

## **ELDORADO-LUGO-MOHAVE (ELM) SERIES CAPACITATOR PROJECT**

**Date:** February 5, 2021  
**To:** Eric Chiang, Project Manager, CPUC  
**From:** Vida Strong, Aspen Project Manager  
**Subject:** Monitoring Report #1: January 4 to January 31, 2021

### **Introduction**

This report provides a summary of the construction and compliance activities associated with Southern California Edison's (SCE) El Dorado-Lugo-Mohave (ELM) Series Capacitor Project (Project). Although the following list includes Project-wide components, this report is limited to construction and compliance activities under the jurisdiction of the California Public Utilities Commission (CPUC), which includes non-federal California lands. Overall project components include:

#### **■ Series Capacitors:**

- Construction of two new 500 kV mid-line series capacitors (i.e., the proposed Newberry Springs Series and Ludlow Series Capacitors) and associated equipment.
- Installation of two communication paths between the series capacitor sites, which includes approximately two miles of overhead and two miles of underground alignments.
- Providing station light and power to the proposed series capacitors by extending and/or rerouting existing lines to create approximately two miles of overhead and 700 feet of underground 12 kV distribution circuits.

#### **■ Repeater Facilities:**

- Construction of three new fiberoptic repeater facilities (Barstow, Kelbaker, and Lanfair) within the Lugo-Mohave right-of-way (ROW).
- Installation of distribution lines for light and power at the three proposed fiberoptic repeater sites.

#### **■ Overhead Clearance Discrepancies:**

- Relocation, replacement, or modification of existing transmission, subtransmission, and distribution facilities at approximately 12 locations along the Eldorado-Lugo, Eldorado-Mohave, and Lugo-Mohave 500 kV transmission lines to address 14 of the overhead clearance discrepancies.
- Tower modifications would include raising nine towers up to approximately 18.5-feet by inserting new lattice steel sections in tower bodies.
- Performing minor grading at two locations along the Lugo-Mohave 500 kV transmission line to address two of the overhead discrepancies.

#### **■ Optical Ground Wire (OPGW):**

- Installation of approximately 232 miles of OPGW which include approximately 59 miles on the Eldorado-Mohave transmission line, approximately 173 miles on the Lugo-Mohave transmission line, and approximately three miles of underground telecommunications facilities in the vicinity of the Mohave Substation.

- Modifications and strengthening of the ground wire peak of existing suspension towers where OPGW splices would occur (some of these towers would also require minor modifications to the steel in the tower body).

■ **Substation Upgrades:**

- Lugo Substation: Modifications to the existing series capacitors, installation of new terminating equipment, removal of two existing tubular steel poles (TSPs), and installation of two new TSPs on the Eldorado-Lugo and Lugo-Mohave 500 kV transmission lines.
- Eldorado Substation: Modifications on the existing series capacitors and upgrades to the terminal equipment on the Eldorado-Lugo 500 kV transmission line.
- Mohave Substation: Replacement of existing series capacitors on the Lugo-Mohave 500 kV transmission line and installation of new terminal equipment on the Eldorado-Mohave and Lugo-Mohave 500 kV transmission lines.
- Telecommunications Facilities: Installation of approximately 2,000 feet of underground telecommunications facilities within the existing Lugo, Eldorado, and Mohave Substations.

■ **Cathodic Protection (if necessary)**

- Installation of approximately 60 miles of Southern California Gas Company’s (SoCalGas) natural gas pipelines parallel to SCE’s Lugo-Mohave 500 kV transmission line and on other pipelines as needed.

**CPUC Environmental Monitors (EMs)**

CPUC EM, Elliot D’Antin, was onsite January 4, 2021, & January 30, 2021.

CPUC EM, Jamison Miner, was onsite January 20, 2021.

**CPUC Notices to Proceed (NTPs)**

Table 1 summarizes the NTPs issued for the Project by the CPUC, to date. Additional requests for NTP(s) are anticipated in March 2021.

