REQUEST FOR PROPOSALS

TECHNICAL ASSISTANCE FOR THE

BENIN ELECTRICITY DISTRIBUTION MODERNIZATION PROJECT

Submission Deadline: **5:00 PM**

LOCAL (LAGOS) TIME

October 2, 2014

Submission Place: Mr. Gbenga Sonuga/ Mr. Kola Adepoju
Lagos Liaison Office
Benin Electricity Distribution Plc
c/o Citi Asset Management Ltd. 47b Glover Road, Ikoyi
Lagos, Nigeria

Email address: modernizationproject@bedcpower.com

SEALED PROPOSALS SHALL BE CLEARLY MARKED AND RECEIVED PRIOR TO THE TIME AND DATE SPECIFIED ABOVE. PROPOSALS RECEIVED AFTER SAID TIME AND DATE WILL NOT BE ACCEPTED OR CONSIDERED.

REQUEST FOR PROPOSALS

Section 1: INTRODUCTION

The U.S. Trade and Development Agency (USTDA) has provided a grant in the amount of US$630,000 to Benin Electricity Distribution Plc (the "Grantee") in accordance with a grant agreement dated May 22, 2014 (the "Grant Agreement") to fund the cost of goods and services required for a technical assistance ("Technical Assistance") on the proposed Benin Electricity Distribution Modernization project ("Project") in Nigeria ("Host Country"). The Grant Agreement is attached at Annex 4 for reference. The Grantee is soliciting technical proposals from qualified U.S. firms to provide expert consulting services to perform the Technical Assistance.

1.1 BACKGROUND SUMMARY

The Grantee intends to improve the company's network quality and reliability, reducing losses within the system, expanding network access, increasing the efficiency and effectiveness of its commercial operations, and improving the economic and financial viability of the company. After an initial period of basic infrastructure investments, the Grantee seeks to introduce new information technology, automation and management technologies, and systems that will equip its distribution network with a fully automated system.

The Technical Assistance will review and expand the Grantee's current business plan and assist the company in developing a complete investment plan that would outline the steps needed to fully modernize its network. In addition, the Technical Assistance will include a load flow analysis to identify bottlenecks and system weaknesses within the Benin DISCO, and develop a framework and design for smart grid modernization, which will recommend technologies and systems for a utility-wide rollout. The Grantee also faces a deficit in human capacity. As the distribution network is modernized, the Grantee has expressed the need for training and capacity building for its staff. Under the Technical Assistance activity, the managers and technical personnel at the Grantee will receive two one-week trainings in priority areas related to the Project. The Technical Assistance will also outline additional training that may be needed based on the recommended technologies in the investment plan.

The Grantee is a Nigerian private sector firm located in the southern region of Nigeria and is responsible for distributing electricity to Nigeria's Delta, Edo, Ekiti and Ondo States. The Grantee services a population of 13.2 million across a territory of nearly 36,000 square miles.

Portions of a background Definitional Mission are provided for reference in Annex 2.

1.2 OBJECTIVE

The objective of this technical assistance is to assist the Benin Electricity Distribution Plc ("Benin DISCO") in upgrading and modernizing its electricity distribution network in Nigeria while reducing its Aggregate Technical, Commercial and Collection Losses (ATC&C Loss), including describing the required investments and training for the Benin Electricity Distribution Modernization project (the "Project").

The Terms of Reference (TOR) for this Technical Assistance are attached as Annex 5.

1.3 PROPOSALS TO BE SUBMITTED

Technical proposals are solicited from interested and qualified U.S. firms. The administrative and technical requirements as detailed throughout the Request for Proposals (RFP) will apply. Specific proposal format and content requirements are detailed in Section 3.

The amount for the contract has been established by a USTDA grant of US$630,000. **The USTDA grant of US$630,000 is a fixed amount. Accordingly, COST will not be a factor in the evaluation and therefore, cost proposals should not be submitted**. Upon detailed evaluation of technical proposals, the Grantee shall select one firm for contract negotiations.

1.4 CONTRACT FUNDED BY USTDA

In accordance with the terms and conditions of the Grant Agreement, USTDA has provided a grant in the amount of US$630,000 to the Grantee. The funding provided under the Grant Agreement shall be used to fund the costs of the contract between the Grantee and the U.S. firm selected by the Grantee to perform the TOR. The contract must include certain USTDA Mandatory Contract Clauses relating to nationality, taxes, payment, reporting, and other matters. The USTDA nationality requirements and the USTDA Mandatory Contract Clauses are attached at Annexes 3 and 4, respectively, for reference.

Section 2: INSTRUCTIONS TO OFFERORS

2.1 PROJECT TITLE

The project is the Benin Electricity Distribution Modernization Technical Assistance.

2.2 DEFINITIONS

Please note the following definitions of terms as used in this RFP.

The term "Request for Proposals" means this solicitation of a formal technical proposal, including qualifications statement.

The term "Offeror" means the U.S. firm, including any and all subcontractors, which responds to the RFP and submits a formal proposal and which may or may not be successful in being awarded this procurement.

2.3 DEFINITIONAL MISSION REPORT

USTDA sponsored a Definitional Mission to address technical, financial, sociopolitical, environmental and other aspects of the proposed project. Portions of the report are attached at Annex 2 for background information only. Please note that the TOR referenced in the report are included in this RFP as Annex 5.

2.4 EXAMINATION OF DOCUMENTS

Offerors should carefully examine this RFP. It will be assumed that Offerors have done such inspection and that through examinations, inquiries and investigation they have become familiarized with local conditions and the nature of problems to be solved during the execution of the Technical Assistance.

Offerors shall address all items as specified in this RFP. Failure to adhere to this format may disqualify an Offeror from further consideration.

