

Network security: DoD cybersecurity accreditation for microgrid system

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Utility safety: IPERC (Intelligent Power & Energy Research Corporation), a provider of cybersecure, intelligent microgrid controls solutions for commercial and military applications, has announced that the Department of Defense (DoD) has accredited the company's GridMaster™ control system at Camp Smith, Hawaii with Platform IT Risk Approval (PRA). This is the first and only DoD accreditation of an installation [microgrid control system](#). The PRA was issued after rigorous security testing and authorizes full operation of the GridMaster-controlled microgrid supporting a mission-critical Pacific Command facility. IPERC led the design of controls, communications, and cybersecurity for this capstone project of the three-phase SPIDERS (Smart Power Infrastructure Demonstration for Energy Reliability and Security) program.

Several DoD and multi-agency teams performed testing and evaluation of the GridMaster system at Camp Smith and at off-site locations, encompassing both the hardware and software of IPERC's unique control solution. The testing and evaluation plan included "Red Team Attack" penetration testing conducted by the Joint Vulnerability Assessment Branch (JVAB) of the Army Research Laboratory Unique Mission Cell (ARL/UMC), as well as by members of Pacific Command (PACOM) and Northern Command (NORTHCOM). The cybersecurity posture of IPERC's system earned a rating of "Excellent" from the JVAB Red Team. IPERC also hosted a Navy validation team, led by Lou DiFilippo, Information System Security Manager at Naval Facilities Engineering Command, Headquarters (NAVFAC HQ), to evaluate the security features of the GridMaster system for Navy Fleet Cyber Command, culminating in the issuance of the PRA accreditation.

The PRA issued to IPERC grants formal Authorization to Operate (ATO) at Camp Smith, and constitutes a general Type Accreditation. This designation pre-approves the IPERC microgrid control system for use at all organizations and services within the DoD, and greatly streamlines the process for obtaining ATOs at future microgrid installations. Type Accreditation of

the GridMaster system uniquely positions IPERC to offer US Military installations an accredited cybersecure control solution for microgrids that can be installed and authorized for use faster and more cost-effectively than systems from any other designer or vendor in the industry.

GridMaster's accreditation required compliance with DoD 8500-series and National Institute of Standards and Technology (NIST) 800-series cybersecurity, smart grid, and Risk Management Framework (RMF). The GridMaster also meets all NERC CIP v5 and ANSI/ISA 62443 standards. IPERC's roots are in research and development, and the company has built a defense-in-depth strategy into its technologies for many years. Today, GridMaster's array of security features extends well beyond current best practices for military and commercial applications.

For commercial and utility customers, IPERC's military Type Accreditation is a strong validation of GridMaster's technological approach. According to Dr. Darrell Massie, CEO of IPERC, "The first-ever military accreditation of a microgrid control system provides commercial microgrid integrators, and customers such as utilities and municipalities, a high level of confidence that a GridMaster-controlled microgrid will exceed their requirements for information assurance and cybersecurity."

ABOUT IPERC

IPERC provides cybersecure intelligent microgrid solutions that maximize efficiency, enhance energy security and resiliency, and reduce overall energy consumption. IPERC's cybersecure, collaborative-intelligence software and compact, field-tested hardware form a complete distributed controls solution that is inherently more robust, more adaptable and more secure than any alternative on the market. The IPERC team is comprised of experts in energy control systems and cybersecurity, as well as in microgrid assets such as generators, solar power, and energy storage. With this diverse expertise, IPERC is able to tailor solutions to meet each client's unique needs.

For more information about [IPERC](#) or other products, click here to go to [Utility Products' Buyers Guide](#).

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