

ELDORADO-LUGO-MOHAVE (ELM) SERIES CAPACITATOR PROJECT

Date: March 9, 2021
To: Eric Chiang, Project Manager, CPUC
From: Vida Strong, Aspen Project Manager
Subject: Monitoring Report #2: February 1 to 28, 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 February 3 and 25, 2021.

CPUC LEM, Jamie Miner, was onsite February 19, 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.

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

Construction & Compliance

A summary of construction and compliance activities is provided below by NTP.

NTP #1

Allowed construction activities under NTP #1 are summarized in Table 1 above. 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.

Summary of Construction Activity

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

1. For the currently approved substation, distribution, and telecommunications components, construction activities are being performed by SCE crews. Currently approved components associated with construction of the Ludlow Series Capacitor and adjacent yard are being performed by Beta-Siemens.
2. Construction activities that occurred at the Lugo Substation during the reporting period included staging materials, wreck-out of existing concrete pads, trenching, drilling foundations, pouring concrete, setting conduit boxes, backfilling, exporting materials, assembling racks and A-frames, setting beams, and grounding (see Photos 1 and 2).
3. Construction activities associated with the Ludlow Series Capacitor and Mid-Line that occurred during the reporting period included delivery of materials and equipment, installation of BMPs, and grading (see Photo 3).
4. To date, activities associated with the Lugo Substation are approximately 23 percent complete and activities associated with the Ludlow Series Capacitor and Mid-Line are less than one percent complete.

Environmental Compliance

1. One CPUC Incident Report and one CPUC Project Memorandum associated with NTP #1 were issued to date. These are summarized in Table 2, below.
 - On February 3, 2021, the CPUC EM observed construction activities occurring at the Ludlow Series Capacitor Yard without required monitors present. BETA provided a response on February 19, 2021 and indicated that no work occurred within the established buffer for sensitive resources at the site. As such, BETA contended that all work occurred at a distance where monitoring would not be required. As a final resolution, SCE submitted a map revision to the area in question which reduced the work site boundaries to a farther distance from the sensitive resources. The CPUC confirmed that the reduction of the project limits would be an acceptable approach in lieu of the required monitoring.
 - On March 5, 2021, the CPUC EM observed that construction crews had performed vegetation removal and grading activities at the Ludlow Series Capacitor Yard prior to the installation of required desert tortoise exclusionary fencing, as required by the CDFW Incidental Take Permit, which had yet to be initiated at the time of the EM's observation (see Photo 4). According to SCE Daily Monitoring Reports, there were no impacts to desert tortoise or other sensitive resources documented. Additionally, the CPUC EMs identified several instances where monitors who have not received CPUC concurrence have been utilized in the field throughout the reporting period.
2. There were no SCE self-reported incidents associated with NTP #1 documented during the reporting period.

3. There were no SWPPP maintenance items or corrective actions associated with NTP #1 recorded during the reporting period. To date, there are no open SWPPP maintenance items or corrective actions associated with NTP #1.
4. There were no reportable (>1 gallon) or non-reportable (<1 gallon) spills associated with NTP #1 identified during the reporting period.
5. As of the end of the reporting period, there were four active nests (common raven, red-tailed hawk) located within work areas associated with NTP #1. If required, nest management, including establishment of buffers and the removal of inactive non-special-status bird species' nests, is being implemented per the requirements of the project Nesting Bird Management Plan (NBMP). Two inactive nests were removed during the reporting period (see Photo 5).
6. Special-status species observed at work sites associated with NTP #1 during the reporting period included desert kit fox.

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)

One CPUC Incident Report and one CPUC Project Memorandum was issued during the reporting period. Table 2 summarizes the compliance infractions to date.

Table 2. CPUC Incidents, Project Memoranda (PM), and Non-Compliance Reports				
Incident/ PM/NCR	Regulatory Requirement	Date Issued	Location	Description
INCIDENT REPORTS				
Level 1 Incident	MM CR-5	02-04-21	Ludlow Series Capacitor	<ul style="list-style-type: none"> ▪ On February 3, 2021, the CPUC EM documented no monitors present in an area where monitoring is required.
PROJECT MEMORANDUMS				
PM 001	ITP 8.8 MM BR-1	03-08-21	Ludlow Series Capacitor Lugo Substation	<ul style="list-style-type: none"> ▪ On March 5, 2021, the CPUC EM observed project activities that had occurred prior to the installation of required desert tortoise exclusionary fencing. Several records identified of monitors commencing activities onsite prior to CPUC concurring with agency approvals.

PROJECT PHOTOGRAPHS



Photo 1: Burial of trenching for grounding wire at Lugo Substation. View southwest. (February 11, 2021).



Photo 2: Dead-end structure A-Frames within Lugo Substation. View southeast. (February 25, 2021).



Photo 3: Grading activities at Ludlow Series Capacitor Work Area. View southwest.
(February 3, 2021).



Photo 4. Grading activities at the Ludlow Series Capacitor Yard prior to installation of desert tortoise exclusionary fencing (March 3, 2021).



Photo 5: Removal of inactive, common raven nest within Lugo Substation IV, Laydown Yard. View south. (February 3, 2021).