Submission of a proposal shall constitute evidence that the Offeror has made all the above mentioned examinations and investigations, and is free of any uncertainty with respect to conditions which would affect the execution and completion of the Technical Assistance.

2.5 PROJECT FUNDING SOURCE

The Technical Assistance will be funded under a grant from USTDA. The total amount of the grant is not to exceed US$630,000.

2.6 RESPONSIBILITY FOR COSTS

Offeror shall be fully responsible for all costs incurred in the development and submission of the proposal. Neither USTDA nor the Grantee assumes any obligation as a result of the issuance of this RFP, the preparation or submission of a proposal by an Offeror, the evaluation of proposals, final selection or negotiation of a contract.

2.7 TAXES

Offerors should submit proposals that note that in accordance with the USTDA Mandatory Contract Clauses, USTDA grant funds shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in the Host Country.

2.8 CONFIDENTIALITY

The Grantee will preserve the confidentiality of any business proprietary or confidential information submitted by the Offeror, which is clearly designated as such by the Offeror, to the extent permitted by the laws of the Host Country.

2.9 ECONOMY OF PROPOSALS

Proposal documents should be prepared simply and economically, providing a comprehensive yet concise description of the Offeror's capabilities to satisfy the requirements of the RFP. Emphasis should be placed on completeness and clarity of content.

2.10 OFFEROR CERTIFICATIONS

The Offeror shall certify (a) that its proposal is genuine and is not made in the interest of, or on behalf of, any undisclosed person, firm, or corporation, and is not submitted in conformity with, and agreement of, any undisclosed group, association, organization, or corporation; (b) that it has not directly or indirectly induced or solicited any other Offeror to put in a false proposal; (c) that it has not solicited or induced any other person, firm, or corporation to refrain from submitting a proposal; and (d) that it has not sought by collusion to obtain for itself any advantage over any other Offeror or over the Grantee or USTDA or any employee thereof.

2.11 CONDITIONS REQUIRED FOR PARTICIPATION

Only U.S. firms are eligible to participate in this tender. However, U.S. firms may utilize subcontractors from the Host Country for up to 20 percent of the amount of the USTDA grant for

specific services from the TOR identified in the subcontract. USTDA's nationality requirements, including definitions, are detailed in Annex 3.

2.12 LANGUAGE OF PROPOSAL

All proposal documents shall be prepared and submitted in English, and only English.

2.13 PROPOSAL SUBMISSION REQUIREMENTS

The **Cover Letter** in the proposal must be addressed to:

Mr. Gbenga Sonuga/ Mr. Kola Adepoju
Lagos Liaison Office
Benin Electricity Distribution Plc
c/o Citi Asset Management Ltd. 47b Glover Road, Ikoyi
Lagos, Nigeria

Email address: modernizationproject@bedcpower.com

An Original and eight (8) physical copies of your proposal must be received at the above address no later than 5:00pm, local (Lagos) time, on October 2, 2014. An emailed copy of the submitted proposal is also required after physical submission by 5:00pm local (Lagos) time on the same date.

Proposals may be either sent by mail, overnight courier, or hand-delivered. Whether the proposal is sent by mail, courier or hand-delivered, the Offeror shall be responsible for actual delivery of the proposal to the above address before the deadline. Any proposal received after the deadline will be returned unopened. The Grantee will promptly notify any Offeror if its proposal was received late.

Upon timely receipt, all proposals become the property of the Grantee.

2.14 PACKAGING

The original and each copy of the proposal must be sealed to ensure confidentiality of the information. The proposals should be individually wrapped and sealed, and labeled for content including the name of the project and designation of "original" or "copy number x." The original and eight (8) copies should be collectively wrapped and sealed, and clearly labeled, including the contact name and the name of the project.

Neither USTDA nor the Grantee will be responsible for premature opening of proposals not properly wrapped, sealed and labeled.

2.15 OFFEROR'S AUTHORIZED NEGOTIATOR

The Offeror must provide the name, title, address, telephone number, e-mail address and fax number of the Offeror's authorized negotiator. The person cited shall be empowered to make binding commitments for the Offeror and its subcontractors, if any.

2.16 AUTHORIZED SIGNATURE

The proposal must contain the signature of a duly authorized officer or agent of the Offeror empowered with the right to bind the Offeror.

2.17 EFFECTIVE PERIOD OF PROPOSAL

The proposal shall be binding upon the Offeror for NINETY (90) days after the proposal due date, and Offeror may withdraw or modify this proposal at any time prior to the due date upon written request, signed in the same manner and by the same person who signed the original proposal.

2.18 EXCEPTIONS

All Offerors agree by their response to this RFP announcement to abide by the procedures set forth herein. No exceptions shall be permitted.

2.19 OFFEROR QUALIFICATIONS

As provided in Section 3, Offerors shall submit evidence that they have relevant past experience and have previously delivered advisory, technical assistance and/or other services similar to those required in the TOR, as applicable.

2.20 RIGHT TO REJECT PROPOSALS

The Grantee reserves the right to reject any and all proposals.

2.21 PRIME CONTRACTOR RESPONSIBILITY

Offerors have the option of subcontracting parts of the services they propose. The Offeror's proposal must include a description of any anticipated subcontracting arrangements, including the name, address, and qualifications of any subcontractors. USTDA nationality provisions apply to the use of subcontractors and are set forth in detail in Annex 3. The successful Offeror shall cause appropriate provisions of its contract, including all of the applicable USTDA Mandatory Contract Clauses, to be inserted in any subcontract funded or partially funded by USTDA grant funds.

