Power Substation Security
Enhanced Video Verification Solutions
Due to their remote locations and valuable assets power substations are often targets for theft and vandalism. When an intrusion occurs swift action must be taken to minimize damage to people, property and service. An advanced security camera system can provide immediate alerts to security or monitoring personnel who can take control of the cameras, verify a break-in, communicate warnings to intruders, and quickly dispatch authorities to the scene.

**Video Verification for Security**

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**Video Supervision for Operations**

Video surveillance cameras are a valuable tool for monitoring crews and equipment within a substation to improve safety and operations. An advanced security camera system can include:

- Cameras that interface with SCADA monitoring and can focus on faulty equipment to help diagnose issues before dispatching repair crews
- Thermal cameras that can alert personnel when the temperature of substation components exceed operational thresholds

**Deployable Video Surveillance Units**

Complete video surveillance systems enclosed in rugged, portable housings that easily attach to a utility pole or building and require only 110 VAC for power. Each unit features high-definition cameras, onboard video storage, and an advanced 4G LTE cellular data modem.

**VX400 Covert Deployable Pole Camera Unit**

Features an AXIS 10x optical zoom PTZ camera in a rugged covert housing that resembles a power transformer.

**VP400 Multi-Camera Deployable Unit**

Features an AXIS 10x optical zoom PTZ camera and 3 AXIS fixed cameras for a continuous 220 degree field of view.

**VP100 Wireless Pole Camera Unit**

Features an AXIS Ultra 4K HD camera with built-in infrared illumination and optional thermal camera.

**NDAA Compliant Camera Systems**

Every i2c video surveillance system utilizes NDAA compliant cameras that are approved for use in critical infrastructure and follow cybersecurity best practices.

**AXIS High-Definition IP Cameras**

NDAA compliant cameras that are approved for use in critical infrastructure and renowned for their reliability and following cybersecurity best practices. Cameras can include built-in microphone, infrared illuminators, thermal imaging, and pan, tilt, zoom (PTZ) capabilities.

**AXIS Network Loudspeaker**

Provides clear, long-range speech and enables an operator to remotely address people and deter unwanted activity. The loudspeaker can also play a pre-recorded audio file when it is manually or automatically triggered in response to an alarm event.

Every i2c Technologies Substation Protection product includes remote set-up and configuration by our U.S. based tech support team and affordable extended service agreements are available to keep each system like new, year after year.

24/7/365 Video Monitoring

i2c Technologies has partnered with the Cooperative Response Center (CRC) to provide alarm and video verified asset monitoring with UL inspected and certified alarm monitoring with redundant locations across the U.S.

i2c Technologies is an AXIS Communications Solution Gold Partner and a leading supplier of deployable surveillance units for substations and utility facilities.
The VX400 system is an effective tool in our ongoing efforts to curb property losses. Three times this system stopped the loss of assets and two of them helped local police settle the case in a court of law.”

Kevin Brown | Engineer | Alpena Power | Alpena, MI

5/5 Stars
The 2019 National Defense Authorization Act (NDAA) banned the purchase and use of certain video surveillance cameras manufactured in China, and requires all federal government agencies, contractors, and critical infrastructure to remove, or have a plan to remove these cameras effective August 13, 2019. Based on Congressional testimony, the purpose for the ban mainly stems from cybersecurity concerns and the potential for mass espionage by the Chinese government. The ban includes some major camera manufacturers and their OEM partners.

In July 2019 the NERC issued a Level 2 Alert that identified the following manufacturers as subjects of the NDAA ban: Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, and Dahua Technology Company. The NERC also issued a list of recommendations to identify and mitigate the risks posed by these products.

However, identifying which cameras are subject to the ban is more difficult than you would think. If your cameras do not have the Hikvision or Dahua logo on them it doesn’t mean you are out of the woods. That’s because Hikvision and Dahua are the original equipment manufacturer (OEM) for many big-name surveillance camera companies and dozens of smaller ones. Companies like Honeywell, Bosch, Panasonic, Lorex, Stanley, and Tyco have used, and may continue to use components and cameras manufactured by Hikvision and Dahua and rebrand them as their own through a process called “whitelabeling”.

How to Know if Your Security Camera System is in Compliance with the NDAA?

Ask your security integrator/installer. If they do not know the answer right away they can contact their supplier. Also, IPVM.com offers a directory that lists the OEM partner companies that use Hikvision and Dahua components.

“After NERC issued their alert, we received several calls from our power co-op customers to inquire whether our video surveillance systems included cameras that were banned by the NDAA. Because we exclusively use Axis Communications IP cameras for our power substation security camera systems, I was pleased to tell our customers that their systems were in compliance.” said Jeff Doak, CEO of i2c Technologies.

i2c Technologies designs deployable video surveillance units for power substation security. Axis Communications, headquartered in Lund, Sweden, is the market leader in IP camera technology and their cameras are not included in the ban.

i2c Technologies has partnered with the Cooperative Response Center (CRC) to provide video verified monitoring for their members. We offer covert and overt video surveillance units which feature high-definition cameras and thermal imaging for superior detection. Request a quote online and ask about our special pricing for CRC members.

IPVM has compiled the following directory that lists companies that sell OEM products from Hikvision and Dahua