

Owners and operators of dams, generating stations, and transmission and distribution systems are increasingly concerned with protecting their asset base and maintaining service reliability in the face of both physical and cyber threats. As it is susceptible to damage and loss due to natural causes, theft, deliberate destruction and mischief, electrical infrastructure is confronted with unique protection challenges. Utilities must take all necessary steps to reduce risk and ensure safe and secure power supply.

The Infrastructure Protection and Security Interest Group (IPSIG) is an international technical forum for engineers, operators, and security experts in the fields of generation, transmission, distribution, and cyber security for the utility industry. Program activities aim to enhance the design and functioning of security operations for control centers, dams, power houses, substations, and transmission/distribution grids.

Topics & Issues

1. Operational Security
2. Physical Security
3. Cyber Security
4. NERC CIP and NIST Compliance
5. Substations, Buildings & Storage Yards
6. Security of Overhead Lines, Right of Ways & Linear Assets
7. Security of Dams, Power Houses & Generation Stations

Technical Advisor



Mr. Don Burlack (CISSP, CISM) has over 37 years of experience working within the telecommunications and electrical utility industries, with almost 30 of those directed towards computer science and information systems security. At SaskTel he became Senior Systems Security Director, responsible for creation, implementation and management of the company's operational and corporate cyber security program. At SaskPower he held the position of Supervisor - Cyber Security, responsible for implementation and management of the enterprise cyber security program. Mr. Burlack has served as an Auxiliary Constable within the Technological Crimes Section of the RCMP and has led ethical hacking classes as an instructor for EC-Council.



Mr. Scott Webber has thirty years of experience in various utility industry Physical Security leadership roles while employed at Allegheny Energy, FirstEnergy and Duquesne Light Company. During his career, Mr. Webber has experienced the growth in physical security's role within the electric sector, beginning with the first Gulf War to Y2K. During his tenure at Allegheny Energy, he chaired the Edison Electric Institute Security Committee from 2007-2009 and served on the Leadership Committee from 2009-2012. He also served on the NERC CIPC Executive Committee from 2007-2009 and chaired the Security Guidelines Work Group during this time. Mr. Webber has a BA and MA in Criminology with Security Management Concentration from the Indiana University of Pennsylvania.



Projects

- Evaluation of Physical Security Risk Mitigation Techniques
- Electric Facility Access Control
- Secure Wireless Communications in the Electric Utility Industry
- Security of Right of Ways and Linear Assets
- Security System Design and Engineering Specification Templates for Electrical Utility Use
- Assessing Transmission Station Security Threats and Risks
- Practices & Products for Securing the Perimeter of Electrical Transmission Stations

Issues & Areas of Focus

Cyber Security & NERC CIP Compliance

- Physical Security of Cyber Security Assets
- Monitoring Revisions and Updates to the NERC CIP Standards
- Lessons from Compliance Audits
- NERC CIP Compliance Best Practices

Substations and Storage Yards

- Security Classification and Standards for Substations
- Perimeter Security
- Remote Monitoring
- Copper and Other Metal Theft

Dams and Generating Stations

- Threat and Risk Assessment
- Integration of Emergency Action Plans
- Barriers, Fencing & Signage

Overhead Lines

- Security of Right-of-Ways
- Security Hardening of Transmission Towers
- Strategic Camera Surveillance of Transmission Towers
- Security of Wireless Technology

Underground Lines

- Access to Tunnels and Joint Bays through Manholes
- Tampering and Cable Measurement Equipment

Security Management

- Best Practices for Running Corporate Security Departments

Annual Activities

- 2 Face-to-Face Meetings & Quarterly Conference Calls
- Working Group Conference Calls
- On-Demand Information Exchanges
- Technical Tours
- Benchmarking Surveys

*Participation is open to Electrical Utilities, Independent Power Producers, and Government Agencies.

For a complete project listing, please visit www.ceati.com/IPSIG



Working Groups

- Physical Security Work Group
- Cyber Security Working Group