

EVERSOURCE	SMS-POL-10.02.3	Revision 1
Safety Policy	Radiofrequency Safety Policy	
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Approvals:

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1. PURPOSE

This document provides the requirements that ensures that work is performed safely when working in areas containing Radiofrequency (RF) emitting equipment. For the purposes of this policy, RF emissions can be associated with any non-ionizing radiation in the range of 30 megahertz (MHz) to 300 gigahertz (GHz).

2. APPLICABILITY

This document applies to all Eversource employees who access areas which contain RF emitting equipment including pole antennas.

This document does not cover electric and magnetic fields associated with electric power generation, transmission, and distribution.

3. RESPONSIBILITIES

3.1 Organizational Leaders (Vice Presidents and above)

- 3.1.1 Create and lead a learning mindset that celebrates successes, learns from mistakes, and continuously improves safety.
- 3.1.2 Provide the necessary commitment and resources to successfully implement this document.
- 3.1.3 Understand the requirement of this document and lead by example.
- 3.1.4 Stop work and act to address potentially unsafety acts/conditions.
- 3.1.5 Raise questions and engage Eversource Safety as needed.
- 3.1.6 Embrace a Human and Organizational Performance (HOP) mindset.

3.2 Directors, Managers, and Supervisors

- 3.2.1 Understand the requirements of this document and lead by example.
- 3.2.2 Ensure training is implemented in a timely manner.
- 3.2.3 Report all incidents and concerns as directed by this document.
- 3.2.4 Stop work and act to address potentially unsafe acts/conditions.
- 3.2.5 Raise questions and engage Eversource Safety as needed.
- 3.2.6 Implement the requirement of this document.
- 3.2.7 Create and lead a learning mindset that celebrates successes, learns from mistakes, and continuously improves safety.
- 3.2.8 Embrace a Human and Organizational Performance (HOP) mindset.

3.3 Eversource Safety

- 3.3.1 Serve as a partner with all Eversource Organizations to create a learning mindset that celebrates successes, learns from mistakes, maintains compliance, and continuously improves safety.
- 3.3.2 Serve as a partner with all Eversource Organizations to help define the necessary commitment and resources needed to successfully implement this document.
- 3.3.3 Understand the requirements of this document and lead by example.
- 3.3.4 Stop work and act to address potentially unsafe acts/conditions.
- 3.3.5 Raise questions and engage.
- 3.3.6 Ensure all requirements of this document are integrated within applicable Eversource systems (e.g., SIMS), procedures, and work instructions.
- 3.3.7 Embrace a Human and Organizational Performance (HOP) mindset.
- 3.3.8 Provide technical assistance as requested to departments where RF sources are present or areas where RF source installation will be anticipated.
- 3.3.9 Assist Technical Training in the development and delivery of employee training programs.

3.4 Eversource Salaried/Hourly Employees

- 3.4.1 Understand and support a learning mindset that celebrate successes, learns from mistakes, and continuously improves safety.
- 3.4.2 Understand how this document applies and comply with the requirements.
- 3.4.3 Raise questions and engage Eversource Safety as needed.
- 3.4.4 Stop work and act to address potentially unsafe acts/conditions.
- 3.4.5 Embrace a Human and Organizational Performance (HOP) mindset.

4. REQUIREMENTS

4.1 Working Around Radiofrequency Generating Equipment

- 4.1.1 In New Hampshire, the Distribution Asset Repository System (DARS) shall be used to track antenna attached to Eversource equipment. (MA and CT use a different database for tracking antenna locations.)
- 4.1.2 Organizations who manage antenna from third-party entity contracts shall do so in coordination with the appropriate Third-Party Attachments group as specified in the table below:

Third-Party Attachments Groups		
Department	Region	Expertise
Distribution Technical Engineering, Berlin CT	CT	3 rd party attachments
Electric Field Operations Support, Hooksett, NH	NH	3 rd party attachments
Distribution Technical Engineering, Westwood, MA	MA	3 rd party attachments
Field Communications	Corporate	Technical resource

- 4.1.3 Each antenna shall be associated with a master agreement and assigned an agreement number.
NOTE: The prefix “WAA” is used in the system to identify if an attachment is an antenna.
- 4.1.4 Third-party antenna contracts shall stipulate that Eversource Safety and Field Communications have access to device information (i.e., EIRP in mW, frequency in MHz or GHz, gain in dBi, type of antenna (directional or omni) and the proposed type of attachment structure, etc. to assist in any potential safety evaluations or analyses.
- 4.1.5 RF safety distances shall not be confused with Electrical Minimum Approach Distances (MAD).
- 4.1.6 Antennas shall be considered active unless proven otherwise, such as visual evidence that the units have been powered down.
- 4.1.7 Personnel working near any RF emitting antenna shall obey any posted safety signage.
- 4.1.8 Field personnel with implanted medical devices, such as pacemakers, that could be impacted by RF emitting antennas, shall consult with their doctor and provide medical documentation to their supervisor and HR outlining any restrictions to normal work activities.

