GridLiance West LLC
And
Valley Electric Association

Transmission Line Circuit Availability
Performance Report

2023
Contents
A. INTRODUCTION ........................................................................................................... 3
B. APPROACH TO AVAILABILITY PERFORMANCE ANALYSIS ................................. 3
C. PERFORMANCE INDICES ............................................................................................ 3
D. DISCUSSION OF RESULTS ........................................................................................ 3
E. CONTROL CHARTS ....................................................................................................... 4
A. INTRODUCTION
The 2023 GridLiance West LLC (GLW) and Valley Electric Association (VEA) Transmission Line Circuit Availability Performance Report is developed to provide California Independent System Operator Corporation (CAISO) system availability performance measurements between January 1, 2023 and December 31, 2023. This report is submitted to comply with the maintenance reporting requirements outlined in the Transmission Control Agreement (TCA), California Public Utilities Code 348 and the CAISO Tariff.

VEA became a Participating Transmission Owner (PTO) in the CAISO on January 2nd, 2013. VEA owns and operates 138 kV voltage class transmission line. In 2017, VEA sold its 230 kV voltage class transmission lines to GLW, and GLW became a PTO in the CAISO. These transmission lines are under the CAISO operational control (Note: VEA’s 138 kV transmission lines are classified under 115 kV voltage class per the TCA Appendix C defined voltage classes). Neither GLW nor VEA have complete historical transmission outage data prior to GLW or VEA becoming a PTO at CAISO. Collection of outage data for the purposes of Control Charts started from January 1, 2013.

B. APPROACH TO AVAILABILITY PERFORMANCE ANALYSIS
GLW and VEA using annual historical data, will develop a base line for Controls Charts. The base line will establish the Availability Measure System used to measure the annual availability performance of all the transmission line circuits in a voltage class and establish the Availability Measure Target for transmission line circuits in a voltage class. The availability performance goals will be jointly established by the CAISO, GLW and VEA and will be chosen as the principal determinant of GLW’s and VEA’s maintenance effectiveness.

C. PERFORMANCE INDICES
Control Charts will include three indices: Annual Average Forced Outage Frequency of all Transmission Line Circuits, Annual Average Accumulated Forced Outage Duration of Only Transmission Line Circuit with Forced Outages and Annual Proportion of the Transmission Line Circuit with No Forced Outages.

All transmission outages will be classified and documented, certain types of outages will be excluded from the data set used in the Control Charts. The excluded outages include:
- Scheduled Outages;
- Outages classified as —Not a Forced Outaged in the Maintenance Procedures;
- Forced Outages caused by events originating outside of GLW’s or VEA’s system;
- Forced Outages demonstrated to have been caused by earthquakes.

D. DISCUSSION OF RESULTS
The long duration of the outage that occurred in 2022 on the 138kV line was due to a scheduled construction project submission within the forced outage window.

Outage durations on the 230kV system increased due to inclement weather and in order to maintain SOL limits.
E. CONTOL CHARTS

115 kV Voltage Class

138kV Transmission System Availability by Year

Frequency of Forced Outages - 138kV
230 kV Voltage Class

![230kV Transmission System Availability by Year](chart1.png)

![Frequency of Forced Outages - 230kV](chart2.png)