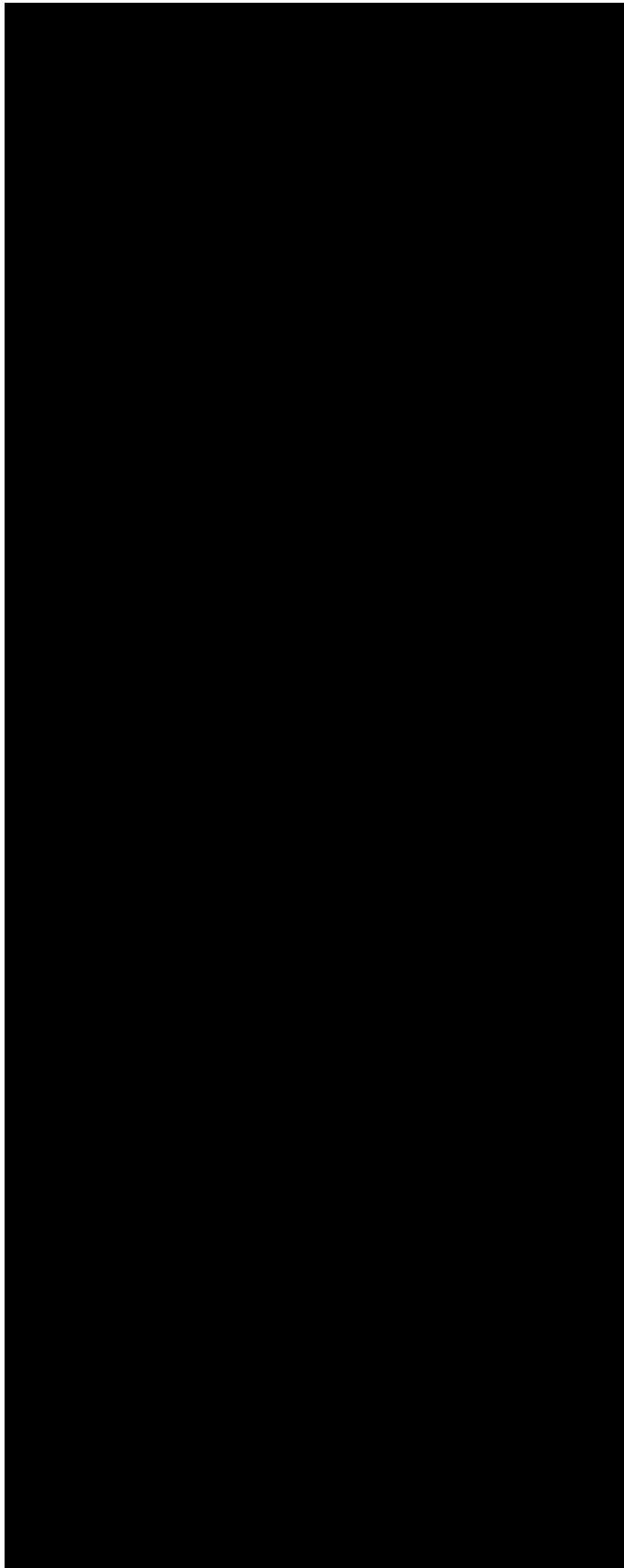
The T&M rates in this Schedule D will be used for distribution and transmission work as authorized by the Company.

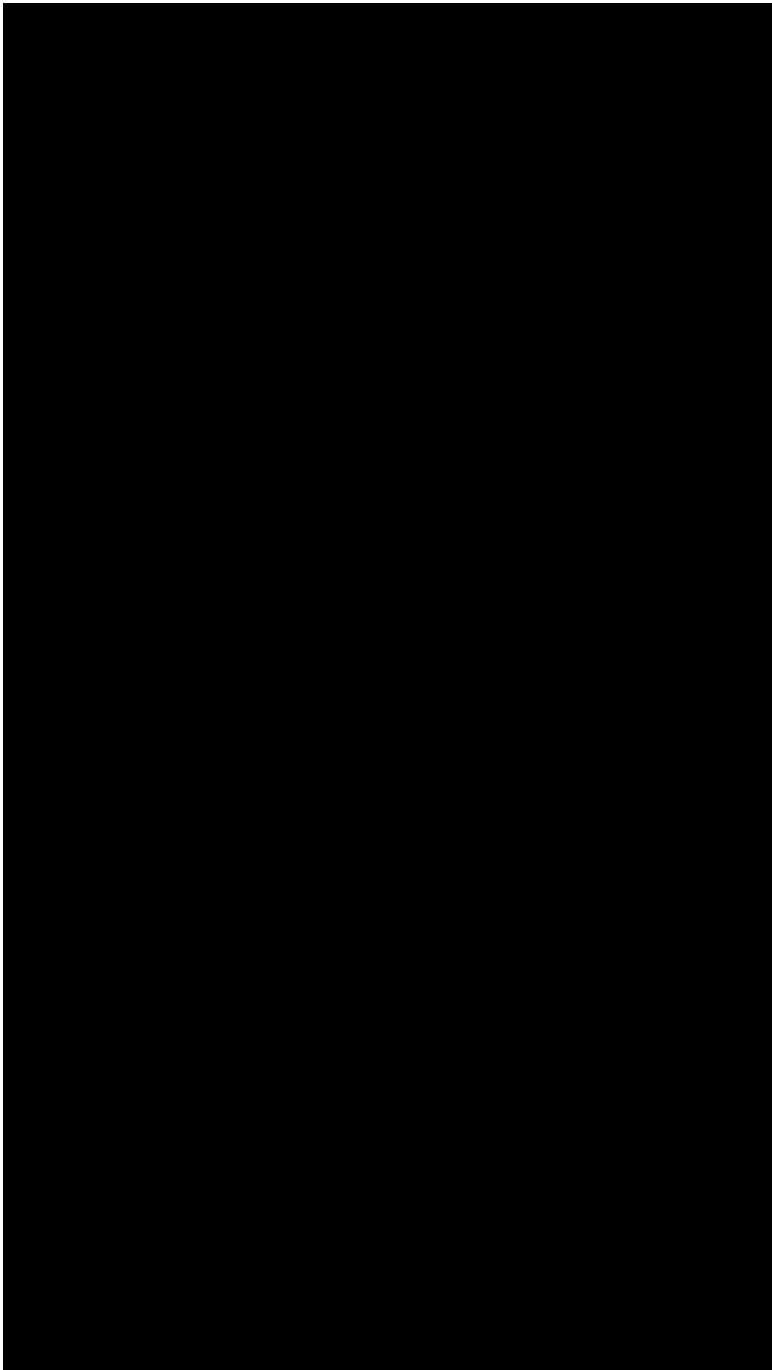
The billing rate for all on and off road bucket apparatuses are to include all chain saws necessary to complete work, pruners, viz saws, hand saws, pruner poles, ropes, climbing gear, lights, and OSHA and DOT/MUTCD required safety equipment; including but limited to cones, signage, traffic paddles/flags, barriers etc.

Working height is based on manufacturers listed height.









## **SCHEDULE E**

### **Special Conditions (rev. 5.31.23)**

#### **Performance Measurements and Liquidated Damages**

##### **I. Performance Measurements**

Company and Supplier agree to the performance measurements listed below. If the Supplier fails to meet any objective within any of the 5 performance measures, the Company will engage in a meeting with the Supplier to discuss expectations. Supplier will have to provide written plan of improvement and demonstrate that improvement within the subsequent 3 months after approved written plan, in order to maintain their contract with the Company. If Supplier can't demonstrate improvement on performance metrics, Company shall consider it a breach of contract and has the right to renegotiate/terminate purchase orders as needed.

##### **1. Customer Satisfaction**

(a) Customer complaints will be at or below 1.0 complaint per 50 miles (primary, secondary, and ROW) worked. Qualifying complaints will be for work not done to specification, damage to property, or if crew behavior is problematic. Complaints will be reviewed by the Company and Supplier. All complaints shall be resolved or have a resolution plan in place before final circuit payment is made, unless otherwise agreed to in writing by Supplier and Company.

Supplier will be the first point of contact for all customer inquiries and complaints. All complaints must be verbally reported to Company District Arborist and Vegetation Management ("VM") Manager immediately and in a written format within two (2) business days.

(b) Supplier will respond to customer damage complaints within two (2) business days and provide a resolution plan to Company District Arborist within one (1) week. Supplier shall notify Company District Arborist in writing when complaint is resolved.

(c) Supplier shall not miss notifying any customer in accordance with Schedule B, Addendum 1.

##### **2. Adherence to Specifications**

Supplier will adhere to scope of work for all work on Company's system. Any rework will be done at the Supplier's expense. Distribution rework shall not exceed 10% per circuit in any calendar year. For lump sum work, final payment will be released when rework is complete. All rework will be tracked by Company and Supplier. All rework initiated by the Company District Arborists will be forwarded to the Supplier via paper and/or electronic copy for completion. All work must meet Company specifications regardless of the date audited. All work will be audited in a timely manner, Supplier may request a meeting to review audit schedule. Any disputed rework will be resolved at meetings between Company and Supplier managers. Inspections of work will be completed within 30 days of the initial circuit sign off, which the Supplier will submit to the

Company District Arborist. The Supplier has 30 days from when re-work is issued to complete and notify Company for re-inspection. The Company then has 30 days to do a final inspect and identify any outstanding redo's that may have not been completed. Upon completion of distribution circuit work including all re-work, contract supervisor will submit the Final Circuit Signoff-sheet to Company District Arborist.

### **3. Timely completion of work**

(a) Work allocated shall be completed in the year in which it is awarded and PO's are provided. If work is not completed, terms as set forth in section II "Completion of Work and Liquidated Damages" of this Schedule E shall apply.

(b) Ancillary Targets as listed:

A. 75% spend completed by end of third quarter

B. 100% spend to be completed by December 31

(c) Capital Targets as listed:

A. All capital jobs started within 5 days of when job is provided to Supplier.

B. If a capital job can't be completed within 3 days of being started, Supplier needs to communicate such delay to the Company District Arborist. Exceptions include large capital projects with 10+spans of trim, or unless otherwise approved by Vegetation Management.

