INTEGRATED SECURITY CORPORATION™





Meeting NERC-CIP 014 intrusion detection requirement

MEETING NERC-CIP 014 PERIMETER INTRUSION DETECTION REQUIREMENTS

ISSUE: Electrical power plants and substations require critical protection shielding them from physical attacks which can cause extreme damage and downtime. It is essential that the country's bulk power system operate as efficiently as possible without unnecessary interruption. Inadequate physical security at these sites would leave the bulk power system exposed to damaging security threats.

The NERC-CIP 014 guidelines were instituted in 2014 out of this crucial need. These guidelines mandate stricter security measures for critical locations composing the bulk power system. Owners and operators of these sites require a plan which adequately addresses risks faced by their critical sites. NERC-CIP 014 guidelines mandate that these personnel must conduct a risk assessment of their critical facilities, evaluate potential threats and vulnerabilities, and implement a security strategy which protects their sites from these destructive physical attacks.

The Hydra Asset Protection System is Integrated Security Corporation (ISC)'s solution for these critical sites. Hydra is a perimeter intrusion detection system (PIDS) that is unlike any other, with unparalleled flexibility and industry leading low false alarm rates.



SOLUTION: ISC designed Hydra to secure highly critical sites like those which are integral to the bulk power system. Hydra uses cutting-edge technology that is unavailable with any other PIDS. Hydra hardware is easier to install than traditional wired PIDS. Hydra sensors don't need power or trenching at the fence line and are battery powered for uninterrupted multi-year operation.

Another aspect that sets Hydra apart within the NERC-CIP 014 guidelines is the dual-detection system. Hydra requires both passive infrared (PIR) detection and a subsequent accelerometer detection.

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This design allows Hydra to maintain tremendous accuracy registering actual intrusion attempts while successfully filtering out false alarms. Hydra also includes a high-pass filter so it's unaffected by events with a low frequency vibration, like wind, that often generate false alarms for other systems. This is another reason why numerous utilities have chosen Hydra for their sites.



CONCLUSION: When dealing with NERC-CIP 014 guidelines, critical facilities must be prudent in deciding how to ultimately secure their site. This was a major driving force in the design of the Hydra Asset Protection System. Hydra provides superior detection quality while allowing these critical sites the advantage of a system that is easy to install and well within a utility budget.

Once the hardware components are installed, Hydra is configured using a simple, web interface. Operators can use menus to easily adjust sensitivity levels or zone assignment of a sensor. Adjustments to site hardware are just as easy. If it's determined the site needs extra hardware, adding each additional sensor is as easy as securing it to the fence with two steel tie wraps in mere moments.

Hydra was designed with a very specific purpose of securing highly critical sites like those designated within the NERC-CIP 014 guidelines. Hydra's numerous advantages over other PIDS make it the superior choice for helping to meet NERC-CIP 014 compliance standards.