<b>Table 1. CPUC Notices to Proceed</b>			
<b>NTP #</b>	<b>Date Requested</b>	<b>Date Issued</b>	<b>Description</b>
NTP #1	09/22/2020	12/14/2020	<ul style="list-style-type: none"> <li>▪ Modifications at the Lugo Substation</li> <li>▪ Mid-Line Series Capacitor Construction at Ludlow Series Capacitor 5</li> <li>▪ Distribution and Telecommunications Construction for Mid-Line series Capacitors and the Barstow Repeater</li> <li>▪ Staging Yard construction at the Ludlow Series Capacitor Yard</li> </ul>

**Construction & Compliance**

To date, all pre-compliance materials associated with NTP #1 have been approved by CPUC. Construction activities associated with NTP #1 began on January 4, 2021 and continued throughout the reporting period. These activities are currently limited to work within the Lugo Substation and at the Ludlow Series Capacitor.

A summary of construction and compliance activities for the reporting period is provided below.

### **Summary of Construction Activity**

During this reporting period, construction work only took place within the Lugo Substation (see Photos 1-8). Preconstruction surveys were conducted at the Ludlow Series Capacitor site so that construction work can begin in the following reporting period (see Photo 9-11).

Construction activities that were conducted at the Lugo Substation during the reporting period include:

- Mobilizing material and equipment
- Installation of best management practices (BMPs)
- Framing, drilling, and pouring foundations
- Wreckout of existing concrete platforms
- Trenching for grounding conduit

### **Environmental Compliance**

- There were no SCE self-reported or CPUC-issued compliance incidents identified during the reporting period.
- New Project personnel were provided with Worker Environmental Awareness Program (WEAP) training and sign-in logs were submitted to the CPUC.
- There were no SCE self-reported Stormwater Pollution Prevention Plan (SWPPP) maintenance items identified during the reporting period.
- There were no reportable (> 1 gallon) or non-reportable (< 1 gallon) spills identified during the reporting period.
- SCE provided the appropriate monitoring at all required work areas during the reporting period.
- No active nests were identified during the reporting period. To date, there are no active nests located within work areas authorized under NTP #1.
- Following appropriate procedures, three previously identified, inactive nests (common raven) were removed during the reporting period within Lugo Substation.
- One inactive nest (common raven) was discovered within Lugo Substation during monitoring and remained intact at the end of the reporting period. Two previously identified, inactive nests (unknown species) located at two towers adjacent to the Ludlow Series Capacitor sites were monitored for signs of activity. No activity was documented during the preconstruction survey efforts, and the two nests remain inactive and intact at the close of the reporting period.
- Preconstruction surveys were conducted at the Ludlow Series Capacitor site and associated work areas on January 27 and January 28. The CPUC EM confirmed appropriate staking was installed to avoid established Environmentally Sensitive Areas (ESAs).
- Four desert tortoise burrows were discovered during preconstruction surveys within the buffer area of the Ludlow Series Capacitor. With monitoring, no impacts are anticipated.
- Preconstruction surveys and staking along the Lugo-Mohave Transmission line began on January 27 and continued through the end of this reporting period.
- No special-status species were observed during the reporting period at Lugo Substation or the Ludlow Series Capacitor sites.

- A total of five tree events (chaparral yucca) were identified during preconstruction surveys for the Lugo Substation. The CPUC EM confirmed that the appropriate staking was installed to avoid impacts at these locations (see Photo 4).

### **Minor Project Refinements (MPRs) and Temporary Extra Workspaces (TEWS)**

There were no MPRs or TEWS requested or approved during the reporting period.

### **CPUC Incident Reports, Project Memoranda (PMs) and Non-Compliance Reports (NCRs)**

No CPUC Incident Reports, PMs, or NCRs were issued during the reporting period.

