

APPENDIX A-1



**Accident Prevention
Rules
For Contractors**

VT TRANSCO'S COMMITMENT TO SAFETY

I. CORPORATE STRATEGIC PLAN

Vermont Transco LLC's ("VT TRANSCO") goal is to be recognized on the basis of its performance as unsurpassed in the safety, quality, timing, environmental compatibility, cost-effectiveness, and reliability of its physical facilities, operations, and electric transmission services. VT TRANSCO recognizes that its worth will be measured in terms of the value it creates for its stakeholders.

VT TRANSCO will plan, design, construct, maintain, and operate an optimal system of electric transmission facilities in Vermont as part of an integrated regional network to serve the needs of its customers and the expectation of its owners, regulators, the public and the region, and to do so in a manner that is consistent with relevant national, regional, state, and industry standards, and with the values of high standards of impartiality, integrity, and devotion to duty.

VT TRANSCO acknowledges that the achievement of its mission is a process, not an event, and that it requires imaginative leadership, teamwork, innovation, a talented, dedicated and respected workforce, a commitment to excellence and to open communication, cooperation, and collaboration with its customers and other stakeholders, and the ability to anticipate and embrace change.

II. SAFETY – A CRITICAL COMPETENCY

VT TRANSCO is committed to maintaining an atmosphere that embraces a collaborative responsibility for the health and safety of the associates, the plant, and community with continuous improvement as a measure.

III. COMMITMENT

The VT TRANSCO Community, the VT TRANSCO Management, the VT TRANSCO Senior Management, the VT TRANSCO Members are all committed to a Safety First Culture. We are all committed to providing a safe and healthy work environment, and to ensure that the proper measures are in place to prevent occupational injuries and illnesses. This commitment is implemented through the systematic application of a comprehensive safety program. This commitment is consistent and throughout as it applies to the VT TRANSCO Affiliates and their associates, its Contractors, the public, and the plant.

The basic philosophy of that program follows:

- A. It is possible to work safely and remain healthy in the presence of all known occupational injuries, illnesses and exposures;

- B. Management has the responsibility to implement the safety programs at VT TRANSCO. Effective development and implementation is the collaborate;
- C. It is the responsibility of all within the VT TRANSCO community;
- D. All associates must be properly trained and equipped to work safely;
- E. Safety is a fundamental requirement for the continued employment by VT TRANSCO; each associate and contractor is responsible for the personal compliance will all applicable safety rules, standards and work practices. Willful or repeated violations of safety rules will result in discipline or discharge;
- F. Management is committed to effective communication and consultation with the associates on matters of safety and health;
- G. Occupational safety and health performance is an integral part of our business, and will be incorporated into the job performance evaluation as a critical competency.

IV. VT TRANSCO SAFETY MESSAGE

All at VT TRANSCO are equally charged with the responsibility of the overall safety of themselves, their co-workers, contracted resources working on VT TRANSCO property and the general public. This book of standards and work practices contains safety expectations for management, supervision, associates and any contractors / consultants working at or for VT TRANSCO. The information in this book is part of a comprehensive approach to safety and work practices; no single section shall ever be used independently from the rest of the book. Future revisions to this book will be made as necessary and it is the intent of the VT TRANSCO community to strive for continual improvement to these standards and work practices.

REMEMBER, WORK SAFE!

Questions concerning our safety programs should be directed to your work supervisor, the VELCO Person-in-Charge, and/or the Safety Manager.

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1.0 Before Work Begins

Upon any work begins, the Contractor shall initiate discussions with the VELCO Person-in-Charge (PIC) to review the scope of work, schedule, means and methods, and arrange for a Pre-Work Construction Meeting. If VELCO does not identify a PIC upon contract award, Contractor shall provide written notice to VELCO requesting that VELCO assign the PIC.

Under the direction of the PIC, the Contractor shall attend a Pre-Work Scoping Meeting and complete a Pre-Work Scoping Checklist. The Scoping Meeting will be held at the work site, unless alternative arrangements are made with the PIC. The Contractor shall submit the completed checklist to the PIC. A copy of the checklist shall be maintained at the work site. Copies of the checklist can be obtained from the PIC.

