# Indicator 2: Rate of Protection System Misoperations



### What it measures

Indicator 2 measures the effectiveness of protection systems in safeguarding system reliability.



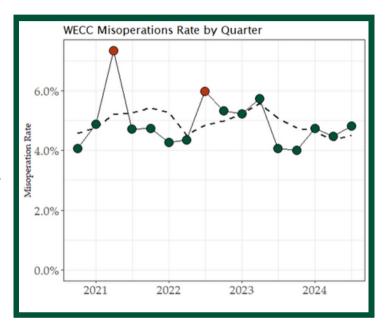
Indicator Performance History

#### How it is measured

Indicator 2 tracks the ratio of protection system <u>misoperations</u> to the total number of protection system operations.

## Why this matters

System reliability is reduced when protection systems fail to operate, or they operate incorrectly ("misoperation"). Misoperations are a major contributor to transmission outage severity.



## What does the Q3 2024 evaluation tell us?

There were 54 misoperations reported in Q3 2024 along with 1,125 misoperations resulting in a misoperations rate of 4.8%. The leading causes for misoperations in the third quarter of 2024 were Incorrect Settings (22), Relay Failures/Malfunctions (9), and Unknown Cause (6). Two of the Unknown Cause misoperations were failures to trip with a fault on the system. They are generally considered the most significant category of misoperations, and without a known cause and applied corrective action there is a higher likelihood of a repeat misoperation. The 4.8% misoperations rate is favorable, resulting in this indicator being green for the quarter.