C. For CMP only: All capital jobs with a CSG Date will be started as soon as possible to allow the line department sufficient time to energize service, to be completed no later than 3 days from provided.

(d) If distribution foliar work is assigned, Herbicide application, as defined in Addendum 1 to this Agreement, shall be completed during the growing season while the foliage is fully developed and still has its normal green color and vigor, approximately from mid-June to September 1. If the Company feels that work will not be completed, additional resources will be brought in at the Supplier's expense.

(e) Supplier will have appropriate crews dispatched within one (1) hour (30 min at UI) of the initial call for storm restoration. Dispatched is defined as crew has left location where truck is based.

### **4. Safety**

Preventable safety incidents, such as but not limited to, Loss Time Accidents, injuries, electrical contact, crew caused outages, motor vehicle accidents, and PPE/worksites infractions shall not exceed three (3) in any one calendar year. Company and Supplier will jointly review each reportable incident. After three (3) preventable safety incidents, the Company reserves the right to remove the Supplier and terminate the Agreement or at the Company's option enter into a formal review process with the Supplier to evaluate Supplier's safety and require a corrective action plan. The foregoing is without limitation of all rights and remedies available to Customer under the Agreement and at law and in equity, which are expressly reserved.

## **5. Timely Reporting of Incidents**

Supplier caused outages, safety violations, accidents, property damage and complaints shall be documented on the Contractor Incident Report (ANHS-FOR-020D). A copy of the report shall be sent to Company Manager of Vegetation Management and Vegetation Management District Arborist within 24 hours of being aware of the event. Final reports should be received by Company representatives within 2 weeks of incident. Failure to report timely may result in termination of this Agreement and disqualification from future RFP's initiated by the Company.

## **II. Completion of Work and Liquidated Damages**

The Company will issue a work plan to the awarded Supplier, at a minimum of 60 days prior to the new calendar year. Once both the Company and Supplier have reviewed and confirmed circuits, the Company will issue POs for each year and the Supplier shall accept them. For CMP PO's will be issued by February 15th, of each year. All agreed upon work assigned in a given calendar year shall be completed before December 14th and the rework by December 31st of that year. Rework assigned after December 1st maybe completed in January. For any distribution circuit that is not completed within the specified timeframe Article 24 "Progress and Completion" of Schedule C to this Agreement shall apply. If Supplier is used for restoration work, extensions may be allowed for each day working for Company Affiliates. Extensions will not be granted for storms occurring before October 1st. All extensions must be approved in writing by the Company.

## **III. Accident and Outage Reporting**

All Supplier accident and crew outages will be reported to Company immediately with additional written follow-up including the Contractor Incident Report (ANHS-FOR-020D) and lessons learned within 24 hours. Verbal and written correspondence needs to go to the local District Arborist and Manager of Vegetation Management. The final investigation report shall be due within 2 weeks of the incident. Any accidents or outages will be reviewed by the Supplier on the monthly AVANGRID VM Safety Call, as well as EH&S safety calls if selected. Supplier will also be required to fill out Company 4-Blockers as appropriate.

## **IV. Definitions**

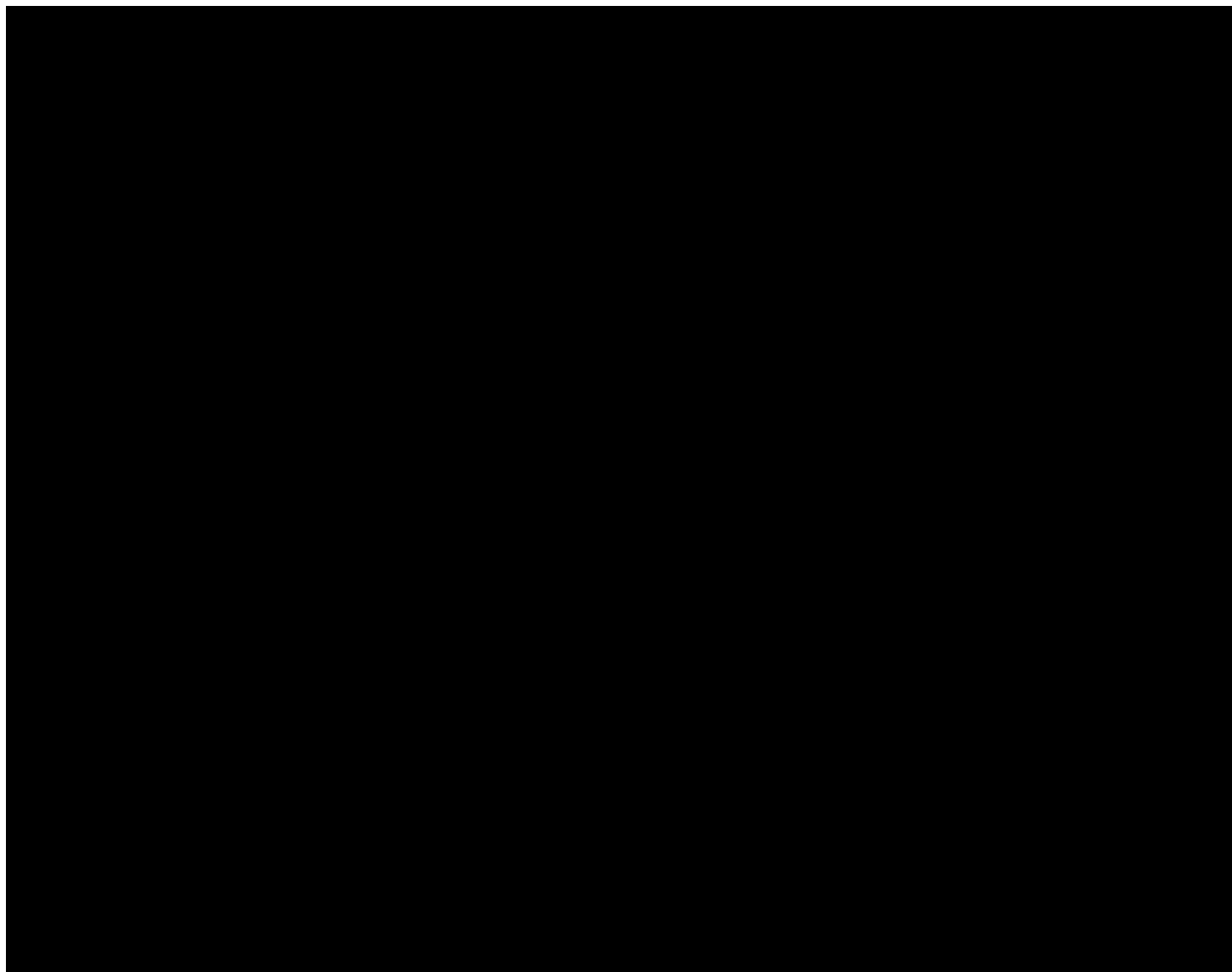
- (a) "Company District/Division Arborist" shall mean with respect to this Agreement, the regional vegetation management supervisor responsible for all vegetation work performed within assigned region.

"Company Vegetation Management ("VM") Manager" shall mean with respect to this Agreement, the Avangrid operating company vegetation management manager responsible for all Company District/Division Arborists.



## **SCHEDULE F – Notices**

Along with all other correspondence requirements included in this Agreement, any notice, request, approval or other document required or permitted to be given under this 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, or when email notice has been given with an acknowledgement given by the appropriate Party representative. The Parties shall acknowledge in writing the receipt of any such notice delivered in person.



## SCHEDULE G – 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 and in no way limit the indemnification obligations of the Supplier. 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 below.

**IF YOU DO NOT HAVE A CURRENT CERTIFICATE ON FILE WITH COMPANY** 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 Company and the Companies for its review.

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

**Procurement Department/ Insurance Cert.  
89 East Avenue  
Rochester, NY 14649-0001**

### A. General Insurance Requirements

Each insurance policy shall:

- 1) 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 Rating of not less than "A- VII" and a policyholder surplus of at least \$25,000,000.
- 2) have defense costs outside of the limits of liability;
- 3) add Company and its Affiliates as additional insureds except of any required professional liability coverage, which shall name Company and its Affiliates as indemnified parties;
- 4) not preclude Company or its Affiliates from making claims against the policy for the wrongful acts, omissions or other tortious conduct of the Supplier/Consultant/Labor Supplier;
- 5) provide Company with 30-day notice of cancellation, except for non-payment of premium and then it shall be 10 days;
- 6) notify Company of any reduction in the aggregate policy limits;
- 7) contain a breach of warranty clause;
- 8) be primary and non-contributory with respect to Company and its Affiliates;
- 9) contain a waiver of subrogation in favor of Company and its Affiliates;
- 10) contain a separation of insureds clause;
- 11) contain a terrorism provision; and
- 12) contain a choice of law provision which states that the policy shall be governed by the State in which the Services are being performed.