## PROJECT PHOTOGRAPHS



**Photo 1:** Conex trailer being delivered to the Lugo Substation (photo courtesy of SCE; January 11, 2021).



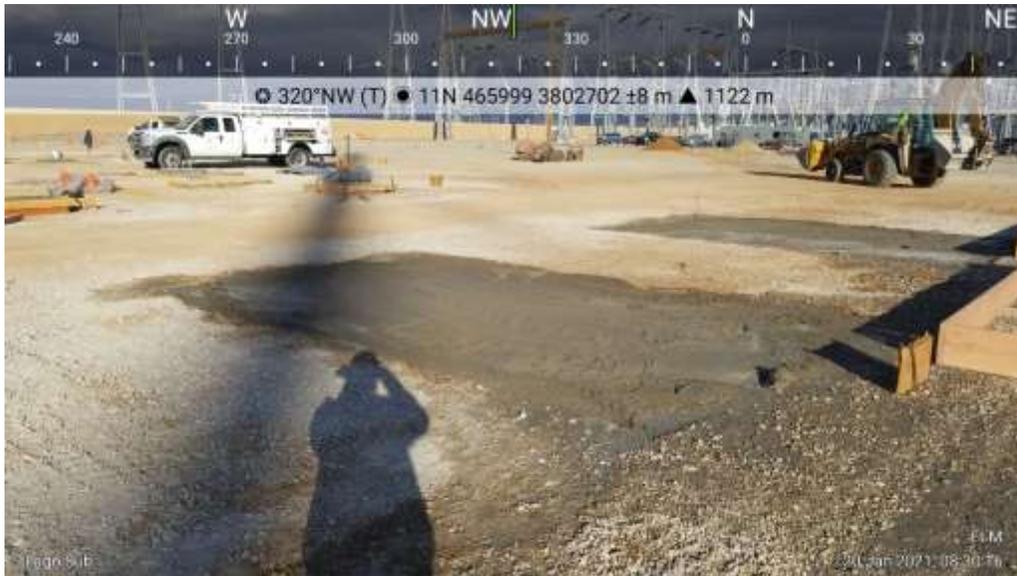
**Photo 2:** BMPs installed at equipment staging area in the Lugo Substation (photo courtesy of SCE; January 4, 2021).



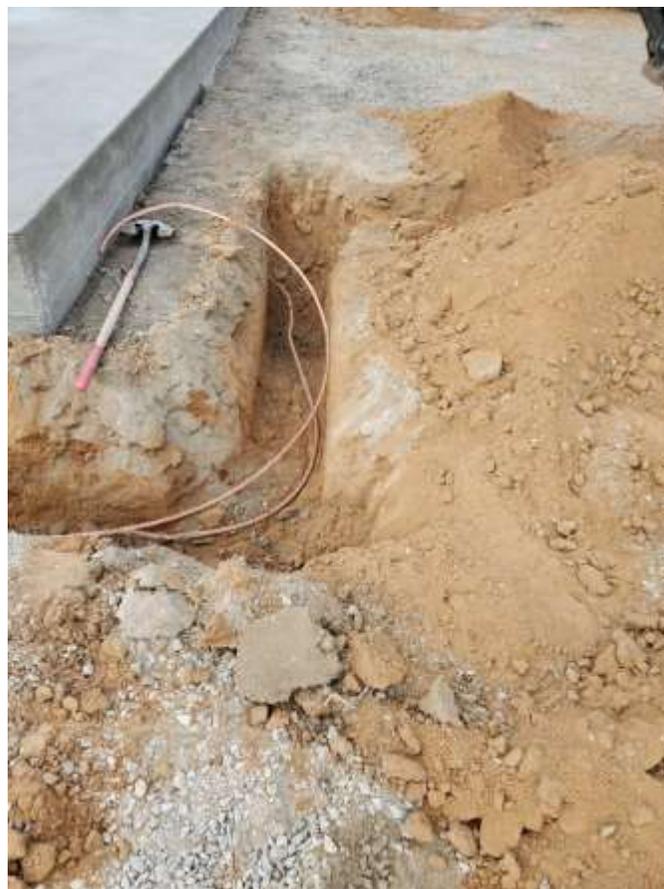
**Photo 3:** Foundation drilling occurring at the Lugo Substation (photo courtesy of SCE; January 12, 2021).



