



THE POWER OF INNOVATION

The EMI Monitoring system offers visualization of the spectrum bands and total power bands through National Instruments' InsightCM™. Each system includes one license for InsightCM™. To the left is an example of a Waterfall Graph showing time series data of a worsening issue in the exciter/collector area.

ELECTRO-MAGNETIC INTERFERENCE (EMI) MONITORING

The EMI system monitors abnormalities from energized, high voltage assets. It looks for patterns and signatures in RF spectrum to indicate potential failures along the generator and out to the IsoPhase Bus.

Alarm levels are set when power levels within a band exceed a threshold; the thresholds may be configured by the user. The intent is to maximize the detection of potential failures before they occur, resulting in plants' ability to reduce their operation & maintenance budgets, while having fewer catastrophic outages.

EMI is able to detect a variety of failure modes, including:

- Arcing
- Coronal Discharges
- Gap Discharges
- Partial Discharges
- Sparking
- Random Noise

The EMI Monitoring system offers a cost-effective alternative to traditional methods of failure detection. When compared with traditional methods, Cutsforth™ EMI Monitoring offers the following benefits:

- Lower Costs
- Fewer surprise outages
- Plants own and control their own data
- Holistic view of generator and auxiliary equipment health in one application
- Intuitive waveforms allow plant personnel to determine when potential failures may occur to better allocate time and capital resources
- Requires an NI InsightCM™ license (included with the system)



The automated assessment tool categorizes time domain waveforms to better determine failures.