2.0 Job Briefing – The Tailboard

A job briefing – the tailboard - shall be conducted with all work personnel before the start of work, following any breaks in work, and prior to commencing work after there is any change in the nature, scope, location and/or hazards associated with the work. The briefing shall cover all topics identified on the Tailboard Form. The Tailboard Form shall be completed fully by the work crew supervisor, and all workers participating in the briefing shall sign the Tailboard Form. A copy must be maintained on the job site, and for one year following the completion of work.

When new workers or visitors arrive at the work site, the work crew supervisor shall provide the person(s) with the briefing, and they shall sign the Tailboard Form.

3.0 Control Room Reporting

The Work Crew Supervisor shall contact the VELCO Control Room before work commences each day and upon termination of work at the end of the day. Detailed reporting requirements will be provided by the Person-in-Charge and/or the Safety Manager; however, typical reporting information will include:

- 1) Crew location and number of workers
- 2) Nature of work
- 3) Supervisor contact information
- 4) Location (VELCO line designation, structure number, or lat./long. if work is not within a transmission line corridor).

4.0 Accident Reporting

Any and all accidents (person injury and property damage) involving VELCO, contractor or sub-contractor employees, contractors, subcontractors or consultants, must be reported to the VELCO Person-in-Charge and the Safety Manager.

Serious accident (e.g., ambulance dispatched, emergency room visit, lost work days, or any electrical contact) require immediate telephone notification. Minor accidents require notification within 12 hours.

For any of the following situations, contact the VT TRANSCO Control Room at 802-770-6261 or 6262.

- Medical emergency
- Threat to integrity of line/grid/infrastructure
- Actual line contact

Copies of all Workers Compensation First Report Forms will be forwarded to the Safety Department.

5.0 Approaching Energized Parts

No person or equipment shall approach energized high voltage parts closer than 15 feet. Qualified employees shall not bring any part of their body or un-insulated equipment closer to energized electrical parts than shown in the following table.

Minimum Approach Distances
(Tables 441-1,441-2,441-3 of NESC)

VOLTAGE	PHASE-GROUND	PHASE-PHASE
13.8 kV	2' 1''	2' 2''
34.5 kV	2' 4''	2' 7''
46 kV	2' 7''	2' 10''
69 kV	3' 0''	3' 6''
115 kV	3' 2''	4' 3''
230 kV	5' 3''	7' 6''
345 kV	8' 6''	12' 6''

6.0 Chemicals

Material Safety Data Sheets shall be forwarded to VT TRANSCO for review and approval before and products being brought on site. All products approved for use will be properly labeled and stored according to OSHA's Hazard Communication Standard 1910.1200. The contractor or sub-contractor will be responsible for all spills clean up or other emergency procedures associated with their products. The contractor/subcontractor must remove all unused products from VT TRANSCO Company property at the conclusion of the job.

7.0 Clothing

Clothing that complies with OSHA 1910.269(I) (6) (iii) is required whenever employees, contractors or visitors are present inside the substation fence.

OSHA 1910.269 (I)(6)(iii)

The employer shall ensure that each employee who is exposed to the hazards of flames or electrical arcs does not wear clothing that, when exposed to flames or electric arcs, could increase the extent of injury that would be sustained by the employee. (Rayon, Acetate, Nylon, Polyester, or blends containing these fabrics are prohibited)

Those performing work on or near energized equipment and lines, or in the vicinity of the work being performed, are required to wear flame retardant clothing. This also includes but is not limited to the use of welding equipment or torches, working on secondary systems, and performing switching duties on primary equipment.

Line personnel, right of way agents, surveyors or others that are working in the right of way are required to wear an article of blaze orange or bright red during the period from September 1st through December 31st. The minimum requirement is either a hat or vest/jacket. The intent of this policy is to ensure the safety of personnel during the hunting seasons.

8.0 Confined Spaces

All work that can be considered a confined space work must be discussed with the VT TRANSCO Safety Department before commencing any work. The contractor or sub-contractor will be responsible for providing their own atmospheric test equipment for all confined space work.

