

Infrastructure Energy

Improving an installation's energy security through cost-effective renewable energy solutions and energy resiliency options that are focused on technology design, integration, demonstration and sustainment



Concurrent Technologies Corporation (CTC) offers an integrated team of diverse disciplines proficient at developing a customized power and energy plan to meet our clients' needs. Our core focus spans Energy Efficiency, Energy/Utility Grid Security, Energy Sustainability, and Strategies, Assessments and Audits. Our registered Energy Professionals are ready to provide relevant solutions meeting your needs in a timely manner.



Energy and Environment

Concurrent Technologies Corporation (CTC) is an independent, nonprofit, applied scientific research and development organization. CTC uses an engineering design process moving from ideation and concept development through feasibility, preliminary and final design stages into construction, commissioning training and operation. As a nonprofit, CTC partners with clients to provide the best possible Energy and Environment solutions. We offer extensive expertise in:

- Energy Security Assessments
- Mission Critical Utility Infrastructure Designs
- Vehicle to Grid (V2G) Solutions
- Energy Storage Solutions
- Engineering Services
- Renewable Energy Siting and Design
- Smart Utility Distribution Design
- Mission Continuity

CTC  *Concurrent Technologies Corporation*

CTC's quality management system is certified to the ISO 9001:2015 and AS9100D:2016; CTC's environmental management system is certified to 14001:2015.

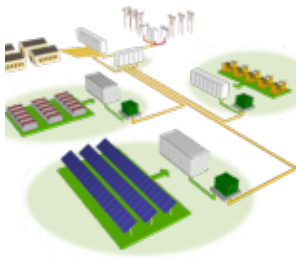
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Energy Security Assessment (ESA)

Enhance Energy Security Posture

CTC developed an ESA methodology to enhance Energy Security posture by identifying critical facilities/systems, the energy demand/infrastructure needs of each and plausible threats/energy security risks; resulting in prioritized vulnerabilities for the installation. An ESA provides ensured continuity of critical operations enhancing mission capability, actionable energy security solutions, and energy security documentation for future mission planning and energy system planning. The ESA methodology was demonstrated and validated at twelve Army installations.



Mission Critical Utility Infrastructure

Mission-Focused Microgrids Enhance Energy Resilience

CTC developed a Mission Critical Utility Infrastructure Conceptual Design (MCUI-CD) methodology to create a self-sustaining electrical power infrastructure capable of serving all mission critical loads, also known as a microgrid. This methodology is an extension of the energy security assessment and was demonstrated at a number of Army and Air Force installations. The microgrid ensures mission continuity during extended commercial electric grid outages, and increases an installation's energy resilience.



Plug-in Electric Vehicle - Vehicle to Grid

Providing installations with a means to reduce energy and fleet vehicle costs

CTC researched, developed and engineered Plug-in Electric Vehicle – Vehicle to Grid (PEV V2G) systems at Los Angeles Air Force Base (LAAFB), Fort Hood and Joint Base Andrews. As a result, the Air Force unveiled the Department of Defense's first non-tactical fleet composed entirely of plug-in electric vehicles (PEVs). Energy providers pay for V2G services, allowing installations to offset energy costs. Bi-directional PEV's and charging systems with software controls to manage vehicle fleets enable bidding into the energy ancillary services market.



Engineering Services

Optimizing the engineering design cycle to support client requirements

CTC subject matter expert's partner with clients to develop and evaluate solutions balancing mission and performance requirements with life cycle cost considerations. CTC conducts energy related audits and assessments and provides full scale engineering services employing a multi-disciplinary team to produce effective results and recommendations for installations to meet their energy-related goals. Our team can engage anywhere in your project life cycle and provide expertise to develop the right solution.



Energy Storage

Man-portable to grid scale applications supporting life cycle development

CTC has addressed the barriers of energy storage since the mid-90's and has continued to integrate energy storage in stationary, mobile and man portable applications for our clients. CTC advances energy storage technology and designs, integrates, demonstrates/validates and addresses operation and recycling needs of energy storage. An advanced Energy Storage Management System (AESM) demonstrates the ability to improve energy resiliency while increasing facility use of alternative and renewable energy at the Maui High Performance Computing Center (MHPCC)



Contact

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