2.22 AWARD

The Grantee shall make an award resulting from this RFP to the best qualified Offeror, on the basis of the evaluation factors set forth herein. The Grantee reserves the right to reject any and all proposals received.

2.23 COMPLETE SERVICES

The successful Offeror shall be required to (a) provide local transportation, office space and secretarial support required to perform the TOR if such support is not provided by the Grantee; (b) provide and perform all necessary labor, supervision and services; and (c) in accordance with best technical and business practice, and in accordance with the requirements, stipulations, provisions and conditions of this RFP and the resultant contract, execute and complete the TOR to the satisfaction of the Grantee and USTDA.

2.24 INVOICING AND PAYMENT

Deliverables under the contract shall be delivered on a schedule to be agreed upon in a contract with the Grantee. The Contractor may submit invoices to the designated Grantee Project Director in accordance with a schedule to be negotiated and included in the contract. After the Grantee's approval of each invoice, the Grantee will forward the invoice to USTDA. If all of the requirements of USTDA's Mandatory Contract Clauses are met, USTDA shall make its respective disbursement of the grant funds directly to the U.S. firm in the United States. All payments by USTDA under the Grant Agreement will be made in U.S. currency. Detailed provisions with respect to invoicing and disbursement of grant funds are set forth in the USTDA Mandatory Contract Clauses attached in Annex 4.

Section 3: PROPOSAL FORMAT AND CONTENT

To expedite proposal review and evaluation, and to assure that each proposal receives the same orderly review, all proposals must follow the format described in this section.

Proposal sections and pages shall be appropriately numbered and the proposal shall include a Table of Contents. Offerors are encouraged to submit concise and clear responses to the RFP. Proposals shall contain all elements of information requested without exception. Instructions regarding the required scope and content are given in this section. The Grantee reserves the right to include any part of the selected proposal in the final contract.

The proposal shall consist of a technical proposal only. A cost proposal is NOT required because the amount for the contract has been established by a USTDA grant of US$630,000, which is a fixed amount.

Offerors shall submit one (1) original and eight (8) copies of the proposal in addition to one electronic copy sent via email. Proposals received by fax cannot be accepted.

Each proposal must include the following:

Transmittal Letter,
Cover/Title Page,
Table of Contents,
Executive Summary,
Firm Background Information,
Completed U.S. Firm Information Form,
Organizational Structure, Management Plan, and Key Personnel,
Technical Approach and Work Plan, and
Experience and Qualifications.

Detailed requirements and directions for the preparation of the proposal are presented below.

3.1 EXECUTIVE SUMMARY

An Executive Summary should be prepared describing the major elements of the proposal, including any conclusions, assumptions, and general recommendations the Offeror desires to make. Offerors are requested to make every effort to limit the length of the Executive Summary to no more than five (5) pages.

3.2 U.S. FIRM INFORMATION

A U.S. Firm Information Form in .pdf fillable format is attached at the end of this RFP in Annex 6. The Offeror must complete the U.S. Firm Information Form and include the completed U.S. Firm Information Form with its proposal.

3.3 ORGANIZATIONAL STRUCTURE, MANAGEMENT, AND KEY PERSONNEL

Describe the Offeror's proposed project organizational structure. Discuss how the project will be managed including the principal and key staff assignments for this Technical Assistance. Identify the Project Manager who will be the individual responsible for this project. The Project Manager shall have the responsibility and authority to act on behalf of the Offeror in all matters related to the Technical Assistance.

Provide a listing of personnel (including subcontractors) to be engaged in the project, including both U.S. and local subcontractors, with the following information for key staff: position in the project; pertinent experience, curriculum vitae; other relevant information. If subcontractors are to be used, the Offeror shall describe the organizational relationship, if any, between the Offeror and the subcontractor.

A manpower schedule and the level of effort for the project period, by activities and tasks, as detailed under the Technical Approach and Work Plan shall be submitted. A statement confirming the availability of the proposed project manager and key staff over the duration of the project must be included in the proposal.

3.4 TECHNICAL APPROACH AND WORK PLAN

Describe in detail the proposed Technical Approach and Work Plan (the "Work Plan"). Discuss the Offeror's methodology for completing the project requirements. Include a brief narrative of the Offeror's methodology for completing the tasks within each activity series. Begin with the information gathering phase and continue through delivery and approval of all required reports.

Prepare a detailed schedule of performance that describes all activities and tasks within the Work Plan, including periodic reporting or review points, incremental delivery dates, and other project milestones.

Based on the Work Plan, and previous project experience, describe any support that the Offeror will require from the Grantee. Detail the amount of staff time required by the Grantee or other participating agencies and any work space or facilities needed to complete the Technical Assistance.

3.5 EXPERIENCE AND QUALIFICATIONS

Provide a discussion of the Offeror's experience and qualifications that are relevant to the objectives and TOR for the Technical Assistance. If a subcontractor(s) is being used, similar

information must be provided for the prime and each subcontractor firm proposed for the project. The Offeror shall provide information with respect to relevant experience and qualifications of key staff proposed. The Offeror shall include letters of commitment from the individuals proposed confirming their availability for contract performance.

As many as possible but not more than six (6) relevant and verifiable project references must be provided for each of the Offeror and any subcontractor, including the following information:

Project name,
Name and address of client (indicate if joint venture),
Client contact person (name/ position/ current phone and fax numbers),
Period of Contract,
Description of services provided,
Dollar amount of Contract, and
Status and comments.

Offerors are strongly encouraged to include in their experience summary primarily those projects that are similar to the Technical Assistance as described in this RFP.