## B. Required Coverages

### 1) Workers' Compensation and Employers' Liability Insurance:

Coverage A: Statutory

Coverage B: Limits apply per issued annual policy

Bodily Injury by Accident - \$500,000 each Accident

Bodily Injury by Disease - \$500,000 each Employee

Bodily Injury by Disease - \$500,000 Policy Limit

Policy Information Page Requirements:

Item 1 – First Named Insured and Other Named Insureds

Item 3.A. – State(s) of Operations

Item 3.C. – All Other States Except Monopolistic States

Endorsements:

Voluntary Compensation – WC 00 03 11 A

Alternate Employer – WC 00 03 01 A

FELA – If any basis

Maritime – If any basis

USL&H – If any basis

### 2) Automobile Liability

Combined Single Limit - \$5,000,000 (limits in excess of \$1M can be satisfied by umbrella/excess coverage)

Uninsured/Underinsured – Minimum allowed by State law

Hired/Non-owned liability - \$5,000,000

Symbol – 1

Endorsements:

Employees as Insureds

Fellow Employee Coverage

MCS 90

CA 9948

### 3) General Liability: ISO Form CG 00 01 or its functional equivalent

Per Occurrence - \$1,000,000

General Aggregate - \$2,000,000

Products Completed - \$2,000,000

Personal and Advertising Injury - \$1,000,000

Endorsements:

Contractual Liability Amendment

Explosion, Collapse, Underground Coverage

Independent Contractors Coverage  
Broad Form Property Damage  
No Punitive or Exemplary Damages Exclusion  
No Subsidence Exclusion

- 4) Umbrella/Excess Liability: Written on a Follow Form Basis and Worldwide Coverage  
Per Occurrence - \$5,000,000  
General Aggregate - \$5,000,000  
Products/Completed Operations - \$5,000,000  
Personal & Advertising Injury - \$5,000,000

Underlying Policies: Commercial General Liability, Auto Liability, Employer's Liability

- 5) Contractor's Pollution Liability  
Per Occurrence - \$5,000,000  
Policy Aggregate - \$5,000,000

Coverage:

Environmental Impairment Liability  
Bodily Injury, sickness, disease, mental anguish or shock sustained by any person, including death and mental anguish  
Property Damage including physical injury or destruction of tangible property including resulting loss of use, clean-up costs, and loss of use of tangible property that has not been physically injured or destroyed  
Disposal site coverage and transportation extensions  
Underground storage tanks  
Loss, remediation, clean-up costs and related legal expenses  
Sudden and non-sudden pollution conditions  
No exclusion for loss occurring over water including but not limited to a navigable waterway

Endorsements:

Extended Completed Operations – 10 years

- 6) Professional Liability:  
Per Claim - \$5,000,000  
Policy Aggregate - \$5,000,000  
Mitigation of Loss/Rectification - \$5,000,000

Coverage:

Extended Reporting Period – 120 months  
Retroactive Date – Date of first design  
No Exclusion for environmental impairment liability  
No Exclusion for punitive damages to the extent insurable

## **SCHEDULE H – Security Requirements**

## AVANGRID Privacy and Data Security Rider

### Annex 1 – Data Security Rider

For the purposes of this Privacy and Data Security Rider (the “Rider”) Avangrid and any of its affiliates procuring or receiving services, works, equipment or materials under the Agreement (as defined below) shall be hereinafter referred to as the “CUSTOMER”. [REDACTED] shall be hereinafter referred to as the “VENDOR”

(a) Among other, the purpose of this Rider is to enable the VENDOR to Process on behalf of the CUSTOMER the Personal Data and Company Data necessary to comply with the purpose of the Agreement (as defined below), define the conditions under which the VENDOR will Process the Personal Data and Company Data to which it has access during the performance of the Agreement, and establish the obligations and responsibilities of the VENDOR derived from such Processing. Personal Data disclosed by CUSTOMER to VENDOR is provided only for limited and specified purposes as set forth in the Agreement and this Rider.

(b) The following definitions are relevant to this Rider:

(i) “Personal Data” means any information about an individual, including an employee, vendor, customer, or potential customer of CUSTOMER or its affiliates, including, without limitation: (A) any information that can be used to distinguish or trace an individual's identity, such as name, social security number, date and place of birth, mother's maiden name, biometric records, personal electronic mail address, internet identification name, network password or internet password; (B) information that identifies, relates to, describes, is capable of being associated with, or could reasonably be linked, directly or indirectly, with a particular individual or household, or (C) any other information that is linked or linkable to an individual, such as medical, educational, financial, and employment information, as well as cookie information and usage and traffic data or profiles, that is combined with any of the foregoing.

(ii) “Company Data” means any and all information concerning CUSTOMER and its affiliates and their respective business in any form, or to which the CUSTOMER or its affiliates have access, that requires reinforced protection measures, including but not limited to CUSTOMER sensitive information (confidential or restricted), internal use information, Personal Data, Cardholder Data, commercially sensitive information, Critical Infrastructure Information, other information that relates to critical infrastructure, information that relates to the operation or functionality of facilities, networks, or grids, commercially sensitive information, strategic business information, credentials, encryption data, system and application access logs, or any other information that may be subject to legal or regulatory requirements.

(iii) “Critical Infrastructure Information” means engineering, vulnerability, or detailed design information about proposed or existing critical infrastructure (physical or virtual) that (A) relates details about the production, generation, transmission, or distribution of energy; (B) could be useful to a person planning an attack on critical infrastructure; (C) is exempt from mandatory disclosure under the Freedom of Information Act; and (D) gives strategic information beyond the location of the critical infrastructure.

(iv) “Processing” (including its cognate, “process”) means any operation, action, error, omission, negligent act, or set of operations, actions, errors, omissions, or negligent acts that is performed upon Personal Data or Company Data, whether or not by automatic means, including, without limitation, collection, recording, organization, storage, access, adaptation, alteration, retrieval, consultation, retention, use, disclosure, dissemination, exfiltration, taking, removing, copying, making available, alignment, combination, blocking, deletion, erasure, or destruction.

(v) "Data Security Incident" means: (A) the loss or misuse (by any means) of Personal Data or Company Data; (B) the inadvertent, unauthorized and/or unlawful Processing, corruption, modification, transfer, sale or rental of Personal Data or Company Data; (C) any other act, omission or circumstance that compromises or may reasonably compromise the security, confidentiality, or integrity of Personal Data or Company Data, including but not limited to incidents where Personal Data or Company Data has been damaged, lost, corrupted, destroyed, or accessed, acquired, modified, used, or disclosed by any unauthorized person, by any person in an unauthorized manner, or for an unauthorized purpose; (D) any act, omission or circumstance that compromises or may reasonably compromise the cybersecurity of the products and services provided to CUSTOMER by VENDOR or the physical, technical, administrative, or organizational safeguards protecting VENDOR'S systems or, if VENDOR knows or reasonably believes, CUSTOMER'S systems storing or hosting Personal Data or Company Data, or (F) VENDOR receives any complaint, notice, or communication which relates directly or indirectly to (x) VENDOR'S Processing of Personal Data or Company Data or VENDOR'S compliance with Technical and Organizational Measures or applicable law in connection with Personal Data or Company Data or (y) the cybersecurity of products and services provided to CUSTOMER by VENDOR.

(vi) "Technical and Organizational Measures" means security measures, consistent with the type of Personal Data or Company Data being Processed and the services being provided by VENDOR, to protect Personal Data or Company Data, which measures shall implement industry accepted protections which may include physical, electronic and procedural safeguards to protect the Personal Data or Company Data supplied to VENDOR against any Data Security Incident, and any security requirements, obligations, specifications or event reporting procedures set forth in this Rider or in any Schedule to this Rider. As part of such security measures, VENDOR shall provide a reasonably secure environment for all Personal Data and Company Data and any hardware and software (including servers, network, and data components) to be provided or used by VENDOR as part of its performance under the Agreement.

(vii) "Losses" shall mean all losses, liabilities, damages, and claims and all related or resulting costs and expenses (including, without limitation, reasonable attorneys' fees and disbursements and costs of investigation, litigation, settlement, judgment, interest and penalties).

(viii) "Agreement" shall mean the Master Services Agreement For Vegetation Management dated as of the effective date of the contract and any purchase orders, statements of work, notice to proceed and related documents issued in connection therewith.

(c) Personal Data and Company Data shall at all times remain the sole property of CUSTOMER, and nothing in this Rider or the Agreement will be interpreted or construed as granting VENDOR any license or other right under any patent, copyright, trademark, trade secret, or other proprietary right to Personal Data or Company Data. VENDOR shall not create or maintain data which are derivative of Personal Data or Company Data except for the purpose of performing its obligations under the Agreement and this Rider and as authorized by CUSTOMER.

(d) Regarding the Processing of Personal Data and Company Data, the parties agree that:

(i) VENDOR shall Process Personal Data and Company Data only on behalf of CUSTOMER, on the instruction of CUSTOMER and in accordance with the Agreement, this Rider and privacy and security laws applicable to VENDOR'S services or VENDOR'S possession or Processing of Personal Data and Company Data. CUSTOMER hereby instructs VENDOR, and VENDOR hereby agrees, to Process Personal Data and Company Data only as necessary to perform VENDOR'S obligations under the Agreement and as further described below and for no other purpose. For the avoidance of doubt and without limitation, (i) VENDOR shall not Process Personal Data or Company Data for any purpose other than providing the services specified in the Agreement nor for any purpose outside the scope of the Agreement; and (ii) VENDOR is prohibited from (w) selling, renting, releasing, disclosing, disseminating, making available, transferring, or otherwise communicating orally, in writing, or by electronic or other means, Personal Data and Company Data to any business or third party (x) retaining, using, or disclosing

Personal Data or Company Data for any purpose other than for the purposes specified in the Agreement and this Rider, (y) retaining, using or disclosing Personal Data and Company Data outside of the direct business relationship between CUSTOMER and VENDOR pursuant to the Agreement, and (z) combining Personal Data or Company Data received from CUSTOMER with Personal Data or Company Data received from or on behalf of another person or persons or collected by VENDOR.

(ii) The parties agree that:

- **The Processing activities that will be carried out by VENDOR are:** VENDOR expects evaluation, review, and audit of data and does not anticipate Processing data activities.
- **The categories of Personal or Company Data that will be Processed by VENDOR are:** VENDOR anticipates evaluation, review, and audit of Internal Use and Confidential Company Data, including but not limited to: circuit maps, historical circuit data, resources on property (contract arborists, vendors trimming, number of crews, etc.), trimming schedules, and so forth.
- **The categories of Personal Data subjects whose information will be processed by VENDOR are:** VENDOR may have touch points with customer Personal Identifiable Information while monitoring regulatory complaints, trimming refusals, or other scenarios. The information includes but is not limited to: customer name, address, phone number, account number, and so forth.
- **The instructions for the Processing of Personal or Company Data are:** VENDOR must treat sensitive data viewed and/or processed as confidential and must not share or through negligence inadvertently leak data to other external parties.

