



Reply to the attention of:

DEP/GIE/WRS

JUN 28 2007

Ms. Sally J. Scott
Franczek Sullivan, P.C.
300 South Wacker Drive
Suite 3400
Chicago, IL 60606

Dear Ms. Scott:

Thank you for your April 20, 2007, letter to the Occupational Safety and Health Administration's (OSHA's) Directorate of Enforcement Programs (DEP) regarding hazardous energy control (lockout/tagout or LOTO) on wind turbines. This letter constitutes OSHA's interpretation only of the requirements discussed and may not be applicable to any questions not delineated within your original correspondence. Your paraphrased scenario, question, and our reply follow:

Scenario: On a wind farm containing over 140 wind turbines, employees must perform work that requires the equipment to be tagged out. Since the electrical disconnects are located at the base of each tower, employees climb 200 feet to the top of the tower, determine whether tagout is required, and then climb 200 feet to the bottom to tagout the equipment. As such, it is very difficult for the employees (tower-employees) who have already climbed 200 feet to troubleshoot, to descend, isolate the energy source, and then climb to the top of the tower again to perform work.

The company would like to use a procedure that would allow the tower-employee to climb to the top of the tower, and if tagout is required, radio to an employee at the tower base (ground-employee) to de-energize/isolate the appropriate equipment. The ground-employee will repeat the instructions to the tower-employee, who, in turn, will confirm the instructions. The ground-tower employee will, using the appropriate isolation checklist for the equipment, document the equipment de-energization and apply the respective *Danger* tags. The ground-employee will radio to the tower-employee that the equipment has been isolated and tagged. The tower-employee will repeat the instructions to the ground-employee, who will confirm the instructions. The employee on the tower will verify de-energization by testing, attempting to start, etc. Once the tower-employee is satisfied that the equipment is safe to work on, he or she will instruct the ground-employee to place the tower-employee's personal protection (PP) tag on the de-energize/isolated equipment. Only then would the tower-employee commence work.

For re-energization, similar radio communications and confirmation steps will be performed between the tower-employee and ground-employee. When multiple employees are working up on the tower, the ground-employee will independently verify the instructions with each tower-employee before de-energizing or re-energizing the equipment. Each employee will have their own PP tags hung by the ground-employee and they also be given the opportunity to verify the equipment has been de-energized.

Question: Would this be an acceptable method of complying with §1910.147?

Response: No. The procedures you describe are not acceptable methods of compliance. As a threshold matter, please note that installations of electric utilities and equivalent installations of similar industrial establishments which engage in the generation, transmission, and distribution of electric power are covered by the energy control provisions of 29 CFR §1910.269, as opposed to 29 CFR §1910.147.

With respect to your scenario involving one tower-employee, 29 CFR §1910.269(d)(4) explicitly prohibits a practice, such as the one you describe, which permits any employee aside from the authorized employee who is performing the servicing or maintenance to place or remove a LOTO device. The core concept of LOTO is personal protection – i.e., each authorized employee must control his or her own personal LOTO device during servicing/maintenance work. The authorized employee, which in your scenario is the tower-employee, must be able to rely upon the fact that he or she applied the LOTO device and has control of the equipment's energy isolating device(s) while he or she is exposed to the hazards of the servicing/maintenance operation. As a result, the tower-employee's exclusive placement and removal of the lockout/tagout device is the only method, in this situation, which will guarantee that hazardous energy is controlled as required by 29 CFR §1910.269(d)(4).

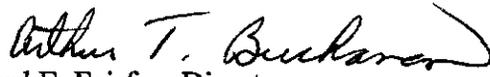
In addition to the one tower-employee scenario, you also describe a situation where multiple tower-employees will verify the application and removal of a lockout/tagout device with a single ground-employee. This practice, as you describe it, would be prohibited by 29 CFR §1910.269(d)(8)(ii)(D), for the same reasons as explained in the paragraph above. In group lockout/tagout situations, such as the one you describe, each authorized employee, in this case the tower-employees, must each individually affix and remove a personal lockout/tagout device to a group lockout device, group lockbox, or comparable mechanism when he or she completes or finished their work. 29 CFR 1910.269(d)(8)(ii)(D); *See also Secretary of Labor v. Exelon Generating Corp., LaSalle County Station*, 21 BNA OSHC 1087 (OSHRC Docket No. 00-1198, 2005).

You also note that the employer in question uses a tagout device, as opposed to a lockout device. Please note that when a tagout device is used on a lockable energy isolating device, a lockout device must be used unless the employer demonstrates that the use of a tagout system would provide *full employee protection*, pursuant to the provisions of the standard. See §1910.269(d)(2)(ii)(B).

Lastly, in order to reduce the difficulty and fatigue associated with ascending and descending the towers, the employer should consider the installation of energy isolating device(s) in a safe location on top of the tower. Although this is not required by 1910.269(d), this recommended design change may enhance employee safety while at the same time improve the efficiency of your servicing/maintenance process.

Thank you for your interest in occupational safety and health. We hope you find this information helpful. OSHA requirements are set by statute, standards, and regulations. Our interpretation letters explain these requirements and how they apply to particular circumstances, but they cannot create additional employer obligations. This letter constitutes OSHA's interpretation of the requirements discussed. Note that our enforcement guidance may be affected by changes to OSHA rules. Also, from time to time we update our guidance in response to new information. To keep apprised of such developments, you can consult OSHA's website at <http://www.osha.gov>. If you have any further questions, please feel free to contact the Office of General Industry Enforcement at (202) 693-1850.

Sincerely,


for Richard E. Fairfax, Director
Directorate of Enforcement Programs