Section 4: AWARD CRITERIA

Individual proposals will be initially evaluated by a Procurement Selection Committee of representatives from the Grantee. The Committee will then conduct a final evaluation and completion of ranking of qualified Offerors. The Grantee will notify USTDA of the best qualified Offeror, and upon receipt of USTDA's no-objection letter, the Grantee shall promptly notify all Offerors of the award and negotiate a contract with the best qualified Offeror. If a satisfactory contract cannot be negotiated with the best qualified Offeror, negotiations will be formally terminated. Negotiations may then be undertaken with the second most qualified Offeror and so forth.

The selection of the Contractor will be based on the following criteria:

- **Technical Proposal (30)**
  - Overall technical approach for performing the TA (15)
  - Technical approach for developing recommendations for the project and development of an Implementation and Investment / Business Plan for over 10 years that will meet the project's objectives (10)
  - Technical approach for the Financial Analysis for the Project (5)
- **Personnel and Management Plan (30)**
  - Experience and expertise of the Project Manager in designing and/or deploying power generation and distribution projects in a complex international environment (10)
  - Experience and expertise of the Team personnel in fulfilling the various functions

of each component of the TA specifically in network design, load flow management, training and project management (10)
    - Experience and expertise of the Team personnel in working on Aggregate Technical, Commercial and Collection (ATC&C) loss reduction strategies (10)
- **Firm/Team Technical Capability and Past Performance (30)**
    - Firm's/Team's experience and years of performance in distribution business planning and/or deployment (10)
    - Firm's /Team experience and years of hands on exposure to ensuring reduction of ATC&C Loss (10)
    - Firm's/Team's experience working with utilities and providing technical assistance to them for planning Smart Grid projects (10)
- **Developing Implementation and Business Plans (10)**
    - Capabilities, experience in developing project implementation and business plans for developing and implementing expansion plans including identifying funding sources and developing financing plans (10)

Proposals that do not include all requested information may be considered non-responsive.

Price will not be a factor in contractor selection.

ANNEX 1

Mr. Gbenga Sonuga/ Mr. Kola Adepoju
Lagos Liaison Office
Benin Electricity Distribution Plc
c/o Citi Asset Management Ltd. 47b Glover Road, Ikoyi
Lagos, Nigeria

Phone: +234-1-271-9620 Ext. 206
Email: modernizationproject@bedcpower.com

*Proposals shall be clearly marked "Benin Electricity Distribution Modernization Project"

U.S. Trade and Development Agency ("USTDA") Activity Number 2014-11024A: Benin Electricity Distribution Modernization

POC: Jennifer Van Renterghem, USTDA, 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901, Tel: (703) 875-4357, Fax: (703) 875-4009, Email: RFPQuestions@ustda.gov. Benin Electricity Distribution Modernization. The Grantee invites submission of qualifications and proposal data (collectively referred to as the "Proposal") from interested U.S. firms that are qualified on the basis of experience and capability to develop a technical assistance to assist the Benin Electricity Distribution Plc ("DISCO") in upgrading and modernizing its electricity distribution network in Nigeria, including describing the required investments and training for the Benin Electricity Distribution Modernization project.

Benin Electricity Distribution Plc ("Grantee") intends to develop a complete investment plan to fully modernize its existing network. As the distribution network is modernized, the Benin DISCO has expressed the need for training and capacity building for its staff. Under the Technical Assistance activity, the managers and technical personnel at the Benin DISCO would receive two one-week trainings in priority areas related to the Project. The Technical Assistance will also outline additional training that may be needed based on the recommended technologies in the investment plan.

The Grantee is a Nigerian private sector firm located in the southern region of Nigeria and is responsible for distributing electricity to Nigeria's Delta, Edo, Ekiti and Ondo States. The Benin DISCO services a population of 13.2 million across a territory of nearly 36,000 square miles.

The U.S. firm selected will be paid in U.S. dollars from a $630,000 grant to the Grantee from the U.S. Trade and Development Agency (USTDA).

A detailed Request for Proposals (RFP), which includes requirements for the Proposal, the Terms of Reference, and portions of a background definitional mission report, is available from USTDA, at 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901. To request the RFP in PDF format, please go to: https://www.ustda.gov/businessopps/rfpform.asp. Requests for a mailed hardcopy version of

the RFP may also be faxed to the IRC, USTDA at 703-875-4009. In the fax, please include your firm's name, contact person, address, and telephone number. Some firms have found that RFP materials sent by U.S. mail do not reach them in time for preparation of an adequate response. Firms that want USTDA to use an overnight delivery service should include the name of the delivery service and your firm's account number in the request for the RFP. Firms that want to send a courier to USTDA to retrieve the RFP should allow one hour after faxing the request to USTDA before scheduling a pick-up. Please note that no telephone requests for the RFP will be honored. Please check your internal fax verification receipt. Because of the large number of RFP requests, USTDA cannot respond to requests for fax verification. Requests for RFPs received before 4:00 PM will be mailed the same day. Requests received after 4:00 PM will be mailed the following day. Please check with your courier and/or mail room before calling USTDA.

Only U.S. firms and individuals may bid on this USTDA financed activity. Interested firms, their subcontractors and employees of all participants must qualify under USTDA's nationality requirements as of the due date for submission of qualifications and proposals and, if selected to carry out the USTDA-financed activity, must continue to meet such requirements throughout the duration of the USTDA-financed activity. All goods and services to be provided by the selected firm shall have their nationality, source and origin in the U.S. or host country. The U.S. firm may use subcontractors from the host country for up to 20 percent of the USTDA grant amount. Details of USTDA's nationality requirements and mandatory contract clauses are also included in the RFP.