(iii) The duration of the Processing shall be: Vendor is expected to carry out Processing activities, and/or otherwise evaluate, review and audit Personal or Company Data for the entire Term of the Agreement.

(iv) VENDOR shall immediately inform the CUSTOMER if in VENDOR'S opinion a Processing instruction given by CUSTOMER may infringe the privacy and security laws applicable to VENDOR'S services or VENDOR'S possession or Processing of Personal Data or Company Data.

(v) In the event that the activities to be carried out by VENDOR under the Agreement do not require access to Personal Data, VENDOR, its employees and representatives shall be prohibited from accessing and Processing Personal Data. If they gain access to Personal Data, VENDOR shall immediately inform CUSTOMER. Notwithstanding the foregoing, any Processing of Personal Data by VENDOR shall be subject to the terms and conditions set forth in this Rider.

(e) As a condition to starting work, VENDOR'S employees and other persons authorized, pursuant to the terms of this Rider, to Process Personal Data or Company Data shall acknowledge in writing their agreement to [(i) comply with the terms of CUSTOMER'S Acceptable Use Requirements set forth in Schedule C hereto, as such Acceptable Use Requirements may be modified or supplemented from time-to-time upon notice from the CUSTOMER, (ii) maintain the confidentiality of Personal Data and Company Data, and (iii) comply with any applicable Technical and Organizational Measures. In addition, VENDOR'S employees and other authorized persons that access CUSTOMER'S premises shall abide by CUSTOMER'S physical security policies, rules and procedures.



(f) At any and all times during which VENDOR is Processing Personal Data or Company Data, VENDOR shall:

(i) Comply with all applicable privacy and security laws to which it is subject, or that are applicable to VENDOR'S services or VENDOR'S possession or Processing of Personal Data and/or Company Data, and not, by act or omission, place CUSTOMER or its affiliates in violation of any privacy or security law known by VENDOR to be applicable to them;

(ii) With regards to the Processing of Personal Data, maintain a record of Personal Data Processing activities carried out on behalf of CUSTOMER, which shall include at least:

(A) The name and contact details of the VENDOR, any subcontractor, where applicable and as previously authorized by CUSTOMER, the CUSTOMER on whose behalf the VENDOR is Processing Personal Data, their respective representatives and, where applicable, the data protection officer;

(B) The categories of Processing activities carried out on behalf of CUSTOMER;

(C) Where applicable, international transfers of Personal Data to a third country or international organization, identifying the third country or international organization, and identification of appropriate safeguards;

(D) A general description of the appropriate Technical and Organizational Measures that VENDOR is implementing relating to:

- The ability to ensure the continued confidentiality, integrity, availability and resilience of Personal Data Processing systems and services;
- The ability to quickly restore availability and access to Personal Data in the event of a physical or technical incident; and
- A process of regular verification, evaluation and assessment of the effectiveness of Technical and Organizational Measures to ensure the security of the Personal Data Processing;
- Pseudonymization and encryption of Personal Data;

(iii) Have in place appropriate and reasonable Technical and Organizational Measures to protect the security of Personal Data and Company Data and prevent a Data Security Incident, including, without limitation, a Data Security Incident resulting from or arising out of VENDOR'S internal use, Processing or other transmission of Personal Data and Company Data, whether between or among VENDOR'S subsidiaries and affiliates or any other person or entity acting on behalf of VENDOR. Taking into account the state-of-the-art, the costs of implementation, and the nature, scope, context and purposes of the Processing as well as the risks of varying likelihood and severity for, among other, the rights and freedoms of the data subjects, VENDOR shall implement Technical and Organizational Measures to ensure a level of security appropriate to the risk. Without limiting the generality of the foregoing, the VENDOR will implement measures to:

(A) Ensure the continued confidentiality, integrity, availability and resilience of Processing systems and services;

(B) Quickly restore availability and access to Personal Data and Company Data in the event of a physical or technical incident;

- (C) Verify and evaluate, on a regular basis, the effectiveness of the Technical and Organizational Measures implemented;
- (D) Pseudonymize and encrypt Personal Data, where applicable; and
- (E) Safely secure or encrypt all Personal Data and Company Data, during storage or transmission;

(iv) Except as may be necessary in connection with providing services to CUSTOMER (and provided that immediately upon the need for such Personal Data and Company Data ceasing, such Personal Data or Company Data is immediately destroyed or erased), not use or maintain any Personal Data or Company Data on a laptop, hard drive, USB key, flash drive, removable memory card, smartphone, or other portable device or unit; and ensure that any such portable device or unit is encrypted.

(v) Notify CUSTOMER at [asoc@avangrid.com](mailto:asoc@avangrid.com) or (855)548-7276 no later than one (1) day from the date of obtaining actual knowledge of any Data Security Incident, or from the date the VENDOR reasonable believes that a Data Security Incident has taken place, whatever is earlier, and at VENDOR'S cost and expense, assist and cooperate with CUSTOMER concerning any disclosures to affected parties and other remedial measures as requested by CUSTOMER or required under applicable law. If the Data Security Incident involves Personal Data, the following information shall be provided as a minimum:

- (A) Description of the nature of the Data Security Incident, including, where possible, the categories and approximate number of data subjects affected, and the categories and approximate number of Personal Data records affected;
- (B) Contact details of the data protection officer of the VENDOR, where applicable, or other contact person for further information;
- (C) Description of the possible consequences of the Data Security Incident or violations; and
- (D) Description of the measures taken or proposed to remedy the Data Security Incident, including, where appropriate, the measures taken to mitigate possible negative effects;

(vi) VENDOR designates the following contacts for the purposes of communications related to a Data Security Incident: [REDACTED]

(vii) Assist and cooperate with CUSTOMER to enable CUSTOMER to comply with its obligations under any applicable privacy or security law, including but not limited to maintaining Personal Data and Company Data secured, responding to Data Security Incidents, and, where applicable, ensuring the rights of data subjects and carrying out Personal Data impact assessments;

(viii) Inform the CUSTOMER, if, where applicable, data subjects exercise their rights of access, rectification, erasure or objection, restriction of processing, data portability and not to be the subject to automated decisions by the VENDOR. The communication must be made immediately and in no case later than one (1) business day following the receipt of the request by VENDOR. VENDOR shall assist CUSTOMER, taking into account the nature of the Personal Data Processing, through appropriate Technical and Organizational Measures, and with any information that may be relevant to the resolution of the request;

(ix) Not use independent contractors or provide Personal Data or Company Data to independent contractors or other personnel that are not full-time employees of VENDOR without CUSTOMER'S prior written approval;

(x) Not disclose Personal Data or Company Data to any third party (including, without limitation, VENDOR'S subsidiaries and affiliates and any person or entity acting on behalf of VENDOR) unless with respect to each such disclosure: (A) the disclosure is necessary in order to carry out VENDOR'S obligations under the Agreement and this Rider; (B) VENDOR executes a written agreement with such third party whereby such third party expressly assumes the same obligations set forth in this Rider; (C) VENDOR has received CUSTOMER'S prior written consent; (D) the Processing is carried out in accordance with the instructions of CUSTOMER, and (D) VENDOR shall remain responsible for any breach of the obligations set forth in this Rider to the same extent as if VENDOR caused such breach;

(xi) Not permit any officer, director, employee, agent, other representative, subsidiary, affiliate, independent contractor, or any other person or entity acting on behalf of VENDOR to Process Personal Data or Company Data unless such Processing is in compliance with this Rider and is necessary to carry out VENDOR'S obligations under the Agreement and this Rider. Personal Data and Company Data shall only be accessed by persons who need access to carry out VENDOR'S obligations under the Agreement and this Rider and in accordance with the instructions of CUSTOMER; VENDOR shall provide appropriate privacy and security training to its employees and those persons authorized to Process Personal Data or Company Data.

(xii) Establish policies and procedures to provide all reasonable and prompt assistance to CUSTOMER in responding to any and all requests, complaints, or other communications received from any individual who is or may be the subject of any Personal Data Processed by VENDOR to the extent such request, complaint or other communication relates to VENDOR'S Processing of such Personal Data;

(xiii) Establish policies and procedures to provide all reasonable and prompt assistance to CUSTOMER in responding to any and all requests, complaints, or other communications received from any individual, government, government agency, regulatory authority, or other entity that is or may have an interest in the Personal Data or Company Data, exfiltration of Personal Data or Company Data, disclosure of Personal Data or Company Data, or misuse of Personal Data or Company Data to the extent such request, complaint or other communication relates to VENDOR'S Processing of such Personal Data or Company Data;

(xiv) Not transfer any Personal Data or Company Data across a country border, unless directed to do so in writing by CUSTOMER, and VENDOR agrees that CUSTOMER is solely responsible for determining that any transfer of Personal Data or Company Data across a country border complies with the applicable laws and this Rider;

(xv) Keep Personal Data and Company Data in strict confidence;

(g) At the time of the execution of this Rider, and at any time, upon CUSTOMER's request, VENDOR shall provide evidence that it has established and maintains Technical and Organizational Measures governing the Processing of Personal Data and Company Data appropriate to the Processing and to the nature of the Personal Data and Company Data;

(h) To the extent VENDOR maintains Personal Data and Company Data at its location, CUSTOMER shall have the right to conduct onsite inspections and/or audits (with no advance notice to VENDOR) of VENDOR'S information security protocols, and VENDOR agrees to cooperate with CUSTOMER regarding such inspections or audits; provided, any such inspections or audits shall be conducted during normal business hours and in a manner so as to minimize any disruptions to VENDOR'S operations. VENDOR will promptly correct any deficiencies in the Technical and Organizational Measures identified by CUSTOMER to VENDOR;

(i) VENDOR shall keep and make accessible to CUSTOMER, at any time, upon CUSTOMER's request, documentation that evidences compliance with the terms of this Rider. CUSTOMER

may conduct audits and inspections, either directly or through a third party, and VENDOR agrees to cooperate with CUSTOMER regarding such audits;

(j) VENDOR shall cease Processing Personal Data and Company Data and destroy, or cause or arrange for the destruction of, all Personal Data and Company Data subject to the Agreement and this Rider, including all originals and copies of such Personal Data and Company Data in any medium and any materials derived from or incorporating such Personal Data and Company Data, upon the expiration or earlier termination of the Agreement, or when there is no longer any legitimate business need (as determined by CUSTOMER) to retain such Personal Data and Company Data, or otherwise on the instruction of CUSTOMER, but in no event later than ten (10) days from the date of such expiration, earlier termination, expiration of the legitimate business need, or instruction. If applicable law prevents or precludes the return or destruction of any Personal Data or Company Data, VENDOR shall notify CUSTOMER of such reason for not returning or destroying such Personal Data and Company Data and shall not Process such Personal Data and Company Data thereafter without CUSTOMER'S express prior written consent. VENDOR'S obligations under this Rider to protect the security of Personal Data and Company Data shall survive termination of the Agreement.