- 8.1 All contractor employees expected to enter a confined space or serve as a confined space attendant must be trained in the hazards of the confined space. Copies of permits shall be supplied to VT TRANSCO.

9.0 Electrical High Voltage Work

Only qualified workers shall be allowed to work on electrical systems, apparatus or equipment and shall follow all applicable OSHA 29 CFR 1910.269 and 1926 Subpart V regulations. VT TRANSCO transmission system circuits have a designated letter or number to identify the voltage as follows:

<i>System Voltages</i>	
Designation	Ø-Ø Voltage
B	13,800*
X	34,500
H	46,000
K	115,000
F	230,000
(3)	345,000
Not VT TRANSCO Owned	450,000 DC

Exception: "B" designation on Florence Breaker 46,000 volts.

All contacted employees working on transmission systems on the line or in substations are required to submit a recitation of all training pertinent to overhead power line work.

10.0 Eyeglasses

Safety glasses must conform to the latest ANSI Z87.1 Standard and must be worn for all work activities other than administration work in the office and transportation to and from the job site. Side shields are required while working in the vicinity of energized parts with voltages greater than 50 volts.

11.0 Excavations

All excavations shall be in compliance with OSHA Construction Standard CFR 1926.652. Excavations greater than 5 feet shall be appropriately shored, sloped or benched. Ladders shall be used to access trenches greater than 4 feet deep.

12.0 Fall Protection

Fall protection will be provided following applicable OSHA standards and will include at a minimum the use of a body belt or full body harnesses with shock absorber lanyards. The intent of any supplied fall protection equipment or system shall be to ensure 100% fall protection for all exposed employees from any point higher than 4 feet above ground level.

13.0 Footwear

Employees of contractors or sub-contractors performing field operations of any kind are required to wear over the ankle safety-toe footwear that complies with ANSI Z41-1991. This includes all Transmission, Substation Maintenance, and warehouse functions.

14.0 GFCI Protection

All electrical tools, lights and extension cords used outside or in a damp, location must be of the low voltage type or GFCI protected. Power supplied at 120 volts from within a substation shall not extend outside the ground grid of the substation.

15.0 Housekeeping

Good housekeeping is fundamental to continuity of service and is essential for the prevention of accidents and fires, and shall be maintained in all company building yards, enclosures, vehicles and job sites.

16.0 Hard Hats

Workers will wear approved hard hats while on the work site. Hardhats shall be inspected and worn with the brim facing forward for eye/face protection.

17.0 Hearing Protection

Workers shall wear hearing protection while operating a rotary or jackhammer, chain saw, and any other equipment with high noise level. Hearing protection is required during any work procedure that is greater than 85db for a prolonged period.

18.0 Intoxicating Liquors and Drugs

The use or possession of intoxicating liquors on the job is strictly prohibited. Before starting work an employee who is taking any type of drugs for medicinal purposes shall notify their supervisor of any effect the drug might have. The supervisor shall take appropriate action to ensure the safety of all personnel.

19.0 Ladders

- 19.1 The use of any ladder will conform to all applicable OSHA regulations
- 19.2 Ladders shall be installed to prevent slipping that may include lashing or some other means to secure in place.
- 19.3 Portable ladders shall have nonconductive side rails if they are used where the employee or the ladder could contact exposed energized parts.
- 19.4 Fall protection is required when the portable ladder is used to access another work area, and a transition from the ladder to that work area is necessary (i.e., ladder to structural steel in a substation, ladder to crane catwalk). The ladder shall extend above an elevated walking surface by a minimum of 3 feet.
- 19.5 Fall protection is not required when working from a free standing step ladder, provided that the worker is not standing higher than two steps from the top and not sitting on the top of the ladder (as prohibited by OSHA regulations).
- 19.6 Fall protection is not required when working from a portable ladder if the ladder is against a flat wall for the purpose of working on that wall area (i.e., extension ladder placed against a wall for painting or access to repair a light fixture).
- 19.7 Where a ladder can be lashed to prevent falling it shall be and work positioning equipment shall be used. Workers must be cautioned against leaning or over reaching from either side of the ladder. Workers should maintain a 3 point positioning at all times when ascending and descending a ladder.

