

# DHAKA ELECTRIC SUPPLY COMPANY HOSTS FINAL USEA/USAID UTILITY PARTNERSHIP EXCHANGE PROGRAM WITH U.S. DISTRIBUTION UTILITIES

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*Ken Floyd of SMUD presents information on demand side management to DESCO audience*

As part of the **United States Energy Association's (USEA)** Energy Partnership Program funded by the **United States Agency for International Development/Bangladesh (USAID/Bangladesh)**, The **Sacramento Municipal Utilities District (SMUD)** of California, **Clark Public Utilities** of Washington and the **Dhaka Electric Supply Company, Limited (DESCO)** conducted their final executive exchange visit December 3 to 7, 2006 in Dhaka, Bangladesh. This was the sixth partnership activity since the partnership was launched in June of 2004. The partnership aimed at assisting DESCO in improving efficiency in power delivery in Bangladesh.

## KEY TOPICS

- Customer Service;
- Network & Operations Management;
- Asset Management, reactive power;
- Information Technology; and
- Overhead to Underground Line Conversion.

## GROWING ENERGY DEMAND REQUIRES IMPROVED SYSTEM PLANNING AT DESCO

As the citizen's of Bangladesh continue to enjoy an increasing level of prosperity the consumption of electricity has risen drastically. One of the major factors in the increased use of electricity is the use of air conditioning units which have only recently become quite popular among the people of Dhaka. The added strain of the increased electricity usage has, up to this point, not caused any major problems for DESCO's system. But the planning department at DESCO can already see a point in the near future where increased demand for electricity will overwhelm their system.

## DESCO Partnership Results:

- DESCO and SMUD will continue to compare information on their prepaid metering systems;
- U.S. utilities provided DESCO with a list of e-mail contacts to continue interaction beyond the scope of the partnership;
- DESCO will use load planning software to maximize the efficiency of any planned system updates;
- U.S. utilities provided DESCO with a list of recommendations for improving system maintenance and reliability;
- SMUD and Clark Public Utilities have committed to work with DESCO to establish a handbook of maintenance practices; and
- DESCO has provided data on prepaid metering to SMUD to facilitate SMUD's own prepaid meter implementation.

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Both SMUD and Clark Public Utilities addressed these concerns with the approaches utilized by their utilities in the United States. Both U.S. utilities emphasized the need to make accurate load flow analyses through the use of specifically designed software. With accurate load flow analysis, DESCO will be able to pinpoint bottle necks and build effectively and efficiently to alleviate them.

### **DEMAND SIDE MANAGEMENT PLAYS SIGNIFICANT ROLE IN LOAD MANAGEMENT**

Both SMUD and Clark Public Utilities emphasized the importance of educating the consumer through conservation programs, equipment replacement subsidies and other energy efficiency programs. Energy efficiency is much cheaper than building new generation and can be used to meet new load growth. Both SMUD and Clark Public Utilities offer rebates and other loans for increased energy efficiency in new construction and in retrofitting older buildings. Lighting can be a significant source of electric demand, but can be reduced easily through the promotion of compact fluorescent lights. By investing consumer education programs in energy efficiency, DESCO can potentially offset costly construction and upgrading of its electric system.



*Security gate at residential substation*



*Clark Public Utilities delegation inspects new control panel at DESCO' newest Substation*



*Residential substation transformer*

### **New Substation Design**

As DESCO continues to make improvements to its electric system, new construction is increasingly difficult to site. Often, the most efficient location to site a new substation is within the residential neighborhoods they will serve. Just as in the United States, DESCO is now facing the classic problem of "Not in My Back Yard!" In an effort to make substations less obtrusive, DESCO has just finished building a substation in the Gulshan area of Dhaka inside a structure designed to look like a residential building. The new substation blends in nicely with the surrounding residences and is barely noticeable.

### **SMUD AND CLARK PUBLIC UTILITIES COMMIT THEIR CONTINUED SUPPORT TO DESCO**

Although this was the last official partnership activity for the partnership between DESCO, SMUD and Clark Public Utilities, both SMUD and Clark have pledged their continued support for the partnership with DESCO. Both U.S. utilities plan on maintaining communications with their friends at DESCO and encouraged their counterparts at DESCO to continue e-mailing them with any concerns or questions they may have in the future. DESCO, SMUD and Clark Public Utilities have all expressed their interest in continuing their partnership formally should a funding mechanism be determined.