On-Site Training in Africa: Kenya Power and Siemens Look to the Future of Kenya’s Power Grid

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In addition to our annual catalog courses (scheduled for release in December 2011) and our long-term comprehensive certificate programs with select customers, Siemens Power Academy TD - North America also offers on-site courses that can be hosted at client locations. These on-site offerings provide customers the benefits of knowledge, expertise and experience that are found in Siemens Power Academy’s most successful catalog courses delivered directly to our customers’ facilities. On-site courses help customers maximize the value of training by providing a safe environment in which to share system-specific information and concerns with our consultants, helping directly relate the training to real-world applications. On-site training also provides opportunities for customers to tailor the content of the course to more precisely fit the training and operational needs of their organizations. An example of this is a recent program we provided to one of our international clients.

As Siemens PTI’s network consultant and instructor for Siemens Power Academy, I recently traveled to Nairobi, Kenya to deliver two training courses to more than 30 engineers and managers from Kenya Power and Light (Kenya Power). I delivered two back-to-back sessions of "PDEC 650 – Power Distribution Systems, Utility Economics and Finance" and "PDEC 630 – Low-voltage Network Systems" from September 12-23, 2011. In addition to sharing with the students how U.S. systems operate in contrast to English style systems, I was able to experience first hand some of the real challenges Kenya Power faces. With multiple power outages starting on day one of instruction, I was able to demonstrate the importance of the topics. The experience enabled me to assess the situation and then demonstrate the advantages that a low-voltage network system can offer, specifically, a higher level of reliability. Although Kenya Power does not currently have any low-voltage networks, the course gave the engineers a keen interest in the possibility of implementing a pilot low-voltage network project for a new skyscraper construction in the city of Nairobi.

Students participating in this on-site training program held positions in Kenya Power that ranged from recent engineering graduates to managers to chief engineers, all of whom were extremely attentive and asked a lot of questions. Since this program took advantage of international funding, it stressed the importance of the "PDEC 650 – Power Distribution Systems, Utility Economics and Finance" course focusing discussions on revenue requirements analysis using Kenya Power’s financial data. Investor owned Kenya Power (formally KPLC) is the country’s sole electric utility and it owns and operates the existing transmission and distribution system. Kenya Power has the challenge (along with government organizations) to increase the supply of electricity to the Kenyan population from 29 percent up to 40 percent by the year 2020. Kenya Power is working with Siemens Power Academy and Siemens PTI to initialize a long-term training relationship to increase their staff’s knowledge, understanding and expertise as they address the major issues of accompanying rapid system expansion with the goal of improving reliability and increasing power quality.

As part of my weekend layover, I took advantage of the natural beauty of the country with a visit to Nakuru National Park for a day safari and a drive into the Rift Valley, a geological phenomena that divides Kenya neatly down the length of the country separating east from west.
Figure 1 – Photos of Nakuru National Park Wildlife