- 4.1.9 Third-party antenna installers shall install signage with safe working distance information on their devices.
- 4.1.10 Eversource field personnel working near a third-party antenna shall identify if it is marked with signage stating the safe working distance.
- 4.1.11 The third-party antenna may remain powered on if field personnel can perform their work outside of the safe working distance.
- 4.1.12 If work must be performed within the safe working distance or if the safe working distance is not known (for example, no signage or the absence of a safe working distance notification), the third-party antenna shall be powered down following the procedure referenced in Attachment 2.
- 4.1.13 Personnel who are not RF-trained shall not enter posted areas unless accompanied by a trained individual.

5. TRAINING REQUIRMENTS

5.1 Initial Training

- 5.1.1 Persons are required to work around RF antennae shall complete [eLearning: Radio Frequency Awareness](#) initial training prior to working on this equipment.

5.2 Refresher Training

- 5.2.1 Persons are required to work around RF antennae shall complete RF refresher training every three (3) years.

6. REFERENCES

- 6.1.1 29 CFR 1910.97, Radiofrequency
- 6.1.2 OET Bulletin 65 Edition 97-01, Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields.
- 6.1.3 A Local Government Official's Guide to Transmitting Antenna RF Emission Safety: Rules, Procedures, and Practical Guidance. FCC, June 2, 2000.
- 6.1.4 Construction Requirements for Distributed Antenna Systems (DAS) on Distribution Poles, C4404, Revision 5 (EMA)
- 6.1.5 Construction Requirement for Distributed Antenna Systems (DAS) in Communication Space, DTR 07.056 (CT, WMA, NH)

7. SUMMARY OF CHANGES

Rev No	Effective Date	Modification
0	04/09/2020	<ul style="list-style-type: none">Initial issue
1	3/7/2022	<ul style="list-style-type: none">Reformatted to comply with the SMS requirements.Modified work requirements to address 5G antenna systems

Attachment 1
Definitions
(Page 1 of 1)

Term	Definition
Antenna	Any communication equipment that may be company-owned and operated as well as equipment owned and operated by third-party entities such as cellular antennas attached to poles, rooftops, towers, etc. and creates radiofrequencies (RF).
Non-Ionizing Radiation	Electromagnetic radiation which has insufficient energy to ionize matter. RF and visible light are forms of non-ionizing radiation.
Safe Distance	The distance, as determined by the carrier, that Eversource and other non-communications personnel shall maintain to stay at or below the Maximum Permissible Exposure (MPE) for the General Public.
Radio Frequency (RF)	A measurement representing the oscillation rate of electromagnetic radiation spectrum, or electromagnetic radio waves, from frequencies ranging from 300 gigahertz (GHz) to as low as 9 kilohertz (kHz).

Attachment 2
Steps to Powering Off and On an Antenna
(Page 1 of 1)

Scheduled Work Requirements:

- Eversource is responsible for providing a 24-hour notice to the carrier prior to powering off antennas for scheduled work.
- The operational group responsible for the work order shall contact the carrier, (see the table below), to request the antenna be powered down for the estimated work period.

Emergency Conditions Requirements:

- Eversource may power down antennas without a 24-hour notice for emergency work.
- Eversource shall contact the carrier, (see the table below), once the work is complete, and the antenna is re-energized.
- To request shutdown of antenna, contact the carrier's Network Operations Center (NOC) number listed on the signage to arrange for shutdown.
- Eversource shall receive conformation from a Carrier they remotely shut down an antenna.
- Field employees may not rely on an indicator light to verify there is no power to the antenna.
- Field employees shall open the disconnect at the antenna unit or lift the service connections to ensure the unit cannot be powered back on while working.
- When work is complete, Field employees shall close the disconnect and/or re-attach the service connections.
- Field workers shall communicate to their supervisor that the antenna is ready for re-powering.
- The operational group responsible for the work shall notify the Carrier to re-power their antenna.

Carrier	Phone Number
American Tower (Martha's Vineyard)	1-877-518-6937
AT&T	1-877-231-5447
Crown Castle	1-888-632-0931
Extenet	1-866 892 5327
Mobilitie	1-877-244-7889
New Cingular Wireless	1-800-638-2833
Verizon Wireless	1-800-264-6620