DEFENSE ENERGY SEMINAR

The Importance of Existing Building Commissioning: How It Is Done and How It Is Taught

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With Guest Lecturer Mr. Brian Clark

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Abstract:

A prominent Lawrence Berkeley National Laboratory study from 2009 suggests that existing building commissioning may be "the single-most cost-effective strategy for reducing energy, costs and greenhouse gas emissions in buildings today," with an average 16 percent in energy savings and 1.1 year payback. Also known as retro-commissioning or simply RCx, this method of optimizing existing building systems is critical at federal facilities given Department of



Mr. Brian Clark

Defense sustainability goals. The methods, however, can be highly technical and are often taught by a select few field gurus. Despite these challenges U.S. Army garrison Presidio of Monterey has established not only an in-house process for RCx assessments, but a mechanism for teaching it to DoD engineers, technicians and energy managers.

The Presidio has recently been awarded the 2014 Federal Energy Management Award and 2014 Secretary of the Army Energy Management Award for its energy program, of which RCx has become a large portion. Presidio's RCx focus began with an attempt to comply with the RCx mandates of the Energy Independence and Security Act of 2007 and has evolved into a practicum for sharing knowledge with the rest of DoD. Presidio's RCx practicum is entering its third year and is continuously improving its approach to RCx assessments and training.

Topics include:

- What is RCx and why is it important?
- What skills are needed for RCx success in the field, for energy managers, and in project management?
- What are some examples of RCx assessments and measures?
- What resources are available for those interested in RCx?
- What are best practices for transferring technical knowledge?

Abridged Biography:

Brian Clark is a mechanical engineer with Presidio of Monterey Army installation. He served as an Army vehicle mechanic and recovery specialist in South Korea (2003-2004) and central Iraq (2004-2005) before discharging to pursue an engineering career. While a student at the University of Illinois, Chicago, Brian was employed by the Department of Energy's "Industrial Assessment Center" performing energy audits, and the U.S. Army Corps of Engineers performing design services for civil projects (2008-2010). After earning a Bachelor's Degree in Mechanical Engineering Brian entered government service at Fort Irwin, CA, in support of the Desert Training Center (2010-2011). His current position at Presidio (2011-now) requires project scoping, development, and management for new and existing buildings as well as knowledge of advanced HVAC applications, DDC controls systems, and sustainable design principles. In addition, Brian is currently a graduate student of University of Wisconsin – Madison (2014-now) pursuing a Master's of Engineering degree with a focus on RCx knowledge transfer.