(k) To the extent that VENDOR processes personal data of Connecticut consumers as such terms are defined in An Act Concerning Personal Data Privacy and Online Monitoring (Public Act No. 22-15), the terms and conditions of Schedule E shall apply.

(l) VENDOR represents that the security measures it takes in performance of its obligations under the Agreement and this Rider are, and will at all times remain, at the highest of the following: (a) Privacy & IT Security Best Practices (including, but not limited to, National Institute of Standards and Technology ("NIST") SP 800 53, International Organization for Standardization ("ISO") 27001/27002, Control Objectives for ("COBIT") framework, Center for Internet Security ("CIS") Security Benchmarks, and Top 20 Critical Controls) and (b) any security requirements, obligations, specifications, or event reporting procedures set forth in Schedule A.

(m) In addition to any other insurance required to be provided by VENDOR hereunder, VENDOR shall also provide the Cyber-Insurance coverage meeting the requirements specified in Schedule B, attached hereto and made part hereof. VENDOR shall also comply with the terms and conditions in Schedule B as they relate to any insurance required to be provided by VENDOR pursuant to this Agreement.

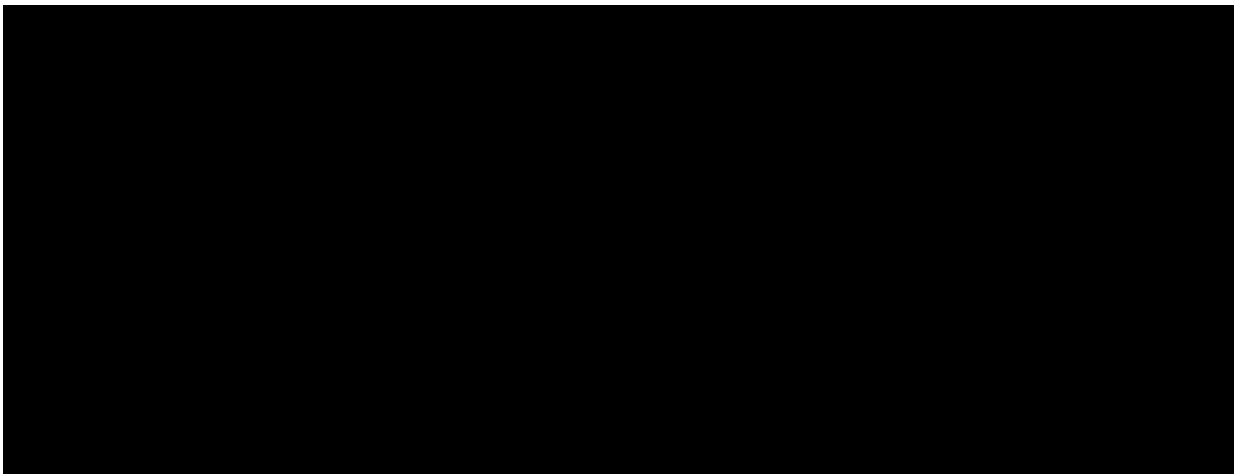
(n) Notwithstanding anything in the Agreement or this Rider to the contrary, VENDOR shall indemnify, defend and hold CUSTOMER, its affiliates, and their respective employees, officers, representatives and contractors, harmless from and against all Losses caused by, resulting from, or attributable to VENDOR'S breach or violation of applicable laws, regulations or any of the terms and conditions of this Rider. VENDOR'S obligation to indemnify, defend, and hold harmless shall survive termination or expiration of the Agreement and this Rider.

(o) Failure by VENDOR to comply with any requirement of this Rider shall constitute a material breach of the Agreement and a VENDOR default thereunder. CUSTOMER shall be allowed to terminate the Agreement, and CUSTOMER shall have all rights and remedies provided by law or equity under the Agreement and this Rider.

\*\*\*

*[Signature page follows]*

IN WITNESS WHEREOF, CUSTOMER and VENDOR have caused their representatives to execute and deliver this Privacy and Data Security Rider.



*[Signature page to Privacy and Data Security Rider]*

Schedule A**General Security Requirements**

(a) The following definitions are relevant to this General Security Requirements Schedule:

(i) "Cyber-infrastructure" means electronic information and communication systems and services, as well as the information contained therein. These systems, both those housed within facilities as well as those that are cloud-based, be they proprietary or third-party, in any manner, are comprised of hardware and software for processing (creating, accessing, modifying and destroying), storing (on magnetic, electronic or other formats) and sending (shared use and distribution) information, or any combination of said elements that include any type of electronic device such as, without limitation, standard computers (desktop/laptop) with internet connections, digital storage methods used on computers (e.g. hard drives), mobiles, smartphones, personal digital assistants, data storage media, digital and video cameras (including CCTV), GPS systems, etc.

(ii) "Protected Information" means Personal Data and Company Data as defined in the Rider.

(iii) Capitalized terms not otherwise defined in this Schedule shall have the meaning set forth in the Rider.

(b) VENDOR must, always, know the level of information protection that should be afforded to the Protected Information as well as the corresponding standards and applicable laws and regulations, and it shall adopt the Technical and Organizational Measures adequate thereto. VENDOR shall, at least, maintain Technical and Organizational Measures consistent with the type of Protected Information being processed and the services being provided by VENDOR, to secure Protected Information, which measures shall implement industry accepted protections which include physical, electronic and procedural safeguards to protect the Protected Information supplied to VENDOR against any Data Security Incident or other security incident, and any security requirements, obligations, specifications or event reporting procedures set forth in the Agreement, the Rider or this Schedule. As part of such security measures, VENDOR shall provide a secure environment for all Protected Information and any hardware and software (including servers, network, and data components) to be provided or used by VENDOR as part of its performance under the Agreement on which Protected Information is contained.

(c) When the scope of the Agreement implies the use or connection of VENDOR's Cyber-infrastructure to that of CUSTOMER, the VENDOR shall have reasonable Technical and Organizational Measures for its protection and for the prevention of any Data Security Incident.

(i) The connection between the CUSTOMER'S and the VENDOR's network is not permitted, unless expressly agreed to in writing, in which case it must be done by establishing encrypted and authenticated virtual private networks, and the number of interconnection points between the two networks must be the minimum that is compatible with the required level of availability. The connection to the VENDOR's network shall be removed as soon as there is no need for it.

(ii) Direct user connections from the VENDOR to CUSTOMER's network are not permitted, unless authorized in writing by CUSTOMER and only for a limited period of time.

(iii) If the Agreement is fully or partially performed at the VENDOR's premises or property, the VENDOR must establish mechanisms and procedures for physical access to said premises or property to prevent unauthorised persons from accessing Cyber-infrastructure or Protected Information.

(d) VENDOR shall establish mechanisms and procedures for identifying, authenticating and controlling logical access necessary to prevent unauthorised persons from accessing its Cyber-infrastructure elements and CUSTOMER's Protected Information, and, in particular:

(i) VENDOR will have procedures based on the principle of least privilege when granting, assigning and withdrawing authorized access and permissions to its personnel or the personnel of its subcontractors, where applicable, including privileged users or administration taking into account the need for the use, the confidentiality of the Protected Information and the resources for the performance of their tasks;

(ii) VENDOR will maintain an updated inventory of the access granted and will withdraw access from personnel who cease working in connection with the Agreement within a period of less than twenty-four (24) hours. Credentials must always be encrypted when stored and transmitted; and

(iii) VENDOR shall have policies and procedures that ensure the strength of the passwords and that they are updated regularly. Passwords shall be changed during the installation processes of new hardware or software. VENDOR'S default passwords shall be changed.

(e) VENDOR shall implement Technical and Organisational Measures necessary to ensure operational continuity under applicable service level agreements (including but not limited to contingency plans, backup and recovery procedures). In particular:

(i) VENDOR shall make backup copies of the Protected Information as frequently as is required for the services being provided by VENDOR and according to the nature of the data, establishing the appropriate procedures and mechanisms to ensure that the data can be retrieved, that only authorised VENDOR personnel can access it and that they are transferred and stored in such a way as to prevent access or manipulation by unauthorised persons; and

(ii) The same security measures shall apply to backups as to the original Protected Information.

(f) In the event that CUSTOMER has expressly authorized VENDOR to use its own IT equipment for accessing CUSTOMER's Cyber-infrastructure, the VENDOR shall guarantee and undertake that there are adequate security measures to protect the stationary or portable IT equipment and mobile devices used to access such Cyber-infrastructure or for storing, processing or transmitting the Protected Information, including but not limited to:

(i) Automatic locking if the device is left unattended for a certain period of time. User authentication will be required for unlocking.

(ii) Protection against malicious software and known vulnerabilities.

(iii) Updating the operating system as often as the vendor requires.

The VENDOR shall maintain an action procedure should the equipment or device be lost or stolen, ensuring, to the maximum extent possible that the event be communicated promptly, Protected Information be deleted safely in accordance with recognised standards, and access to CUSTOMER's systems or systems containing CUSTOMER's Protected Information be suspended.

Before equipment is reused or replaced, the VENDOR must protect, or if applicable remove, all the Protected Information stored on it, ensuring that unauthorised personnel or third parties cannot access or recover it.