Interested U.S. firms should submit their Proposal in English directly to the Grantee by 5:00pm local (Lagos) time, October 2, 2014 at the above address. Evaluation criteria for the Proposal are included in the RFP. Price will not be a factor in contractor selection, and therefore, cost proposals should NOT be submitted. The Grantee reserves the right to reject any and/or all Proposals. The Grantee also reserves the right to contract with the selected firm for subsequent work related to the project. The Grantee is not bound to pay for any costs associated with the preparation and submission of Proposals.

A N N E X 2

(Edited portions of background DM report)

NIGERIA ENERGY SECTOR DEFINITIONAL MISSION

Project Recommendation For

BENIN DISTRIBUTION COMPANY MODERNIZATION PROJECT TECHNICAL ASSISTANCE

May 20, 2013

Prepared by:

Emerging Markets Infrastructure LLC
Herndon, VA 20170
Tel: (703) 870-7164
shuster@emergingmarketsinfrastructure.com

3E Consulting, LLC
Columbia, Maryland
Tel: 410-908-4987
jrezaiyan@verizon.net

Submitted to:
Lisa Bonnikson
Country Manager / Contracting Officer's Representative (COR)
1000 Wilson Blvd.
Arlington, VA 22209

This report was funded by the US Trade and Development Agency (USTDA), an agency of the US Government. The opinions, findings, conclusions, or recommendations expressed in this document are those of the author(s) and do not necessarily represent the official position or policies of USTDA. USTDA makes no representation about, nor does it accept responsibility for, the accuracy or completeness of the information contained in this report.

The US Trade and Development Agency

The U.S. Trade and Development Agency helps companies create U.S. jobs through the export of U.S. goods and services for priority development projects in emerging economies. USTDA links U.S. businesses to export opportunities by funding project planning activities, pilot projects, and reverse trade missions while creating sustainable infrastructure and economic growth in partner countries.

BENIN DISTRIBUTION COMPANY MODERNIZATION PROJECT TECHNICAL ASSISTANCE

A. Executive Summary

Only 50% of Nigeria's population has access to electricity, and that is highly unreliable with an average availability of less than 50%. In 2010, the Government of Nigeria launched the Power Sector Reform Roadmap. Actions under the Roadmap are centered on the unbundling of the national utility's distribution and generation assets and the opening of those unbundled entities to private sector investment and management. The objective is to accelerate the expansion of power supply in Nigeria towards 40,000 MW by 2020 from the current installed capacity of less than 9,000 MW while dramatically improving service delivery, revenue recovery and efficiency across the power sector value chain. After significant delays, Nigeria proceeded with the privatization of the government run generation and distribution companies and Nigeria's eleven distribution companies were offered through competitive tender in 2012.

Vigeo Power was awarded the sale of Benin Electricity Distribution Company (BEDC) and will take over ownership and operations in September 2013. Vigeo Power's goals are to overhaul the utility and bring it from the current dilapidated and outdated state to a modern, state of the art utility. After an initial period of basic infrastructure investments, Vigeo Power plans to introduce new IT, automation and management, or Smart Grid, technologies and systems that will move BEDCO toward a fully automated system in order to improve the quality and the reliability of electric power supply; expand access throughout its designated service area; reduce technical and non-technical losses within the system; increase the efficiency and effectiveness of its commercial operations; and improve the economic and financial viability of the company.

The proposed Technical Assistance (TA) would evaluate, validate and make recommendations for Vigeo's Business Plan and Investment Plan for the Benin Distribution Modernization Project. It would include a financial and economic analysis of the proposed investments and plan for and design a Smart Grid pilot project to test new technologies and systems prior to utility wide rollout. This is a unique opportunity for USTDA to promote the use of Smart Grid technologies in Nigeria. The use of these technologies in Nigeria will be critical not only for the success of the Benin Distribution Company but of the entire electric power sector in Nigeria. Without the efficient and reliable delivery of power at the distribution level none of the other reforms taking place in the regulatory, generation, and transmission areas will be successful. Stable, commercially viable distribution companies that can expand service and be reliable offtakers of delivered power are the bedrock of a financially sustainable power sector.

U.S. suppliers are the global leaders in Smart Grid technologies and are actively pursuing foreign markets, including African countries with great potential such as Nigeria, as U.S. Smart Grid spending slows down. Based on our analysis, the total Project costs could easily reach $100 million with a realistic U.S. export potential of $57 million in the next 10 years.

The Project has strong potential developmental impacts, overall positive environmental impacts, and fits well with the Government of Nigeria's plans to modernize generation, transmission and distribution infrastructure in the country. The DM team recommends USTDA funding for the Benin Distribution Modernization Technical Assistance in the amount of $629,500.

B. Project Description

Nigerian Electric Power Sector Overview

Nigeria is a country with both vast resources and wide spread poverty. Despite possessing the world's seventh-largest natural gas reserves, it has never generated enough power for either the domestic or commercial needs of its rapidly growing population. Only 50% of the population has access to electricity, and that is highly unreliable with an average availability of less than 50%. Nigeria has estimated installed electricity generation capacity of 8,644 MW, and available capacity of only approximately 3,718 MW, to cater for the needs of a population of over 160 million. By comparison, South Africa, with a population of just 50 million, has an installed electricity generation capacity of over 52,000 MW. On a per capita consumption basis, Nigeria is ranked a distant 178th with 106.21 KWh per head, – well behind Gabon (900.00); Ghana (283.65); Cameroon (176.01); and Kenya (124.68).[1]

The Nigerian power sector continues to face all of the common problems associated with electricity sectors in developing countries. These include: (i) old and dilapidated power plants and transmission and distribution networks; (ii) poor system maintenance and virtual absence of preventive maintenance; (iii) poor financial performance of the enterprises and a lack of investment funds; (iv) poor institutional capacity and outdated skills of utility engineers and technicians; (v) unreliable power supply and service with frequent and long power cuts and interruptions; (vi) high technical and non-technical losses; and (vii) rampant corruption.

