

Department of Energy

Washington, DC 20585

August 13, 2019

Mr. Andrew Marto, Owner Marto Electric, LLC 29 Camino Yrissari Tijeras, New Mexico 87059

WEL-2019-02

Dear Mr. Marto:

The Office of Enterprise Assessments' Office of Enforcement has completed an evaluation into an electrical arc event that occurred when personnel entered the minimum approach distance of a 46-kilovolt (kV) energized electrical line with a digger-derrick truck at the Sandia National Laboratories' (SNL) Coyote Test Field, on April 11, 2018. Marto Electric, LLC (Marto Electric) was under contract to the National Technology and Engineering Solutions of Sandia, LLC (NTESS) to perform utility pole replacement at Coyote Test Field for the wood pole replacement project at SNL. When performing work at SNL, Marto Electric is required to follow the NTESS contract specific safety plan (CSSP), which requires Marto Electric to follow the DOE requirements codified in 10 C.F.R. Part 851, Worker Safety and Health Program. Based on this evaluation, the Office of Enforcement identified concerns that warrant management attention by Marto Electric.

The specific concerns relate to the electrical power distribution requirements invoked by Part 851. The electrical arc occurred when two Marto Electric personnel were positioning a digger derrick truck and pole trailer near an energized 46-kV overhead power line to retrieve salvage utility poles that were laying on the ground. While attempting to load the poles onto the trailer, the boom of Marto Electric's digger derrick truck entered the minimum approach distance of the power line, creating an electrical arc. The electrical arc severed the power line between two power poles, causing the power line to fall to the ground, immediately opening the supply breaker and de-energizing the cable. However, within seconds of the line hitting the ground, an electrical substation circuit re-closer automatically re-energized the line. The energized line, in contact with desert brush, initiated a fire. Marto Electric personnel attempted to extinguish the brushfire with portable fire extinguishers while emergency services was contacted. Efforts to extinguish the fire were unsuccessful, and Marto Electric personnel retreated to the assembly point to wait for emergency services.



The Office of Enforcement's evaluation of this event concluded that Marto Electric did not follow the requirements stated in the NTESS CSSP. The CSSP required Marto Electric to perform a pre-operation hazard assessment prior to retrieving the utility poles that addresses the digger derrick truck's proximity to the overhead power lines and to observe the minimum approach distance of 20 feet from energized lines. In addition, the CSSP required Marto Electric to request de-energization of the overhead power lines and to use a spotter to guide the digger derrick truck operator when required to work under or near any overhead power lines. These work performance deficiencies reveal potential violations of DOE requirements codified in Part 851.

The Office of Enforcement has elected to issue this Enforcement Letter to convey concerns about Marto Electric's operation of a digger derrick truck and pole trailer near energized overhead power lines. Issuance of this Enforcement Letter reflects DOE's decision to not pursue further enforcement activity against Marto Electric at this time in recognition of Marto Electric's corrective actions to address noncompliances revealed by the arc event. In coordination with the National Nuclear Security Administration, the Office of Enforcement will continue to monitor Marto Electric's efforts to maintain a safe workplace at DOE sites.

This letter imposes no requirements on Marto Electric and no response is required. If you have any questions, please contact me at (301) 903-7707, or your staff may contact Dr. Anthony Pierpoint, Director, Office of Worker Safety and Health Enforcement, at (301) 903-0100.

Sincerely,

Kevin L. Dressman

Director

Office of Enforcement

Office of Enterprise Assessments

cc: Jeffrey Harrell, NA-SN Randy Castillo, NTESS