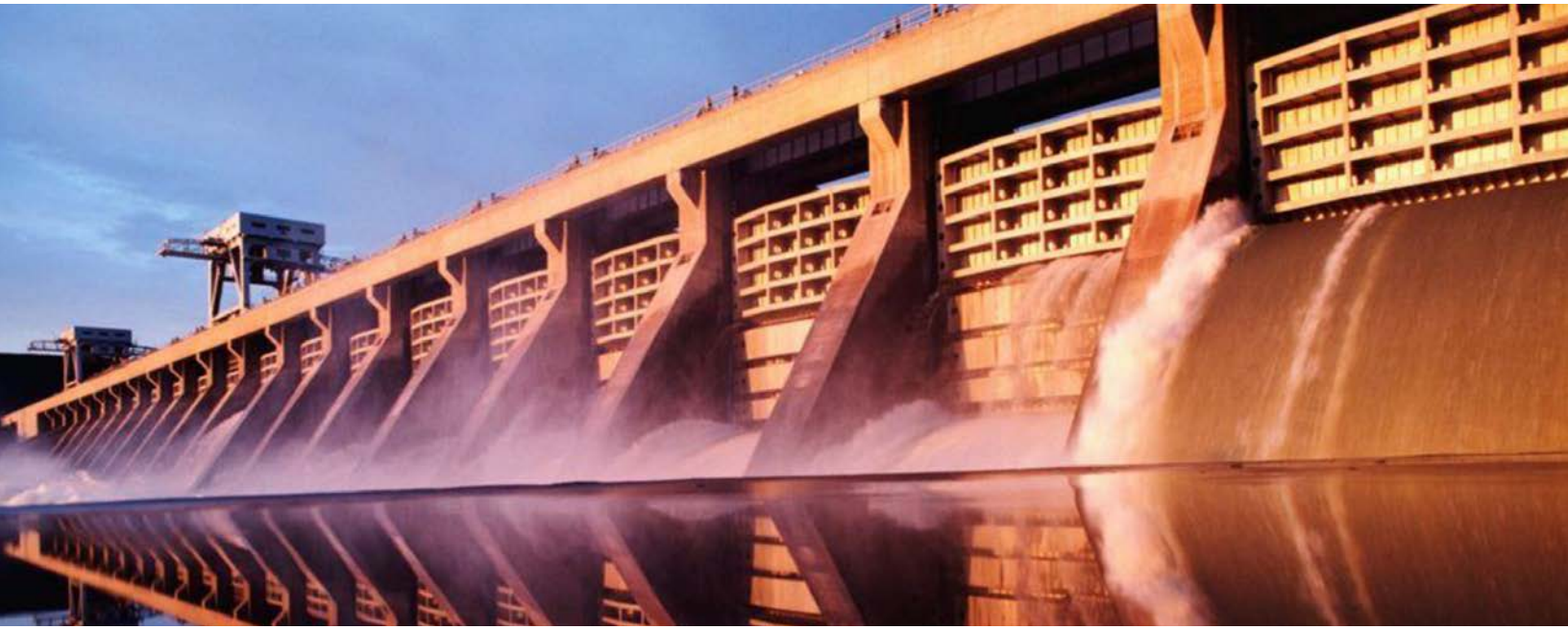
tyco Security Products



Hydropower Dam

Software House teams up with Stratus to deliver C•CURE 9000 with Transparent Redundancy and Fault Tolerance for Large Dam

A large dam in the Pacific Northwest produces hydroelectric power by the gravitational force of rapidly moving water. Hydropower is one of the most universally accepted forms of renewable energy today and has been increasing in popularity over recent years. Hydropower is a valuable and essential contributor in the power grid because of its ability to respond rapidly to varying loads or system disturbances, unlike sources supplied by combustion or nuclear processes.

CASE SUMMARY

Location:
Pacific Northwest

Systems Installed:
Software House:
C•CURE 9000

Stratus Technologies
everRun MX

Introduction

A hydroelectric dam contributing to the Smart Grid required improvement to its security posture for NERC CIP (North American Electric Reliability Corporation Critical Infrastructure Protection) compliance and adherence to Homeland Security Presidential Directives. Smart Grid is an electrical grid that can regulate supply and demand depending upon need and is also able to store energy when too much is produced for later consumption. Members of the Smart Grid have expressed the need for security systems incorporating Defense-In-Depth Technologies on a fault tolerant redundant server platform. All members of The Smart Grid are subject to NERC CIP compliance, or face up to $1 million per day in penalties.

Challenges

In order to meet NERC CIP compliance, a dam requires around-the-clock protection, making a fault-tolerant platform for security systems critical. Some numbers illustrating the need for NERC CIP compliance[1]:

- A rolling blackout across Silicon Valley totaled $75 million in losses
- In 2000, the one-hour outage that hit the Chicago Board of Trade resulted in $20 trillion in trades delayed
- Sun Microsystems estimates that a blackout costs the company $1 million every minute
- The Northeast blackout of 2003 resulted in a $5 billion economic loss to the region

Solution

Integrated Security Solutions, Inc. (ISS) out of Kalispell, MT is a security integrator specializing in critical infrastructure protection, and has become a leader in R&D applications of security technologies. ISS has provided services for design, installation, integration and maintenance of over 80 dams in the USA.

1. The Smart Grid: An Introduction. Prepared for the U.S. Department of Energy by Litos Strategic Communication under Contract No. DE-AC26-04NT41817, Subtask 560.01.04

Stratus Technologies

Stratus Technologies is the partner of choice utilized by ISS for fault tolerant server redundancy. Sites subject to NERC CIP compliance must address redundant server applications for servers hosting the security management software. Stratus Technologies' most recent partnership with Software House provided a successful integration of their C•CURE 9000 security and event management system with advanced reporting features on a redundant server platform utilizing Stratus's everRun MX.

The new system delivers the most reliable and robust access control capability. The system is fully deployed and has operated perfectly ever since. The installation of C•CURE 9000 and everRun MX was simple and operation has been easy.

"Integrated Security Solutions, Inc. selected Stratus's everRun with Software House's C•CURE 9000 for a large Dam to ensure the level of security demanded for these facilities, including NERC CIP compliance. The customer operating the Dam in this heavily regulated industry has been completely satisfied with the system integrated and delivered by ISS" stated Dan Murphy, Business Development Manager for ISS.

www.tycosecurityproducts.com