(g) The VENDOR shall establish adequate procedures to guarantee protection against loss or unauthorised processing of files, computer media and paper documents containing Protected Information and guarantee that they are destroyed when the reasons for their creation no longer apply. Extracting data from a file and downloading it to a server or delivering it electronically is considered equivalent to computer media for the purposes of complying with these measures.

AVANGRID may request information concerning any Processing of Protected Information by the VENDOR.

(h) The VENDOR shall include security measures appropriate to the nature of the Protected Information Processed in developing, maintaining and testing the equipment that will be used to perform the services being provided by VENDOR. The VENDOR will adopt secure code development standards and ensure that no real data is used in test environments. If necessary, CUSTOMER's express written authorisation will be required, and the same security measures required for the work environment will be applied to these test environments.

(i) When the scope of the Agreement includes the supply of equipment and/or materials, the VENDOR shall prove that best security practices and standards have been applied for the design, fabrication, maintenance, and, where applicable, installation of the supplied equipment and/or materials, including its components.

For any such equipment and/or materials with information processing capacity or network connectivity options:

(i) The VENDOR shall provide evidence or certificates that guarantee design security, firmware/software updates and malware protection.

(ii) The VENDOR shall conduct periodic analyses of vulnerabilities and inform CUSTOMER about any necessary updates, especially those that affect security.

(iii) All internet connected devices shall be protected with adequately complex passwords that can be changed by CUSTOMER.

(iv) The configuration of devices, equipment and materials shall be adjustable exclusively according to AVANGRID's needs, and any unnecessary functionality deactivated. Should the VENDOR conduct any configuration, documentation to that effect shall be provided.

(j) VENDOR should fully implement the mitigation actions available on the APTs Targeting IT Service Provider CUSTOMERS site page to protect against this malicious activity. VENDOR should implement the following specific actions:

(i) Apply the principle of least privilege to their environment, which means customer data sets are separated logically, and access to client networks is not shared;

(ii) Implement robust network and host-based monitoring solutions that looks for known malicious activity and anomalous behaviour on the infrastructure and systems providing client services;

(iii) Ensure that log information is aggregated and correlated to enable maximum detection capabilities, with a focus on monitoring for account misuse; and

(iv) Work with CUSTOMER to ensure hosted infrastructure is monitored and maintained, either by the service provider or the client.



Schedule B

**Cyber-Insurance Requirements**

(a) VENDOR shall during the term of the Agreement have and maintain the following insurance coverage:

(i) Cyber Errors and Omissions Policy providing coverage, on a per occurrence basis, for acts, errors, omissions, and negligence of employees and contractors giving rise to potential liability, financial and other losses relating to data security and privacy, including cost of defense and settlement, in an amount of at least \$10 million dollars, which policy shall include coverage for all costs or risks associated with:

- 1) violations of data privacy or data security laws and regulations; and
- 2) cyber risks, including denial-of-service attacks, risks associated with malware and malicious code, whether designed to interrupt a network or provide access to private or confidential information; and
- 3) other risks specific to the work performed by VENDOR as shall be identified by CUSTOMER.

(ii) Such coverage shall be furnished by an insurance company with an A.M. Best Financial Strength Rating of A- or better, and which is otherwise reasonably acceptable to CUSTOMER.

(b) VENDOR warrants that the scope of all coverage evidenced to the CUSTOMER pursuant to this Agreement shall be the sole responsibility of the VENDOR to maintain at committed to levels required by this document and VENDOR, in any event of a loss, will take full responsibility for the payment of any policy deductible, self-insured retention, premium or retrospective premium obligation necessary to maintain coverage, and shall include coverage for any indemnification and hold harmless agreements made by the VENDOR pursuant to the Data Security Rider. VENDOR's failure to pay the applicable deductible, self-insured retention, or retrospective premium shall constitute a material breach of this Agreement, with damages equal to at least the amount of insurance lost or not provided due to such breach.

(c) All insurance coverage(s) provided by VENDOR pursuant to this Agreement shall be primary and non-contributing with respect to any other insurance or self-insurance which may be maintained by the CUSTOMER.

[Schedule C]**Acceptable Use Requirements**

The intent of this Schedule is to document requirements as they pertain to the Acceptable Use of the Electronic Devices and Cyber-infrastructure of Avangrid, Inc. and any of its subsidiaries (hereinafter "Avangrid") by contractors, consultants or other third parties.

Employees and other persons acting on behalf of Avangrid vendors shall be required to read, acknowledge their understanding of, and commit to comply with these Avangrid Acceptable Use Requirements.

**Definitions**

- A **User** is defined as any contractor, consultant or other third parties, including any employee of an Avangrid vendor, with access to or using Avangrid Electronic Devices or Cyber-infrastructure.
- **Cyber-infrastructure** Includes electronic information and communications systems and services, and the information contained in these systems and services. Those systems and services are composed of all hardware and software that process (creation, access, modification, and destruction), store (paper, magnetic, electronic, and all other media types), and communicate (sharing and distribution) information, or any combination of these elements.
- **Electronic Devices** include standard computer (workstation desktop/ laptop) with network connections, digital storage media used in standard computers (e.g. hard drives), telephone and voicemail systems, mobile phones, smartphones, tablets, Personal Digital Assistants (PDA), End Point Storage Devices (EPSD), digital and video cameras (including CCTV), mobile navigation systems, printers, photocopiers and scanners, fax machines, and all other similar of associated devices, etc.
  - **Avangrid Electronic Devices** are Electronic Devices owned and managed by Avangrid.
  - **Personally Owned Devices (POD)** are Electronic Devices (e.g. smart phones, tablets, laptops) privately owned and managed by Users.
  - **End Point Storage Devices (EPSD)** applies to the storage of data on devices that can be connected either by a USB drive, data cable or by wireless connection direct to any computing equipment within Avangrid, e.g. USB sticks, drives, thumb nails, pen drives, flash drives, memory cards, etc.

**1. Requirements and Practices****1.1 Electronic Devices**

Avangrid Electronic Devices and resources are property of Avangrid and may be provided to Users for the pursuit of their professional activity.

- 1.1.1 The determining authority and responsibility for issuance of an Electronic Device shall rest with the Avangrid Business Area Leader (BAL) or department hiring manager.
- 1.1.2 Avangrid Electronic Devices shall be provided to Users configured with the required security hardware and software protections.
  - a. Compromising or interfering with the Electronic Devices' operating system, hardware,

software or protection mechanisms is prohibited.

- 1.1.3 Users shall be responsible for the appropriate use of authorized Electronic Devices in accordance with their duties and responsibilities, including, but not limited to:
  - a. Protecting Electronic Devices from misuse.
  - b. Logging off or protecting Electronic Devices with a screen and/or keyboard locking mechanism, when unattended and when not in use.
    - i. Desktop and laptop computers shall be switched off or hibernating when unattended for a period more than one hour and always at the end of the workday.
    - ii. Desktop and laptop computer screens shall be locked by Users always when unattended.
  - c. Taking the following preventative measures to ensure that any Electronic Devices used to connect to Avangrid's Cyber-infrastructure are physically secured by:
    - i. **Protecting Avangrid assets from unauthorized access and use by others,**
    - ii. **Leaving Electronic Devices in secured locations (e.g. locked cabinet or drawer, locked rooms in locked buildings as applicable),**
    - iii. **Not leaving Electronic Devices in plain view in unattended vehicles,**
    - iv. **Not leaving Electronic Devices in vehicles overnight,**
    - v. **Carrying laptops as hand luggage when traveling,**
    - vi. **Positioning Electronic Devices so that they (and the information displayed) are not visible from outside a ground floor window, and**
    - vii. **Positioning the display screen of Electronic Devices such that it cannot be viewed by others in public places (e.g. train, aircraft, restaurants, etc.).**
- 1.1.4 Users shall follow Avangrid procedures for immediately reporting lost, compromised, or stolen Electronic Devices.
  - a. The User shall notify the Service (Help) Desk and their Avangrid contact.
- 1.1.5 User shall follow Avangrid procedures for the return of Avangrid owned Electronic Devices when the use of those devices is deemed no longer necessary.
  - a. Users shall return all Avangrid Electronic Devices to their Avangrid contact immediately upon separation/ termination, which shall be responsible for collecting all Avangrid Electronic Devices.
- 1.1.6 The use of hot desks/ shared network access equipment shall be reserved for Users who do not regularly require the use of a portable Electronic Device (e.g. laptop) for their professional activities.
  - a. Users of hot desks/shared network access shall have a current network login.

## **1.2 Connection to Avangrid Cyber-infrastructure**

1.2.1 All Electronic Devices which connect to the Avangrid Cyber-infrastructure network shall be Avangrid approved assets which have been configured in accordance with Avangrid standard configurations.

- a. Non-Avangrid approved Electronic Devices shall not connect directly to the Avangrid Cyber-infrastructure (e.g. through Ethernet connection).
- b. Wireless connections from an Avangrid office shall only be accomplished through Avangrid Electronic Devices and the Avangrid supported wireless infrastructure.
- c. Guest wireless network accounts shall only be supplied on 'as-need-be-basis' following Avangrid approval processes.
- d. Remote desk connections shall only be supplied on 'as-need-be-basis' following Avangrid approval processes.

## **1.3 Use of Mobile Devices (for Remote Access)**

1.3.1 The determining authority and responsibility for issuance of a mobile electronic device to perform Avangrid professional activities; access the Avangrid Cyber-infrastructure or store/transmit Avangrid information/data remotely shall rest with the Avangrid Business Area Leader (BAL) or department hiring manager.

- a. Users shall remotely access Avangrid's Cyber-infrastructure utilizing only authorized hardware, software and access control standards (e.g. Avangrid approved VPN technology for Avangrid Electronic Devices or Citrix client).
- b. At no time shall a remote User initiate two simultaneous connections to different networks (e.g., no split tunneling and no multi-homed connection).
- c. Avangrid issued SIM cards shall not be swapped or used in non-Avangrid issued Electronic Devices.
- d. Configuring a non-Avangrid issued Electronic Device for connection to the Avangrid corporate email system is strictly prohibited.
- e. Users should be aware that Avangrid may monitor emails sent from and to non-Avangrid issued devices.