The country's power generation peaked at 4,420 MW in January 2012, and since then has actually declined to 3,200 MW, while a target of 10,000 MW had been fixed for this time by the Obasanjo government a decade ago. The power situation, which was acute prior to this decline, has worsened to critical levels.

Given the massive amount of attention and investment given to the power sector in recent years to both meet demand and improve economic growth, the question remains whether the country can reform the sector to bring about the type of diversified economic growth that has been absent for decades.

Some of the blame for the current situation has been laid upon both the gas supply situation and inadequate ability to transmit the power. At the beginning of the year, when the system was peaking at 4,420 MW of generation, the constraint was the transmission system. Built to service a capacity of 4,000 MW, bottlenecks were created as the transmission system simply became overloaded and broke down. Coupled with explosions at a critical transmission substation, the transmission system currently limits any increased growth in generation beyond 4,400 MW. Furthermore, gas supplies to power plants have been severely curtailed. Given that Nigeria has an estimated 176 trillion cubic feet of proven natural gas reserves and is the largest natural gas producer in Africa, gas supply should not be an issue. However, gas transmission infrastructure has not kept pace with generation construction. Power plants have been built with either limited sources of gas or inadequate transmission. Compounding the problem was the closing of a major natural gas line in 2012 because of leakage and the closing of a hydropower plant for repairs. Finally, state owned power plants have been poorly maintained and operated in part due to disgruntlement of the state labor force in the face of the impending privatization.

Decades of underinvestment by Nigeria's vertically integrated National Electric Power Authority (NEPA) led to the virtual break-down of the generation, transmission, and distribution sectors by

[1] Source: Vanguard: The Challenges of the Nigerian electric power sector reform (1) February 26, 2013 By Felix Ayanruoh.

the early 2000s. To address severe energy shortages, in 2005 the Nigerian government enacted the Electric Power Sector Reform Act (EPSRA), which provided for the unbundling of NEPA into a series of successor companies, the development of a competitive electricity market, and the establishment of a dedicated regulatory body, NERC. EPSRA also created the Power Holding Company of Nigeria (PHCN) as an intermediate step in the privatization process.

The unbundling process resulted in the creation of the following successor companies:

Nigerian Electric Power Companies After Unbundling

Generation Company (Genco)	Transmission Company	Distribution Company (Disco)
Kainji Power PLC	Transmission Company of Nigeria	Abuja Electricity Distribution Company PLC
Shiroro Power PLC		Benin Electricity Distribution Company PLC
Ugheli Power PLC		Eko Electricity Distribution Company PLC
Sapele Power PLC		Enugu Electricity Distribution Company PLC
Geregu Power PLC		Ibadan Electricity Distribution Company
Afam Power PLC		Ikeja Electricity Distribution Company PLC
		Jos Electricity Distribution Company PLC
		Kaduna Electricity Distribution Company PLC
		Kano Electricity Distribution Company PLC
		Port Harcourt Electricity Distribution Company PLC
		Yola Electricity Distribution Company PLC

Source: Update on the Nigerian Power Sector Privatization March 2012, Norton, Rose Fulbright

In 2010, the Government of Nigeria launched the Power Sector Reform Roadmap. Actions under the Roadmap are centered on the unbundling of the national utility's distribution and generation assets and the gradual opening of those unbundled entities to private sector investment and management. The objective is to accelerate the expansion of the power supply in Nigeria towards 40,000 MW by 2020 while dramatically improving service delivery, revenue recovery and efficiency across the power sector value chain. With over 75% of the country's generation capacity depending on gas, the roadmap recognizes the crucial role of natural gas as the primary energy source in the short and medium term to drive the rapid growth in power generation at an affordable price for consumers. According to the report of the Vision 2020 National Technical Working Group on Energy Sector, the Government estimates that investment in the power sector of $3.5 billion per annum over the next eight years is required to reach this target.

Plans for State Owned Power Plants

The centerpiece of the short-term strategy is the accelerated commissioning of 10 new power plants (4,775 MW) built under the government funded National Integrated Power Project ("NIPP"). These NIPP plants are owned and managed by the government-owned Niger Delta Power Holding Company ("NDPHC"). The NIPP was designed to help reduce the short-term gap in generation

supply while the structural reforms are being implemented and to remove national grid bottlenecks to pave the way for future service expansion. The completion of these pivotal projects for the Nigerian economy has been severely delayed by a multitude of challenges including poor contractor performance, shortcomings in project management, available grid capacity and, perhaps most prominently, gas infrastructure and gas availability constraints

Another challenge is political opposition, primarily by the unions, but also by the suppliers of diesel generators and diesel fuel. In addition, the Power Holding Company of Nigeria (PHNC), which would be the interim off taker of power until the distribution companies are reorganized, is insolvent. Many government agencies do not pay their electric bills, owing more than $140 million in electricity bills to PHNC. PHNC is itself a debtor, owing gas suppliers, such as Shell and Eni, more than $500 million. Private power plants operated by Shell, Agip and AES produce 1,100 of the 3,300 MW that PHCN can currently distribute to Nigerians. The independent power plants were initiated in 2005. Because of the lack of payment, gas suppliers interrupt supplies to the power plants, causing reduction in PHNC power generation.

