

Private Developer Upgrades Camp Pendleton With Submeters to Track Base Housing Electrical Costs



Lincoln Military Housing photo

Department of Defense's (DOD) privatization of military family housing has led to the installation of more than 600 E-Mon D-Mon submeters in previously unmetred units, allowing property managers to track electric usage relative to tenants' baseline utility allowance.

Authorized by Congress in 1966, the Military Housing Privatization Initiative (MHPI) opened the door to private-sector partnerships with the DOD to supply high-quality military housing, quicker and at lower cost than government construction would allow. Tasked with reaching 100% compliance by the end of this decade, the widely implemented MHPI is resulting in significant quality-of-life improvements for military families on dozens of installations around the country.

Privatization is also proving very lucrative to the nation's leading general contractors and developers of MHPI projects specializing in turnkey design-build services through the DOD's military construction (MILCON) and Public-Private Ventures (PPV) programs. In late 2006, the Department of the Navy awarded one of the largest PPV contracts to date for a multi-year housing renewal program on 125,000-acre Marine Corps Base Camp Pendleton in Southern California. A multi-phase military housing development, the Camp Pendleton project will include the construction of 1,035 new housing units, demolition of 640 and renovation of 2,171 units over an expected 48-month period. As completed, the housing units are turned over to a private-sector property management company for supervision of daily operations.

Metering On-Base Family Housing

Older on-base home construction typically omitted tenant electrical metering, since such costs were traditionally absorbed by the base Utility Division's operating budget. Driven by rapidly increasing utility costs, housing privatization requirements and the need to better manage and account for all on-base energy usage, the decision was made to retrofit electric metering into 605 single-family detached houses and duplex units that were constructed with no electrical metering capability.

This large metering retrofit project was awarded to San Diego-based Hondo Electric, a large-scale commercial and residential electrical contracting firm. A 25-year industry veteran, Hondo president Steve Shoop estimates that, in addition to numerous commercial properties, Hondo has wired some 35,000 homes in local counties since 1981.

"Our supplier on this project was CED," notes Shoop. "And when I asked our contact Scott Jenkins about remote metering, he suggested E-Mon D-Mon." As one of the largest nationwide wholesalers, Consolidated Electrical Distributors, specifically CED's San Diego branch, enjoys a great working relationship with its customers. Steve comments, "I've known Scott for over 20 years and he's a real professional in the industry."

As a seasoned inside salesman, Jenkins knows submetering and was happy to walk Shoop through the product catalogs to show what submeters can do and how to install them. Being generally familiar with the E-Mon product, Jenkins knew it to be quality and had no problems recommending it. As a stocking distributor, CED had several E-Mon submeters on hand to give the customer a real feel for the product. "Scott helped us select the right meter and a weatherproof housing," says Shoop. At that point Corey Bishop of Blanchard Associates, E-Mon's factory rep out of Ontario, CA was called in to work up a proposal.

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MCB Camp Pendleton (Continued)

Offered a fair volume price, the developer accepted the terms. Corey Bishop, according to Jenkins, was instrumental in coordinating logistics between the factory and CED to keep the job on track. "Scott kept a steady supply in stock that was right-sized for our progress on the job," said Hondo's Steve Shoop. "We never encountered a single shortage of product as we completed installations."

Meter Retrofit Times 600

Steve Shoop recalls the initial challenge Hondo faced in retrofitting 600 plus electric meters, stating that the E-Mon D-Mons "provided for a simple solution to a complex problem." The homes in question were all built without electrical meters, and the service entrance to each was routed directly to a load center inside the house. "This made measuring energy usage a major change that conventionally would have required installing a new service entrance to the outside of each home, with a meter/main and running a sub-feed through the house to the existing load center. There would have been considerable drywall and stucco damage as a result."

Begun in September 2007 and completed the following March, Jeremiah Fimeah, one of two Hondo electricians on the project from start to finish, said, "The install at Camp Pendleton went without a hitch. This product performed perfectly 100% of the time." Fimeah went on to say that the split-core current sensors sped up the process and allowed the installation to be completed without power interruption and the NEMA 4X outdoor enclosures housings were quick and easy to mount.



Simple, clean installation of the E-Mon D-Mon outdoor meter blends well with the housing exterior. Hondo Electric's Steve Shoop noted that "by using the E-Mon D-Mon meters with split-core sensors, installation took an average of one and a half hours per house and required minimal drywall repair and paint touch-up."

Submetering for Cost Allocation & Billing Fairness

Rent for on-base military families is determined by the DOD's Basic Allowance for Housing (BAH), a sliding scale formula that factors in the military pay grade of the tenant, number of dependents and other personal information. Data from the Census Bureau's annual American Community Survey (ACS) is also used to determine average utility costs for each specific dwelling type in each military housing area, adjusted to local housing conditions, geography and climate. After the applicant signs the lease agreement, the government pays the service member's BAH directly to the private-sector property management company, who then pays the tenant's utilities according to the baseline allowance stipulated in the lease contract.

At this point, only electricity is being submetered in the base housing units in question, but water and gas may be factored into future upgrades as budgets allow. Providing an easily installed, low-cost metering solution, the submeters allow quick, accessible data collection of electrical usage for each housing unit as a way for the property manager to monitor the tenant's adherence to the lease's utility allowance. That way, tenants with excessive electrical usage can be billed for the overage. At the same time, conscientious tenants who fall beneath the allowance cap can be rebated the savings.

Looking Forward

The recently completed submetering installation in the 600 previously un-metered units on Camp Pendleton will allow monitoring in the immediate future, as the housing units are transferred from builder/developer to property manager. Looking back on the six-month-long job, Steve Shoop closed the book on a successful and no doubt profitable install with this final observation: "If and when we are asked to provide remote metering in the future, Hondo Electric, Inc. will, without question, use E-Mon D-Mon metering equipment."

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