## **1.4 Personally Owned Devices**

1.4.1 The use of Personally Owned Devices for access to and/or handling of Avangrid information/data and Avangrid Cyber-infrastructure is prohibited.

## **1.5 Treatment of Software and Applications**

1.5.1 The acquisition and installation of software on Avangrid Electronic Devices shall be made using approved methods.

- a. All access to company software and/or applications shall be subject to formal request and approval processes.

1.5.2 Users shall be prohibited from introducing or installing any unauthorized software, content or material.

1.5.3 The installation of any type of network access program peer (P2P) or similar (e.g., BitTorrent, Emule), as well as any other application for file sharing that could saturate Internet bandwidth, prevent access to other Users or slow down connections to technology and information resources is prohibited.

1.5.4 Intellectual property, licensing and regulatory requirements shall be observed always. Downloading, obtaining, copying or redistributing materials protected by copyright, trademark, trade secret or other intellectual property rights (including software, music, video, images) is prohibited, even where such material is to be used for the pursuit of the professional activity.

- a. Where materials protected by copyright, trademark, trade secret or other intellectual property rights are required for the pursuit of an Avangrid professional activity the appropriate license/permission shall be obtained prior to use.

## 1.6 Treatment of Information/Data

1.6.1 Information/data assets obtained or created during the engagement with Avangrid are the property of Avangrid and shall be treated in accordance with the applicable Agreement and Data Security Rider.

1.6.2 The storage of Avangrid information/data on Personally Owned Devices or non-Avangrid controlled or authorized environments, including non-authorized Electronic Devices is prohibited. Users shall not store AVANGRID owned information/data on devices that are not issued by AVANGRID unless explicitly and contractually agreed by both parties.

1.6.3 Where access to Personal Data is part of a Users' professional role and responsibilities, access shall be treated in accordance with all applicable data protection and/or privacy law(s) and regulation(s) and under strict access and usage guidelines.

1.6.4 Corporate storage spaces and network resources shall be used for file storage and/or exchange of professional information.

1.6.5 Users shall store and share information/data in accordance with the terms and conditions with Avangrid and any applicable Data Security Rider.

1.6.6 Use of an End Point Storage Device (EPSD) (e.g., USB) shall be limited to those devices acquired through the Information Technology (IT) request process (e.g. ITSM/ServiceNow).

1.6.7 Printed information/data (hard copy) shall be:

- a. Stored based on critically, e.g., hardcopy containing confidential and/or sensitive information/data shall be locked away when not required (or not in use).
- b. Discarded, when no longer needed, based on criticality, e.g. confidential and/or sensitive

hardcopy shall be shredded.

- c. To be removed from printers, fax machines, copier rooms, and conference/ meeting rooms immediately.

## **1.7 User Access Credentials and Passwords**

1.7.1 Requests for access shall be made following access provisioning procedures.

1.7.2 Applications and network resources access shall be activated\deactivated in accordance with Avangrid activation\ deactivation procedures.

1.7.3 Users requiring duly justified privileged access rights will be assigned a specific "Privileged User ID"

- a. Privileged User IDs shall be reviewed and confirmed at least semi-annually.
- b. Regular professional activities shall not be performed from a privileged ID.

1.7.4 Users shall use strong, complex passwords and securely maintain secret authentication information (e.g. passwords, cryptographic keys, smart cards that produce authorization codes), including:

- a. Not sharing or disclosing their Avangrid credentials (log on IDs-user names and/or passwords) with others inside or outside the company.
- b. Keeping secret authentication information confidential, ensuring that it is not divulged to any other parties, including senior management and technical support.
- c. Not recording (e.g. on paper, software file or hand-held device) secret authentication information, unless this can be stored securely, and the method of storing has been approved (e.g. password vault) by Corporate Security.
- d. Changing secret authentication information when there is any indication of a possible compromise.
- e. Reporting any incidents or suspected compromises by following Avangrid incident reporting procedures.

## **1.8 Internet Use and Social Media**

1.8.1 Avangrid may make available internet access to users depending on their role and responsibilities.

- a. Internet access shall be provided as a tool for business purposes, shall be used with moderation and shall be proportional to the work being undertaken.
- b. Access to restricted websites shall be enabled at the discretion of Avangrid and shall be provisioned following the security exception process.
- c. Only Avangrid approved surfing software shall be used to access the Internet.

1.8.2 A moderate and proportional use of the internet shall be allowed for non-

professional activities, although web surfing is expressly prohibited for:

- a. Accessing or posting of any racist or sexual content or any material that is offensive or defamatory in nature.
- b. Accessing games, downloading video, music (MP3 or another format), or downloading any other files not related to the Avangrid related responsibilities.

1.8.3 Limited and occasional use of Avangrid Electronic Devices and resources to engage in Social Networking<sup>1</sup> and Blogging<sup>2</sup> is acceptable, provided that:

- a. It is done in a professional and responsible manner.
- b. It does not violate the Code of Ethics or any relevant Avangrid policy, procedure or rule.
- c. It is not detrimental to Avangrid's best interests.
- d. It does not interfere with regular work duties.
- e. There is no breach of the prohibitions identified in these requirements.

1.8.4 Avangrid reserves the right to determine which websites and social media platforms can be accessible through Avangrid Electronic Devices or Cyber – infrastructure.

## 1.9 E-mail Use

1.9.1 All information created, sent, or received via Avangrid's e-mail system(s), including all e-mail messages and electronic files shall be the property of Avangrid.

1.9.2 Avangrid reserves the right to monitor, inspect and access such emails and electronic files.

1.9.3 The forwarding of Avangrid owned information/data to a personal e-mail account is prohibited.

1.9.4 Removing or circumventing any of the security controls enforced on the company email system (e.g. SPAM filtering, automatic email disclaimers, etc.) is prohibited.

1.9.5 Users shall not permit others to use their e-mail accounts. Based on user established permissions; calendars and/or mailboxes may be shared.

1.9.6 Limited use of an Avangrid e-mail account for personal purposes shall be regarded as acceptable provided that:

- a. Use does not interfere with the normal performance of professional duties.
- b. Messaging does not violate applicable laws, regulations, the Code of Ethics, or Avangrid

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<sup>1</sup> Social Networking is the use of dedicated websites and applications to interact with other users or to find people with similar interests.

<sup>2</sup> Blogging: A blog is a website containing a writer's or group of writers' own experiences, observations, opinions, etc., Blogging is posting to that website.

policies.

- c. Use is moderate both in terms of frequency and amount of memory and resources consumed.

1.9.7 Avangrid e-mails or messages containing company information/ data shall not be forwarded to external parties except where there is a specific business 'need to know'.

1.9.8 Avangrid electronic messaging shall not be used for transmitting, retrieving or storing any messages, files or attachments which constitute:

- a. Harassing or discriminatory messages which relate to gender, race, sexual orientation, religion, disability or other characteristics protected by applicable laws and regulations.
- b. Defamatory messages which adversely affect the reputation of a person or company.
- c. Messages that violate copyright, trademark, trade secret or other intellectual property rights.
- d. Obscene materials or images of a sexual nature.
- e. Files or documents of an indeterminate origin or that, for any reason, may include computer viruses or in any way breach the security systems of the company or the recipient of the file or document, or may damage their IT systems.
- f. Any material or images that might reasonably be expected to cause personal offense to the recipient.
- g. Messages in violation of applicable laws, regulations, the Code of Ethics, or Avangrid policies.

1.9.9 The retention period for e-mail messages shall be 18 months. Once the retention period has been reached, emails shall be automatically eliminated from the user's mailbox.

- a. a. Users shall store messages and/or associated attachments in Avangrid provided network folders. Storage of messages and/or associated attachments on hard drives in .pst (personal mail folders) folders is prohibited.

1.9.10 Users shall report suspicious email messages (e.g., spam, phishing, etc.) the Service (Help) Desk and/or using the reporting tool REPORTER, available in Outlook.

## **1.10 Incident reporting**

1.10.1 Users shall immediately report any unusual activity, incident or suspected event following Avangrid incident reporting procedures (e.g., Service (Help) Desk, REPORTER, etc.)

## **1.11 Contract Termination**

1.11.1 Avangrid Electronic Devices assigned to or in the possession of a User shall be returned to Avangrid on or before the contract termination date or whenever it is determined that the use of the Electronic Device is no longer necessary. This includes the return of facility access badges.



- 1.11.2 Access to Cyber-infrastructure shall be deactivated (revoked) on or before a User's termination date in accordance with Avangrid access management processes.

## **2. No Expectation of Privacy**

All contents of the Avangrid Electronic Devices and Cyber-infrastructure are the property of the company. Therefore, Users should have no expectation of privacy whatsoever in any e-mail message, file, data, document, facsimile, telephone conversation, social media post, conversation, or any other kind or form of information or communication transmitted to, received, or printed from, or stored or recorded on Avangrid's Electronic Devices or Cyber-Infrastructure.

## **3. Monitoring**

- 3.1 Avangrid reserves the right to use monitoring controls, including software, to ensure compliance with these Acceptable Use Requirements document, and to record and/or monitor one or more Users' Electronic Devices and resources, e-mails and/or internet activity in accordance with regulatory and legal requirements.
- a. This includes the right to monitor, intercept, access, record, disclose, inspect, review, retrieve, print, recover or duplicate, directly or through third parties designated for such purpose, any information/data contained on and any uses of the Electronic Devices and Cyber-Infrastructure. Avangrid may store copies of such information/data for a period of time after they are created and may delete such copies from time to time without notice. Users consent to such monitoring by acknowledging these requirements and using the Electronic Devices and Cyber-Infrastructure.
  - b. Accordingly, Users should not harbor any expectation of privacy in respect to the use of Avangrid Electronic Devices or Cyber-Infrastructure and should not consider the data contained on them as private.
- 4.2 Monitoring may take place at any time and without the need to notify or inform the User in advance, taking into consideration legal or regulatory limitations, where applicable.

