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Mr. Postel:

USAID has cooperative agreements with the U.S. Energy Association (USEA) and the National Association of Regulatory Utility Commissioners (NARUC) which have both regional and bilateral country programs in sub-Saharan Africa. USAID supports USEA's Energy Utility Partnership Program, its Transmission System Planning Partnership and East Africa Geothermal Partnership and NARUC's Energy Regulatory Partnership Program. As part of MCC's \$498.2 million power compact with Ghana to fight poverty by transforming the country's energy sector, MCC provided funding in the past and plans to fund a NARUC bilateral program in Ghana. Currently, NARUC has regional programs in place in West, East, and Southern Africa and bilateral programs underway in Tanzania and Ethiopia. USEA has regional programs in East Africa and bilateral programs in Ghana, Ethiopia, Kenya and Tanzania.

As examples of how these programs operate, in Tanzania, USEA has brought in U.S. utility experts from Bonneville Power Administration (BPA), Pacificorp, Portland General Electric, Sacramento Municipal Utility District, and New England Electric System (National Grid) to undertake a series of assessments, workshops, and exchanges on transmission system operational issues and procedures. In the case of NARUC, there is a regulatory partnership in place between the Illinois Commerce Commission and the Energy and Water Utilities Regulatory Authority (EWURA) in Tanzania. In December 2014, NARUC will launch a partnership between the Missouri Public Service Commission and the Ethiopia Energy Authority (EEA). NARUC also has an Energy Regulatory Partnership with the Nigerian Electricity Regulatory Commission (NERC).

In Nigeria, prospective investors and purchasers of the successor generation companies were mandated through the request for proposal documents to submit bids for the power plants through a consortium that would comprise technical partners. The investors, or project sponsors in the case of green field power generation plants, do not necessarily need technical knowledge of the sector to operate a power plant. Investors typically procure the technical service to operate a power plant through an operations and maintenance (O&M) contract.

To provide training to the existing staff of the successor companies on key issues in O&M, USAID together with USEA organized a workshop in Lagos, Nigeria, on Reducing Power Outages and Improving Electric Services in October 2013 for senior and middle level staff, as well as the new owners. The workshop was designed to build capacity to implement loss reduction programs in the successor companies. All the privatized distribution companies were invited for the training workshop. Some of the training participants were:

- General Electric (GE)
- Itron
- Schweitzer Engineering Laboratories (SEL)
- ABB Group
- Symbion Power, LLC.
- POWER Engineers
- ORMAT
- ENEL Green Power North America
- Baker Hughes
- Sacramento Municipal Utility District (SMUD)
- Xcel Energy
- California Independent System Operation (CAISO)
- Incsys

As a follow up to the training, U.S. Trade and Development Agency (USTDA) selected approximately four of the distribution companies for a reverse trade mission in the U.S. Two American companies participated in the training including ABB Ventyx, which has its headquarters in Houston, TX, and Goodworks International, with offices in Washington, D.C., and Atlanta, GA.

At the regional level in East Africa, NARUC launched in October 2014 the East Africa Regional Regulatory Partnership to enhance the legal, technical and regulatory frameworks for regional power trade in the Eastern Africa Power Pool (EAPP) countries and ultimately strengthen regulatory frameworks that promote an enabling environment for investment and infrastructure as well as energy transactions. USEA also launched in August the East Africa Transmission Planning Partnership (EATP) with the EAPP to improve the capacity of transmission planners in Kenya, Ethiopia and Tanzania to develop regional electric power transmission corridors that will serve as the backbone infrastructure for the cross-border trade and exchange of electricity, the majority of which will come from renewable sources.

With USAID funding, the USEA East Africa Geothermal Partnership and African Union Commission recently hosted 35 government and private sector representatives from six East African nations - Djibouti, Ethiopia, Kenya, Rwanda, Tanzania and Uganda – on a six day geothermal road show in the U.S. that included attendance at the 38th Geothermal Resources Council (GRC) annual meeting in Portland, Oregon, meetings with private geothermal companies in Reno, Nevada and with U.S. government officials and public and private project developers in Washington, DC.

