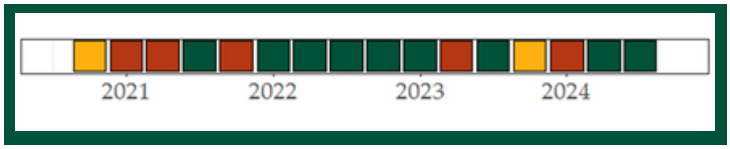
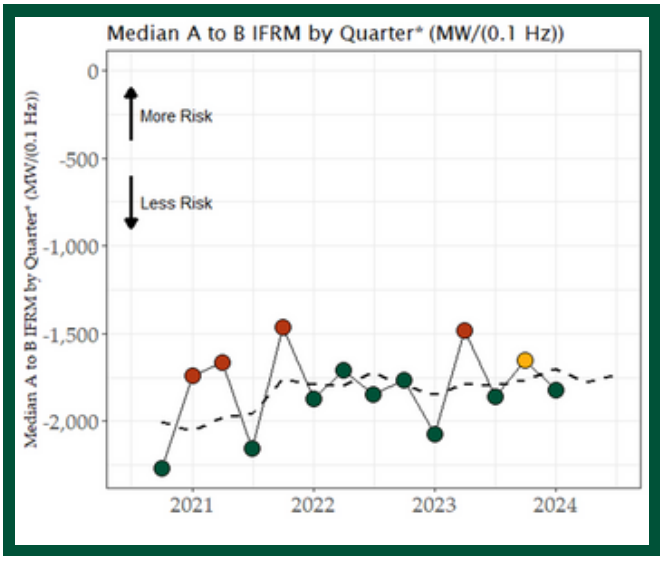
Indicator 6: Interconnection Frequency Response and Performance

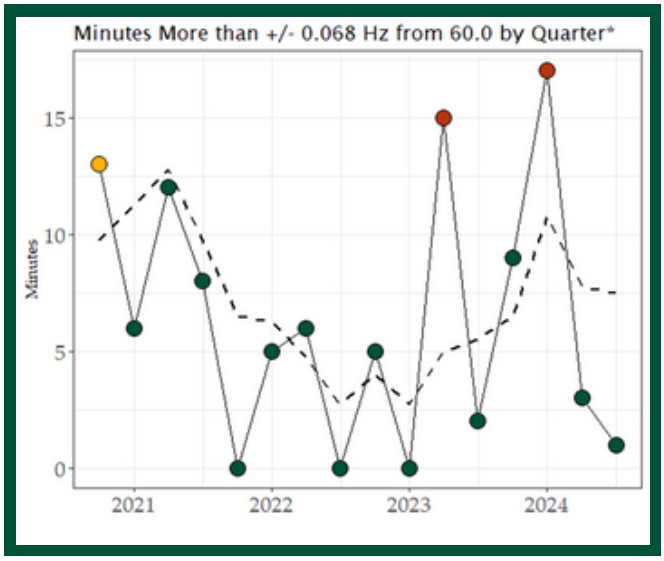
What it measures

Indicator 6 measures the system's ability to respond to changes in frequency and maintain 60 Hz frequency.



Combined Indicator Performance History





How it is measured

Indicator 6 is based on two characteristics of system frequency:

1. Frequency response to large disturbances—Frequency stability in response to events such as sudden generation or load loss, measured by NERC's A-B IFRM metric.
2. Frequency performance under normal frequency behavior—Frequency stability at all times, measured as the number of minutes with a mean frequency exceeding +/-0.068 Hz from 60 Hz.

Why this matters

Frequency should be kept as close to 60 Hertz as possible. When large disturbances occur, frequency should not deviate far from 60 Hertz and should be restored quickly. Maintaining frequency is a coordinated effort among BAs to balance generation and load. When one BA is unable to perform this balance, it can adversely impact the entire interconnection and, if not resolved, can lead to issues on the BPS that may include shedding firm load.

What does the Q3 2024 evaluation tell us?

Beginning with Q1 2022, Indicator 6 has been modified to use the "operating calendar," rather than the "standard calendar." Per the operating calendar, December 2021 through February 2022 represents the first quarter of the 2022 operating year. This change will align Indicator 6 with the meeting, data availability, and reporting schedule of the NERC Resources Subcommittee (RS), which is the source of the IFRM data supporting this indicator. Other indicators will continue to use the standard calendar.

The number of frequency events (2) this quarter was not sufficient to evaluate frequency response. So, for this quarter, Indicator 6 will be based entirely on the system frequency measure and not on frequency response. The interconnection had only one instance when frequency declined past 0.068 Hz for one minute. Indicator 6 is green for the quarter and well below the mean.

DATA SOURCE

NERC IFR Master Event List (Redacted)