## **4. Non Compliance**

Violation and non-conformance to this guidance by third party workers may result in appropriate actions, including contract termination.

[Schedule E]

## **Connecticut Privacy Act Clauses for Processors**

1. Definitions. The following definitions and rules of interpretation apply in this Schedule:
  - a. "Agreement" has the meaning set forth in the Rider.
  - b. "Connecticut Privacy Act" means Connecticut Act Concerning Personal Data Privacy and Online Monitoring (Public Act No. 22-15). Terms defined in the Connecticut Privacy Act, including personal data and processing, carry the same meaning in this Schedule.
  - c. "CUSTOMER" has the meaning set forth in the Rider.
  - d. "Rider" means the Privacy and Data Security Rider to which this Schedule is appended.
  - e. "VENDOR" has the meaning set forth in the Rider.
2. Scope of Application

This Schedule applies only where, and to the extent that, VENDOR processes personal data that is subject to the Connecticut Privacy Act on behalf of CUSTOMER in connection with the Agreement.

1. Personal data processing by VENDOR
  - a. The instructions for the processing of the personal data, the nature and purpose of the processing of the personal data, the type of personal data subject to the processing and the duration for the processing are set forth in section (d)(ii) of the Rider.
  - b. The rights and obligations of CUSTOMER and VENDOR with respect to the processing of personal data are set forth in the Rider and this Schedule.
2. Processor's Connecticut Privacy Act Obligations
  - a. VENDOR will ensure that each person processing personal data is subject to a duty of confidentiality with respect to the data.
  - b. At CUSTOMER'S direction, VENDOR shall delete or return all personal data to the CUSTOMER as requested at the end of the provision of the services, unless retention of data is required by law.
  - c. Upon reasonable request from CUSTOMER, VENDOR shall make available to CUSTOMER all information in its possession necessary to demonstrate the processor's compliance with the obligations in sections 1 to 11, inclusive, of the Connecticut Privacy Act.
  - d. VENDOR shall, allow, and cooperate with, reasonable assessments by CUSTOMER or CUSTOMER'S designated assessor, or the VENDOR may, at its own cost, arrange for a qualified and independent assessor to conduct an assessment of the VENDOR'S policies and technical and organizational measures in support of the obligations under sections 1 to 11, inclusive, of the Connecticut Privacy Act, using an appropriate and accepted control standard or framework and assessment procedure for such assessments, and provide a report of such assessment to CUSTOMER upon request.
3. Subcontracting
  - a. If CUSTOMER authorizes VENDOR to engage subcontractors in accordance with the terms of the Agreement and the Rider, any subcontractor engaged by VENDOR to process personal data shall be engaged pursuant to a written contract that requires the subcontractor to meet the obligations of VENDOR with respect to personal data.
2. Connecticut Privacy Act Warranties

- a. VENDOR will comply with all applicable requirements of the Connecticut Privacy Act when processing personal data.

**EXHIBIT D – Annex 2 – Avangrid Third Party Light Assessment**

See separate document.

## **SCHEDULE I – Background Check Requirements**

### **Domestic Background Checks**

Contractor, at its expense, shall conduct a background check for each employee, agent, representative, contractor, or independent contractor (collectively, “Representatives.”), as well as for the Representatives of its subcontractors, who will provide work or services to the Company or who will have access to Company computer systems, either through on-site or remote access (collectively, “Contractor Representatives”). Contractor Representatives, for the purpose of this requirement, include such temporary staff as office support, custodial service, and third party vendors used by Contractor to provide, or assist in the provision of, work or services to the Company hereunder. Contractor’s obligations with respect to required background checks shall include those obligations specified for Contractor in the Company –Contractor Background Check Rule, as such Rule may be revised and/or supplemented from time to time, which Policy is incorporated herein and made part of this Agreement by reference (the “Rule”). Background checks are to be conducted using the Contractor’s background check vendor consistent with the process developed with the Company under this Agreement. The minimum Background Check process shall include, but not be limited to, the following checks:

- a. Social Security Number Verification
- b. Motor Vehicle Report
- c. Prohibited Parties Database Search\Debarment Lists
- d. County Criminal History Search in each county where a Contractor or Contractor Representative has resided during the seven (7) years preceding the search.
- e. National Sex Offender Registry.

The Background Check must be completed prior to initial access by Contractor Representative(s) and must, at minimum, meet the criteria specified in this Rule and be repeated every two (2) years for Contractor(s) and Contractor Representative(s) under continuing engagements. Any Contractor Representative who separates employment or other commercial relationship with the Contractor must undergo another Background Check prior to renewed access to the Company. The Company Department charged with managing the relationship with the Contractor hereunder (the “Company Liaison”) shall have the right to require more frequent Background Checks of Contractor Representatives or to require checks from other or additional sources than those listed above, and shall have the right to require that the Contractor furnish Background Check results to them. The Company reserves the right to audit Contractor’s Background Check process using either a third-party auditor or representatives from the Company’s Audit Department or the Company Liaison. All Contractor Representatives are responsible to self-disclose any misdemeanor or felony conviction(s) that occur during the course of their assignment hereunder within three (3) business days of the conviction. The conviction must be reported to the Contractor

and the Company Liaison. If reported first to the Contractor, the Contractor shall notify the Company Liaison and the Company Director of Security within three (3) days of learning of the conviction. If, at any time during the term of this Agreement, it is discovered that any Contractor Representative has a criminal record that includes a felony or misdemeanor conviction, the Contractor is required to inform the Company Liaison who will assess the circumstances surrounding the conviction, time frame, nature, gravity, and relevancy of the conviction to the job duties to determine whether the Contractor Representative will be placed on, or continue in, the assignment with the Company, and consistent with, and to the extent permitted by, applicable state law. The Company may withhold its consent in its sole and absolute discretion. The failure of the Contractor to comply with the terms of this provision shall constitute good cause for termination of this Agreement by the Company, in whole or in part.

## Foreign Background Checks

Contractor, at its expense, shall conduct a background check for each employee, agent, representative, contractor, or independent contractor (collectively, “Representatives”), as well as for the Representatives of its subcontractors, who will provide work or services to the Company or who will have access to Company computer systems, either through on-site or remote access (collectively, “Contractor Representatives”). Contractor Representatives, for the purpose of this requirement, include such temporary staff as office support, custodial service, and third party vendors used by Contractor to provide, or assist in the provision of, work or services to the Company hereunder. Contractor’s obligations with respect to required background checks shall include those obligations specified for Contractor in the Company –Contractor Background Check Rule, as such Rule may be revised and/or supplemented from time to time, which Rule is incorporated herein and made part of this Agreement by reference (the “Rule”). Background checks are to be conducted using the Contractor’s background check vendor consistent with the process developed with the Company under this Agreement. The minimum Background Check process shall include, but not be limited to, the following checks:

**NERC CIP Access. If applicable (i.e., when IUSA determines that the Contractor engagement is such that compliance with NERC CIP Standards is required), the background check needs to include an identity verification and 7-year criminal history check as more particularly set forth below.**

- For someone who has resided and/or worked outside of Spain in the last 7 years, the contractor should perform an International Background Check to show the absence or existence of a criminal record. International background checks should verify known data such as employment, education, criminal and civil records, travel and immigration records, as well as address and identity verification
- For someone who has resided and worked only in Spain for the last 7 years, their passport and recent Criminal Record Certificate from the Spanish Ministry of Justice is sufficient (assuming it shows the absence of a criminal record).
- Due to EU privacy rules, the Criminal Record Certificate can only be supplied to the applicant after proof of identify. The Certificate certifies the absence or existence of a criminal record. If the applicant is not willing to obtain and provide the Certificate, an International Background Check should be conducted.

**Non CIP Access. To comply, the background check needs to include the following:**

- For someone who has resided and/or worked outside of Spain in the last 7 years, the vendor should include identity verification and perform an **International Background Check** to show the absence or existence of a criminal record. The international background check should verify known data such as employment, education, criminal and civil records, travel and immigration records, as well as identity.
- For someone who has resided and worked only in Spain for the last 7 years, a **certificate duly signed** by the vendor is sufficient if it states that its employee(s) assigned to work for Company (i) are duly affiliated to the Spanish Social Security and (ii) have the necessary academic and professional experience.

The Background Check must be completed prior to initial access by Contractor Representative(s) and must, at minimum, meet the criteria specified in this Rule and be repeated every two (2) years for Contractor(s) and Contractor Representative(s) under continuing engagements. Any Contractor Representative who separates employment or other commercial relationship with the Contractor must undergo another Background Check prior to renewed access to the Company. The Company Department charged with managing the relationship with the Contractor hereunder (the “Company Liaison”) shall have the right to require more frequent Background Checks of Contractor Representatives or to require checks from other or additional sources than those listed above, and shall have the right to require that the Contractor furnish Background Check results to them. The Company reserves the right to audit Contractor’s Background Check process using either a third-party auditor or representatives from the Company’s Audit Department or the Company Liaison. All Contractor Representatives are responsible to self-disclose any misdemeanor or felony conviction(s) that occur during the course of their assignment hereunder within three (3) business days of the conviction. The conviction must be reported to the Contractor and the Company Liaison. If reported first to the Contractor, the Contractor shall notify the Company Liaison and the Company Director of Security within three (3) days of learning of the conviction. If, at any time during the term of this Agreement, it is discovered that any Contractor Representative has a criminal record that includes a felony or misdemeanor conviction, the Contractor is required to inform the Company Liaison who will assess the circumstances surrounding the conviction, time frame, nature, gravity, and relevancy of the conviction to the job duties to determine whether the Contractor Representative will be placed on, or continue in, the assignment with the Company, and consistent with, and to the extent permitted by, applicable state law. The Company may withhold its consent in its sole and absolute discretion. The failure of the Contractor to comply with the terms of this provision shall constitute good cause for termination of this Agreement by the Company, in whole or in part.



## **SCHEDULE J – Contractor Safety Guide**