For the sector to be financially viable throughout the value chain, the end-user tariff must at least be at a cost-reflective level. However, the tariff has been significantly below what is necessary for the sector. As a result, not only is PHCN continuously unable to meet recurrent expenditure requirements, it must continually ask government for additional monies for short term and long term capital expenditure. Further, and more importantly, without a pricing regime that supports financial viability in the sector, it simply makes no sense for a private sector operator to come into the market. The government put in place a new tariff scheme earlier this year, which targets tariff subsidies for the low income households and increased tariffs for the middle and upper income households -- doubling tariffs in some cases -- in the hope of attracting investors. Furthermore, the government has developed model power purchase agreements and off-taker payment guarantees to support its privatization effort.

Distribution Companies in Nigeria

As noted earlier, the Nigerian grid network is old, dilapidated, and in need of much improvement, upgrading, and expansion. There are locations in Nigeria's power grid that lose up to 40 percent of the power that is being generated. These losses are mostly due to old infrastructure that is not well maintained, as well as theft (non-technical losses).

According to the Bureau for Public Enterprises (BPE), the need for reform is driven by:

- Limited access to infrastructure and low connection rates
- Inadequate power generation capacity
- Inefficient usage of capacity
- Lack of capital for investment
- Ineffective regulation
- High technical losses and vandalism
- Insufficient transmission and distribution facilities
- Inefficient use of electricity by consumers
- Inappropriate industry and market structure
- Unclear delineation of roles and responsibilities

The aims of reforms are to:

- Improve efficiency and performance
- Ensure transparent and responsible management

- Limit political interference
- Eliminate government's involvement in utility management
- Promote Private Sector Participation
- Improve management and technical operations
- Encourage private investment in generation to address inadequate supply
- Ensure a level playing field for all investors
- Release government funds to finance core activities

Privatization of PHCN

After significant delays, Nigeria issued a Request for Proposals for the privatization of PHCN's generation and distribution equities and Nigeria's eleven distribution companies were offered through competitive tender in May, 2012. Successful bidders were required to demonstrate an ability to pay 51 percent of the value of the company; propose mechanisms for the reduction of technical, commercial, and collection losses over a five-year period; and expand the customer base and coverage area of the distribution companies.

Prior to the sale of the distribution companies, the Bureau of Public Enterprises (BPE) contracted with CPCS Transcom International Limited (CPSC) to provide professional advisory services in support of the privatization of Electricity Generation and Distribution Companies created out of the Power Holding Company of Nigeria. CPSC created several due diligence reports for the benefit of the prospective investors on the strengths and weaknesses of each distribution company (see Appendix 1)

There are eleven (11) distribution companies in Nigeria. Geographically, each distribution company covers three to five states, except Ikeja and Eko Distribution Companies, both of which serve Lagos State. Lagos State is the commercial capital of Nigeria and has the highest population density in the country. It is divided into the two distribution zones. The government is in the process of selling these government-owned distribution firms companies to private buyers. The final approval of the preferred bidders by the National Council on Privatization (NCP) and its announcement for the successor companies was done on October 23, 2012. The Bureau of Public Enterprises (BPE) has revealed that it has received the total sum of $469,031,940 from 11 bidders of the March 21, 2013 deadline for the preferred bidders for the mandatory 25% payment of the offer value of their bid.

A statement made available to by BPE disclosed that the bidders have met the payment deadline for the initial 25% payment in April 2013. The second 75% payment is due in September 2013. The preferred bidders for the Discos as approved by the NCPC are:

- Abuja Electricity Distribution Plc (Kann Consortium) - $164 million
- Benin Electricity Distribution Plc (VIGEO Power Consortium) - $129 million
- Eko Electricity Distribution Plc (West Power and Gas) - $135 million
- Enugu Electricity Distribution Plc (Interstate Electrics Ltd) - $126 million
- Ibadan Electricity Distribution Plc (Integrated Energy Distribution & Marketing Ltd) - $169 million
- Ikeja Electricity Distribution Plc (NEDC/KEPCO) - $131 million
- Jos Electricity Distribution Plc (Aura Energy Ltd) -$82 million
- Kaduna Electricity Distribution Plc (no qualified bidders; will be re-bid);
- Kano Electricity Distribution Plc (Sahelian Power SPV Ltd) - $137 million
- Port Harcourt Electricity Distribution Plc (4Power Consortium) - $124 million

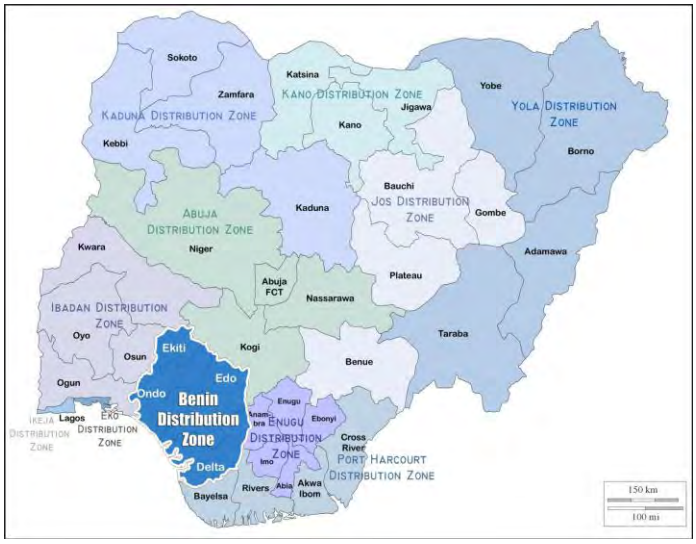
- Yola Electricity Distribution Plc (Integrated Energy Distribution & Marketing Ltd) - $59 million

Winning bidders signed Share Sale Agreements on February 21, 2013. Bidders will be required to make a final payment of 75 percent of equity by September 2013. Privatized distribution companies will be responsible for the wires, sales, billing, collection, and customer care functions within their area of geographic monopoly.