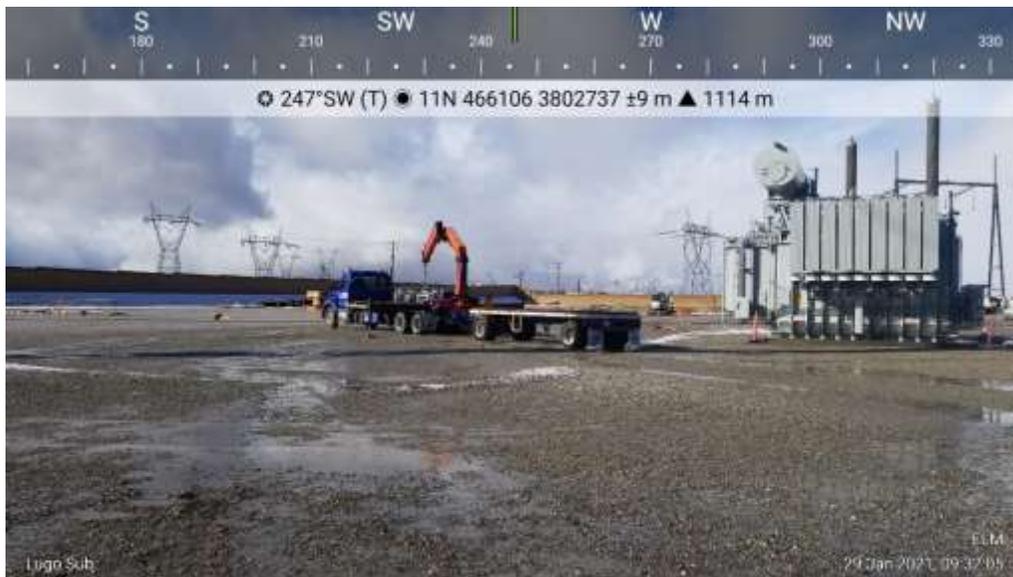
**Photo 4:** The CPUC EM verified avoidance staking at tree events at the Lugo Substation (January 4, 2021).



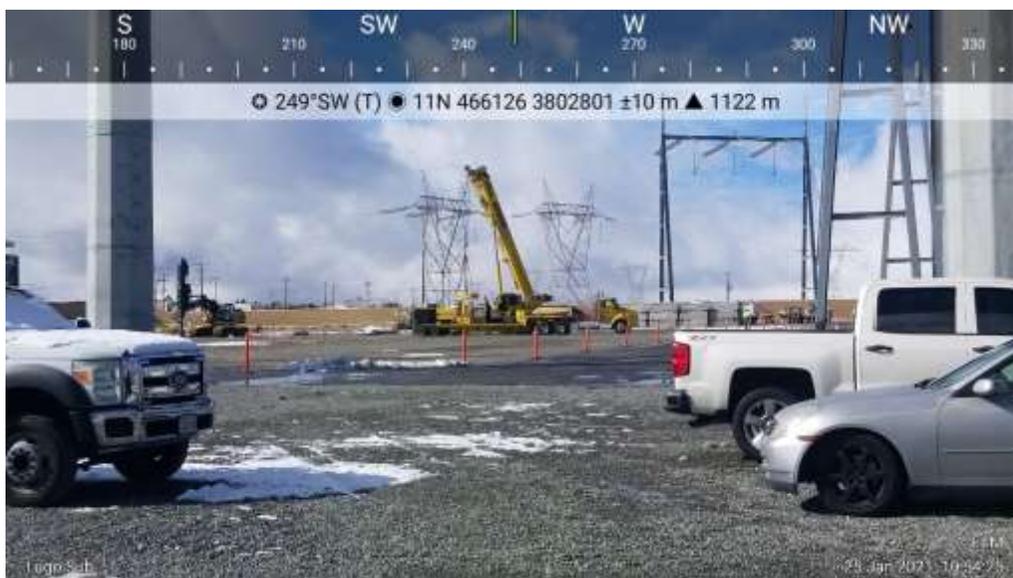
**Photo 5:** Pouring concrete foundations at Lugo Substation (photo courtesy of SCE; January 20, 2021).



**Photo 6:** Trenching for ground wire at Lugo Substation (photo courtesy of SCE; January 23, 2021)



**Photo 7:** Equipment staging within the Lugo Substation, (photo courtesy of SCE; January 29, 2021).



**Photo 8:** Mobilizing crane and counter-weights (photo courtesy of SCE; January 25, 2021).



**Photo 9:** Overview of Ludlow Series Capacitator work area staking, view northwest (January 30, 2021).



**Photo 10:** Overview of Ludlow staging area, view southeast (January 30, 2021).



**Photo 11:** Overview of splicing site, tower M69-T1, view southwest (January 30, 2021).