

# Nigeria Energy Training Program

Project: Nigeria Energy Training and Outreach Program

Program Area: Energy Sector Governance

Implementer: Institute of International Education

Geographic Focus: Latin America

Countries: Brazil

Duration: October 2002 – September 2003

#### Project Background

The long-term goal of the USAID Nigeria Energy Training Program (NETP) is to assist the government of Nigeria to achieve rational development of the country's energy resources – an essential segue to sustainable economic growth.

The National Electric Power Authority (NEPA) is the government owned utility responsible for generation, transmission and distribution of electricity throughout Nigeria. It has an installed generating capacity of 5,800 MW (0.05 kW per capita). However, NEPA has only 1800 MW to 2300 MW of available generating capacity: a level that is inadequate to meet the current demand. Furthermore, because of 50% level of technical and non-technical losses, rates below the cost of service, and inadequate collection performance, NEPA financial resources are drained, leaving it unable to invest in expansion and to support system improvements. Despite the lack of capital, NEPA has an ambitious growth plan to expand service access to reach 85% of the population by the year 2010, renovate its generating plants and transmission systems, and add 2000 MW of new generating capacity by 2003. Reform is

needed, however, to attract foreign investment. Changes required include the legislation of the electricity law, creation of an in- dependent regulatory commission, regulatory framework, and commercialization and unbundling of NEPA.

## Objective

USAID funded NETP training is designed to build the capacity of Nigeria's public and private institutions to effectively handle the challenges of developing and implementing power sector reform in order to build a sustainable self-sufficient energy sector.

## Project Partners

The NETP training program was implemented by the Institute for International Education (IIE). IIE has worked with public Nigerian organizations including the Ministry of Power & Steel, Nigerian National Petroleum Corporation (NNPC), Nigeria Electric Power Authority (NEPA), Office of the Presidential Adviser on Petroleum & Energy, Bureau of Public Enterprises (BPE), Petroleum Products Pricing Regulatory Committee (PPPRC), Senate Committee on Petroleum Resources, Senate Committee on Power,

and Nigeria Gas Company (NGC) to draft a training plan that will meet their institutional capacity needs in this process. These organizations as well as private entities, such as NGOs, project developers, and bankers have participated in NETP training and continue to use the skills gained in training to carry out their daily tasks.

## **Project Activities**

In January 2003, IIE implemented the first workshop on Negotiating Power Purchase Agreements (PPA) for Large Power Projects sponsored by USAID, with assistance from the Nigeria Mission. To meet current and the projected growth in demand, the Ministry of Power and Steel and NEPA hope to draw on foreign investment in generation. This workshop was a priority for NEPA and was requested by the Ministry of Power and Steel to empower the Ministry staff, NEPA personnel and other stakeholders to fully understand the expectations and limits set forth in PPAs.

#### **Project Results**

The workshop was successful in transferring key skills and capacities in the vital elements of power purchase agreements (PPA), including project finance and risk, project development and solicitation, PPA structure, and implementation agreements, and offered international experience regarding the integration of Independent Power Projects (IPP) into power markets, and the future prospects of IPP/PPA. The workshop highlighted key features of model power purchase contracts, and covered essential

elements of contract structure amenable to lenders and financiers.

The workshop was comprised of a total of 38 mid to senior-level participants from Ministry of Power & Steel, Ministry of Finance, NEPA, the Bureau of Public Enterprise, and others representing private banks and energy companies.

The next NETP workshops planned for the first half of 2004 will cover Electric Utility Planning and Strategic Investment, and Management of a Distribution Company.

#### **Development Impact**

Through the NETP workshop, participants acquired the knowledge to become skilled project developers, able to perform the necessary due diligence, solicit proposals, evaluate and negotiate contracts, as if the government was in fact the investor.

In July 2003, select participants of this training served on the government's team in negotiations with Shell Nigeria (SPDC) and closed an agreement between the Nigerian government and SPDC to Rehabilitate, Operate and Transfer the NEPA-owned Afam I-IV power plants and increase their capacity to 660MW. SPDC will also Lease, Operate and Transfer the 276MW Afam V plant which was commissioned in early 2002. Current production from Afam I-V averages just over 300MW. The ministers of Power and Steel as well as Finance, Group Managing Director NNPC and Managing Director of NEPA signed the agreement on behalf of the Nigerian government.

SPDC continues to work with the Nigerian government on upstream gas supply projects in order to meet Afam power peak demand of 250-300MMscf/d expected in 2006/2007.

#### **Lessons Learned**

Workshop participants had a range of experience with PPAs, though most had only limited exposure. They were able to understand the full spectrum of PPA components and determine where their role and job responsibilities would fit into the process. Lively discussions amongst public and private participation highlighted the differing perspectives, needs and expectations within the energy sector.

In their professional lives, participants are generally isolated within their organizations from their colleagues and counterparts in the Nigerian power sector. Furthermore, public sector players have very limited access to outside information and resources of those undergoing similar power sector transitions in other parts of Africa and the world. They also have a more basic lack of access to information regarding the performance of NEPA and other energy sector entities in Nigeria. This workshop offered a forum where those from the various power sector players, Ministry of Power met Ministry of Finance, Bureau of Public Enterprise and private sector representatives, who work on the similar issues within the sector could interact and share information.

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