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According to the Government of Nigeria's daily reports tracking power generation, Nigeria generated 4,070 MW on November 17, 2014. Out of that sum, 3,385 MW (or 83%) came from the Power Holding Company of Nigeria successor companies that have been privatized. The Nigerian National Integrated Power Project plants, which generated 685 MW, are in the process of being privatized.

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Some of the greatest impediments include a lack of creditworthy offtakers and a lack of financing and other measures to mitigate risk with appropriate financial structuring for projects, particularly from local banks. Knowledge gaps in the government and other power sector institutions on how to negotiate Power Purchasing and Implementation Agreements also constrain their capacity to attract private sector investment.

Developers promoting small scale renewable projects are also experiencing challenges accessing long-term financing. This is mainly due to project sponsors' inability to raise the required equity, and a lack of experience in securing larger and more complex financing, particularly in designing attractive project or corporate finance structures. Increasing financing and other risk mitigation tools as well as technical assistance to strengthen public and private sector capacity will allow more institutions to efficiently evaluate and advance commercially viable projects.

The Power Africa Working Group is diligently looking at deals, figuring out what impediments are holding them up or what opportunities exist to accelerate their progress, and deploying tools from across multiple agencies to push reforms that will drive investment. The interagency Policy Sub-Group is also working with teams at Post to advance policy objectives agreed to in Power Africa MOUs to improve the enabling environment. For example, to improve the creditworthiness of offtakers, USAID is providing technical assistance to the utilities in Ghana and Tanzania to reduce their losses and improve their cost-recovery.

The NextGen 5 MW solar project in Tanzania is a prime example of what we can do. The project had stalled because it had a 15 year power purchasing agreement (PPA) but financiers were not willing to finance the project without a PPA term of twenty or more years. Both OPIC and USAID engaged with key institutions to advocate for changes with the PPA term, including a letter OPIC wrote to TANESCO outlining the need to extend the tenor to make it bankable given the small-scale and high fixed costs. As a result, the PPA was extended to 25 years and the financing was finalized, which could have a broader impact on future deal negotiations.

In the case of dVentus, we have supported it achieve a DCA loan guarantee, OPIC's ACEF grant and currently working with AfDB's SEFA grant on the certification stages of its project development. From the start, the Power Africa team has worked with dVentus in facilitating the assistance required to advance its goals. dVentus is an example of a company that has benefited from financing programs that are put together by USAID or Power Africa partners. Such success requires hard work from both the project company to be sponsored and the Power Africa team on the ground, as the process to access financing usually takes a lot of time and effort.

While USAID has provided technical assistance in the past to the Ethiopian government to address capacity issues to negotiate independent power producer agreements, a Power Africa sponsored transaction advisor in country provided incredible value for the Corbetti geothermal transaction by working through a real transaction side-by-side with the Government to build the capacity to negotiate the agreements and terms, and setting up best practice processes. Our Transaction Advisor in Ethiopia has worked as a neutral broker between the government and the private sector developer and helped to bridge other types of assistance as they have come online to support this project (i.e. African Legal Support Facility assistance, risk mitigation).

INSERT 74

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Regarding the physical security of critical infrastructure, Power Africa is driven by private sector investment for project development and implementation in the electrical generation, transmission, and distribution sectors. Power Africa looks to strengthen the enabling policy and market conditions for these investments to thrive in partnership with host country governments and other stakeholders, while private sector owners of power sector assets devote significant efforts to ensure that operational considerations including physical security, are addressed in their planning efforts. Additionally, Power Africa and earlier efforts to strengthen the power sector in Africa have increased the capacity of utilities and regulators to oversee and operate power grids in their respective countries through direct engagement and partnerships with NARUC and USEA. These efforts will help these entities more effectively manage major grid collapses and faults and increase overall stability of the grid.