Debug: Baseline peak frequency = 3000.00 Hz, Current peak frequency = 3000.00 Hz

**Numerical Metrics:** 

Spectral Divergence Index (SDI): 1.34

Root Mean Square Error (RMSE): 0.35

Dominant Frequency Shift (DFS): 0.00 Hz

Signal-to-Noise Ratio (SNR): 6.99 dB

Confidence Interval (CI) for SDI: ±0.9799

Estimated Time-to-Collapse (TCE): 742.49 minutes

System vibrations are within safe limits.