20.0 Life Jackets

While working where there is the potential for falling into a river, lake, headwater, etc., a USCG approved life jacket will be worn and properly fastened. In some cases where a fall potential also exists, suitable fall protection will be provided and worn in addition to the life jackets.

21.0 Lockout/Tagout and Switching

- 21.1 Contractor shall inform the Coordinator of any work involving protection or clearance on high voltage lines or equipment (above 600 volts). The specific work practices will be discussed with the VT TRANSCO Project Representative in advance to coordinate an outage.
- 21.2 Contractors and sub-contractors shall comply with applicable OSHA regulations concerning Lockout/Tagout for low voltage electrical circuits, and mechanical, hydraulic or pneumatic powered systems. Contractors and sub-contractors may be responsible for providing their own Lockout/Tagout devices where applicable.
- 21.3 Switching and tagging in accordance with 29 CFR 1910.269 (m) will be done by qualified VELCO employees only, unless specifically assigned.

22.0 Material Handling

Contractors whose duties require using rope, tackle and slings shall see that they are of sufficient strength to perform the work. All rope, Web, chain or wire rope slings shall be thoroughly inspected before each use. Slings used for rigging shall have a legible tag indicating the rating of the sling. No one shall stand or pass under any suspended load, tag lines shall be used.

23.0 Respiratory Protection

Proper and adequate respiratory protection will be used while working in any hazardous atmosphere that requires protection. Medical suitability to wear a respirator must be provided to VT TRANSCO for each employee expected to use respiratory protection during the project before commencing any work. Personnel using a respirator must be clean shaven.

24.0 Roofing Work

Fall protection for roofing work will comply with all the conditions of OSHA 1926.500(g). For all work in or around the roof edge area (area between warning line and roof edge) where employees are not protected by a suitable railing and the fall potential exceeds four (4) feet, Personal fall protection will be used. The use of a safety monitor will not be considered as a suitable alternative to personal fall protection.

25.0 Scaffolding

All scaffolding/staging will conform to OSHA design specifications as listed in the General Industry Standards (1926.451).

Requirements include but are not limited to the following: guardrails, toe boards, proper footing, proper planking, and safe access.

26.0 Spills

All oil spills that reach the ground shall be immediately reported to the coordinator by dialing 770-6261. On-site personnel shall make every effort to control and contain the spill if it is safe to do so.

27.0 Substations

- 27.1 Before beginning work in any VT TRANSCO substation that is, or could become, in service, the contractor/sub-contractor shall arrange with the Company for a VT TRANSCO representative to be on site during work.
- 27.2 All workers must contact the VT TRANSCO Coordinator upon entering a substation at 802-770-6261 or dial 261 or 262 on Substation extensions. State your name and your purpose to the Coordinator on duty.

28.0 All Terrain Vehicles

- 1. While operating an ATV: (four wheeler, six wheeler, four/six wheeler with tracks, snow mobile) a DOT (Department of Transportation) approved helmet **shall** be worn by the driver and passengers.
- 2. If the vehicle is equipped with seat belts they **shall** be worn.
- 3. Passengers **shall** only ride on the vehicle in the designated seat.
- 4. Eye protection **shall** be worn; if the helmet does not have an approved face shield then approved safety glasses **shall** be worn.

Exception: While operating the John Deere Gator on Pinnacle Ridge paved driveway seat belts **shall** be worn a helmet is optional as per dealer training.

29.0 Summary

This manual represents VT TRANSCO safe work practices and a portion of the OSHA regulations. The procedures and rules set forth in this document shall be followed at all times. However, the practices herein should not be relied on as the sole resource of work practices and procedures for the work scenarios that the contractor may encounter. The contractor is ultimately responsible for evaluating the work and determining suitable safe work practices. Any contractor rule that is more stringent than those contained herein shall take precedence. Questions about conflicts in practices, guidelines or rules, and interpretations of same, shall be directed to the Person-in-Charge and the Safety Manager.

Upon written request by the Safety Manager or Construction Manager, any contracted individual shall be terminated for the violation of safety rules or procedures.

Contact with questions:

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