



## Resolving signal issues detected by the Emerson's 6500 ATG Protection System

Natural Gas Distributor prevents potential trip and shutdown caused by loose wiring and connections.



6500 ATG Protection System Detects Signal Issue on Generator



Replaced Loose Wiring and Connectors To Prevent Trip and Shutdown

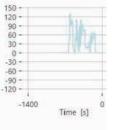
## **CUSTOMER**

A large public natural gas utility company using Emerson's advanced 6500 ATG Protection System installed on power generation units

## **CHALLENGE**

The customer has Emerson's 6500 ATG Protection System installed on the generator and detected a signal issue which prompted a call to Novaspect, an Emerson Impact Partner, to investigate and provide actionable recommendations. Novaspect's Reliability Services Specialists performed troubleshooting to diagnose the spiking vibration signal and determined it was coming from a poor connection at the velocity sensor. However, the system health check and service work needed to be postponed until the customer could schedule a shutdown for the affected unit and avoid a costly unplanned outage.





During the customer's planned shutdown, Novaspect completed the system health check and discovered the velocity sensor cable connectors are a slip-on style environmental connector and the contact felt loose and weak on most of them. The technician performed a simple connection "wiggle" test while monitoring the 6500 ATG Machine Studio software which recorded approximately 120 mils on the sensor after an extremely light touch. This spike in energy would have resulted in a trip and shutdown of the generator.

## **SOLUTION**

Novaspect replaced the loose velocity sensor connector cables with screw-on style connectors which provide a positive electrical connection and have a low risk of accidental disconnection.

