



GENERAL ORDER 174

SUBSTATION

REPORT FOR

2023

This report presents the annual inspections and maintenances of substation facilities results of City of Moreno Valley Electric Utility (MVU) covering the period from January 1, 2023, to December 31, 2023. All items requiring repair and maintenance were addressed and corrected on the day they were identified, ensuring efficient resolution. In cases where parts needed to be ordered, repairs were scheduled for a later time, as indicated in the attached detailed report.

MVU's aim during General Order 174 inspections is to plan, report and maintain substation equipment in a timely manner in accordance with General Order guidelines and manufacturer standards and recommendation. Our substation maintenance is performed by the substation constructor and equipment manufacturer.

GENERAL ORDER 174

2023

MAINTENANCE

REPORT

The City of Moreno Valley conducts regular monthly visual inspection of all substation components including recording and communication of all reads of alarms, fluid levels, meters, and LTC settings for follow up analysis.

MORENO VALLEY SUBSTATION

Spring and Fall maintenance at Moreno Valley Substation located on Moreno Beach Dr. includes transformers/LTCs, high voltage breakers, high voltage switches, pad-mounted switches, capacitor banks, battery testing, 12kV switchgear, including trip-testing and substation grounds inspection. Below is the table showing City of Moreno Valley's detailed inspection and maintenance activities performed.

2023 MVU General Order 174 Maintenance Summary – Moreno Valley Substation

Types of Equipment	Total Equipment	Total Inspected	Total Repaired/Replaced
Transformers/LTCs	4	4	n/a
High Voltage Breakers	2	2	n/a
High Voltage Switches	5	5	n/a
Pad Mount Switches	4	4	n/a
Capacitor Banks	2	2	n/a
Batteries	20	20	n/a
Switchgear	11	11	n/a

During calendar year 2023, there were no deficiencies found with any of the equipment at the time the detailed inspections were made at the Moreno Valley Substation.

MORENO VALLEY SOUTH SUBSTATION

Spring and Fall maintenance at Moreno Valley South Substation located on Nandina Ave. includes transformers, high voltage breaker, pad-mounted switches, battery testing and 12kV

switchgear. Below is the table showing City of Moreno Valley's detailed inspection and maintenance activities performed.

2023 MVU General Order 174 Maintenance Summary – Moreno Valley South Substation

Types of Equipment	Total Equipment	Total Inspected	Total Repaired/Replaced
Transformers	3	3	n/a
High Voltage Breaker	1	1	n/a
Pad Mount Switches	4	4	n/a
Batteries	20	20	n/a
Switchgear	5	5	n/a

KITCHING SUBSTATION

Just like the Moreno Valley Substation on Moreno Beach, Spring and Fall maintenance at Kitching Substation located on Kitching St. also includes transformers/LTCs, high voltage breakers, high voltage switches, pad-mounted switches, capacitor banks, battery testing, 12kV switchgear, including trip-testing and substation grounds inspection. The table below outlines the detailed inspection and maintenance activities conducted by the City of Moreno Valley.

2023 MVU General Order 174 Maintenance Summary – Kitching Substation

Types of Equipment	Total Equipment	Total Inspected	Total Repaired/Replaced
Transformers/LTCs	4	4	n/a
High Voltage Breakers	2	2	n/a
High Voltage Switches	4	4	n/a
Pad Mount Switches	4	4	n/a
Capacitor Banks	2	2	n/a
Batteries	60	60	n/a
Switchgear	13	13	n/a

During calendar year 2023 detailed inspections, the only issues found at Kitching Substation were the broken counter for 52-1 M1 15kV breaker and an unchanging counter for the 52-2 Perris circuit. Deficiency on the Perris breaker has been successfully corrected. To repair the

issue with the counter for the 52-1 M1 15kV breaker, parts have already been ordered and are scheduled for repair in spring 2024.