Improving Electricity Service for the Urban Poor

The presentations given in the course were 'Dimensions of the Problem and Opportunities', by Prof Carlos Rufin of Babson College; 'Technical and Social Solutions, Government Roles & Programme Financing', by Ms. Connie Smyser from Nexant/Smyser Associates; and "Integrated Business Model and Regulatory Approach", by Mr. Antonio Pinhel from Coelba, a private utility company in Brazil.

Prof. Carlos Rufin gave an overview of the urbanization problem and its implications for energy supply and demand, particularly for the poor. The statistics he presented clearly demonstrated that urban growth has outpaced the supply of public services: close to 1 billion people live in slums; 95% of the population growth in developing countries will take place in urban areas; 70% of the world's population will live in conurbations of more than 1 million people in 20 years; and 60% of them will be living below the poverty level. The challenges facing energy distribution to the urban poor are many, including the expected low returns from selling to the poor, lack of experience in dealing with the poor, the risk that employees undergo when entering slum areas and physical access problems to slum areas. The public authorities also face many obstacles, such as the lack of coordination across policy areas that address energy, social policy, infrastructure, urban planning and security issues. Finally, the presentation touched on some of the economic and social benefits of assisting the urban poor. Accessing electricity can enhance income opportunities and attract business as well as improve community organization which will increase involvement in decision making with distributors and local authorities.

Ms. Connie Smyser provided the pros and cons of the main technical solutions available, such as: low cost service drops and "tamper proof" meters, "perimeter" service, pre-payment meters and customer usage monitoring, among others. It also highlighted the dramatic results of hightech anti theft systems as of 2005. Her experience indicates that individual meters are superior to collective solutions or fixed tariffs and that selective use of high-tech anti-theft cables in risky areas may be needed. She also discussed socio-economic solutions such as social partnerships, community-based service "agents" and community and individual legal assistance (e.g. for land title or equivalent). An integrated business model should provide affordability for the consumer, financial viability for the company, tangible benefits for the community and equity and integration for society. Finally, even though theft will never be eliminated, vigilance and follow through can mitigate the problem.

Mr. Antonio Pinhel discussed a specific project targeting urban slums by Coelba. The company's experience has shown that lower income families from all communities found it hard to fine-tune energy consumption and sustainable payment, even when efficient consumption habits were adopted. The objective of the project was to adjust the value of the electric energy bill to the purchasing power of low-income consumers, through rational use of energy and information dissemination by community agents, in order to reduce default and electric energy losses. The success of the project was based on: acting on the demand side; local community participation; information; intervention; customer relationship; planning; logistics and follow-up; scalability; market-orientation and availability of financial resources approved by regulators.