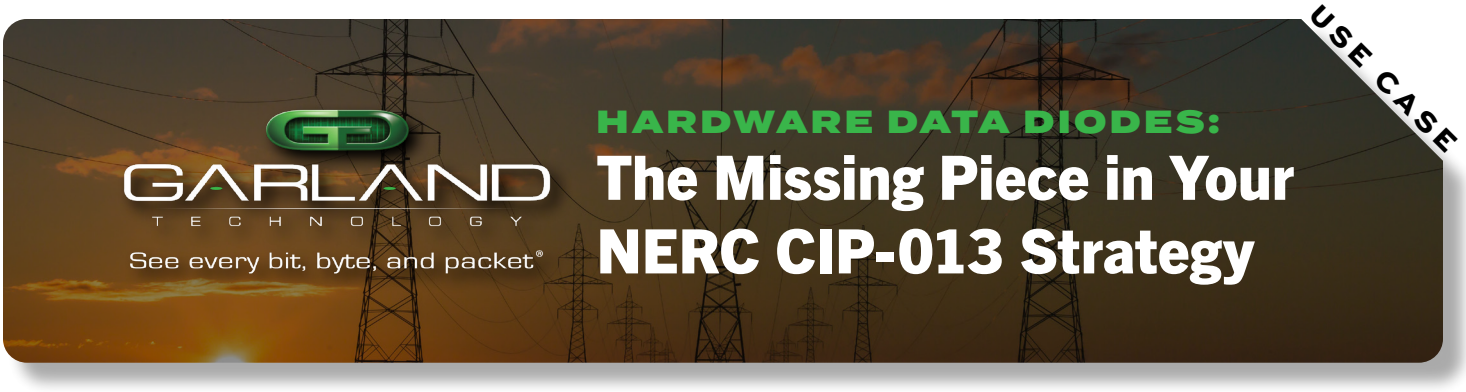


Challenge

Critical infrastructure is one of the most targeted sectors of cyberattacks globally. To combat the devastating effects of a successful cyberattack that could result in data breaches, system failures and a potential shutdown of the energy grid, NERC (North American Electric Reliability Corporation) has enacted a series of cybersecurity standards to help protect the bulk electric system in the United States. To maintain compliance with NERC CIP–013 requirements for both high and medium impact BES (Bulk Electric System) cyber systems, a regional energy organization is instituting new policies and procedures across their OT networks.

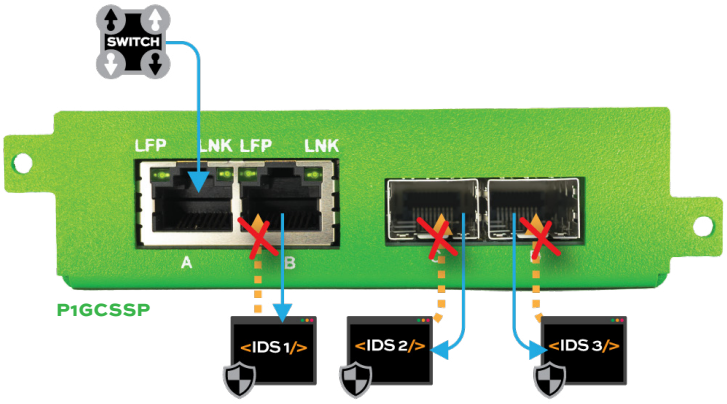
The TAP to Tool™ Solution

In order to comply with the new requirements, all of the power stations deemed medium and high impact needed to ensure that their industrial switches, which traditionally are bidirectional in nature, can guarantee unidirectional traffic flows, proving that they would not be a point of entry for a potential cyber attack.

Garland Technology has several simple, hardware-based solutions that can be retrofitted into existing OT environments, providing unidirectional traffic guarantees through the use of Hardware Data Diodes and Data Diode TAPs. In this case, the customer chose to utilize the mirroring capability of their existing industrial switches to feed multiple tools for continuous monitoring and anomaly detection. A Hardware Data Diode connected to each switch's mirror port provides the physical, unidirectional path for traffic flowing from one location to another without the possibility of traffic flowing in the reverse direction. A simple, plug-and-play solution with no management required.

Benefits

- Physical data diode removes risk of software misconfiguration
- Eliminates risk of inbound cyber attacks from that point in the network
- Reduces complexity of deployment
- Cost effective solution to meet NERC CIP mandates
- US manufactured, controlled and secure supply chain
- No technical personnel needed to install



Have Questions?

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