Vigeo Power (which consists of Vigeo Holdings; Global Utilities Management Company, a utility management company; and NDPL Infra Ltd, a wholly owned subsidiary of Tata Power Delhi Distribution Limited (TPDDL), a leading power distribution utility in India) acquired the sale shares in Benin Electricity Distribution Company (BEDCO). It won on its ability to minimize losses in the region as demonstrated in its plan.

Overview of the Benin Electricity Distribution PLC

Benin Electricity Distribution (BEDCO) is in the southern region of Nigeria. It is responsible for distributing electricity in Nigeria's Delta, Edo, Ekiti and Ondo States. The distribution region covers 57,550 square kilometers with a population of 13.2 million and 3.6 million households.



From an operational perspective, BEDCO cannot meet the current estimated maximum power demand (including suppressed load) and demand is expected to grow in the next five years. According to the CPCS Revised Report on Distribution Companies, the total aggregate technical and commercial (AT&C) losses are approximately 38.9 percent. However, Vigeo Power, after discussions with PHCN management representatives during the due diligence process, expects them to be much higher, perhaps 50-55 percent.

Benin Electricity Distribution Company Key Facts

Key Facts about the Benin Electricity Distribution Company			
Coverage Area	57,550 km2	**Energy Input**	2602 GWH
Population/ Households	13.2 million / 3.6 million	**Energy Billed**	2202 GWH
Peak Load	747 MW	**Revenue Billed**	$92.6 million
Suppressed Load	300 MW	**Govt. Subsidy**	$29.8 million
Connected Load	950 MW	**Actual Collection (including subsidy)**	$107.9 million

Number of Employees as of December 31, 2010	3,808	**Aggregated Technical and Commercial Losses**	Estimated at 38.9%

Source: Information Memorandum, Revised Technical Assessment Report and Market Operator Report 2010

Infrastructure Overview

The maximum demand of BEDC is around 747 MW, not including suppressed demand. Below is a summary table of the existing infrastructure within BEDC and an infrastructure review from the BPE Technical Assessment of the utility.

Description	Volume of Business
Number of Injection Substations	(179) 33/11kV
Installed Power Transformer Capacity	1434 MVA
Total Number of Distribution Transformers	7,154
Total installed Distribution Transformers Capacity	2023 MVA
Number of 33 kV Feeders	45
Number of 11kV Feeders	268

Source: Vigeo Consortium Business Plan

Infrastructure Review

- Almost all distribution networks within BEDC are overhead and are weak and dilapidated
- A large percentage of the injection substations and distribution substation transformers are overloaded.
- There is inadequate energy supply to the company from the grid to meet demand.
- Capacity limitations at some of the 11kV feeders and 33kV feeders in addition to erratic generation resulted in forced and frequent opening of critical 33kV feeders by the transmission department. These events considerably and adversely affected the stability and quality of electricity supply and lost revenue.
- The network also has numerous untreated wooden cross arms and untreated wooden poles and overall network construction is poor.
- BEDC has 6,438 distribution feeder pillars, many of which are damaged along with the associated cables.
- The 33kV and 11kV panels at some of the injection substations have become obsolete and unserviceable due to lack of spare parts for maintenance and therefore are prone to frequent faults.

- Most of the power transformers are old and subject to failure and the planned comprehensive maintenance on these power transformers and associated switchgears has suffered due to lack of transformer oil and other essential materials.
- The conductors and cables of the area surveyed were not seemingly undersized; however improper handling and joints have de-rated the conductors/cables.
- The network is managed manually. The injection stations are operated by shift operators on instruction from the system operator. Presently the load control is being done by the operator directly.
- The secondary distribution of 415V is predominantly overhead. The conditions of network and feeder pillar boxes are dilapidated. There is no visible protection of the 415V side of distribution transformers, which should be adversely affecting the transformers, implying there would be higher rate of failure of distribution transformers.

Customer Breakdown

In spite of poor service delivery complaints from customers, each customer group grew from 2009 to 2010, demonstrating strong unmet demand. BEDC provides service to the following customers.

Consumer Classification	**Number of Customers**		
	2009	**2010**	**% Growth**
Residential	454,136	543,311	20%
Commercial	51,877	63,454	22%
Industrial	3,435	3,734	9%
Special	738	1,241	68%
Streetlight	124	95	
Total	510,310	611,835	20%

Source: NDPL Due Diligence Report

Key Challenges

In preparing for its bid, Vigeo Power reviewed the documents prepared by CPCS on behalf of BPE and asked its bid partner NDLP to conduct its own audit of the Benin Disco. Both the CPCS and NDLP reports made similar conclusions regarding the structure and current weaknesses of BEDC.

Vigeo's assessment of the state of the Benin Disco is that the previous years' cash flows, perhaps due to uneconomical tariffs, have been insufficient to meet even the basic operating costs. This has led to shortfalls in maintenance and difficulty providing for investment in the replacement and refurbishment of assets as well as in meeting new demand. The current status of the utility is further caused by the cash flow weakness, resulting from unauthorized supplies and theft, non-collection of billed sales, poor enforcement of debt recovery and theft prevention. Also noted were the human resource issues, specifically the lack of technical training to undertake the corrective and breakdown maintenance of the network, non-abidance to standard safety procedures and

regulations before undertaking network maintenance work, and unethical activities by the field force leading to customer mistrust. Overall there seems to be poor morale amongst the existing employees which affects their productivity and interest in performing their duties.

In summary, the CPCS and Vigeo Power documents report the following overall weaknesses with the Benin Disco:

- Dilapidated high tension (HT) and low tension (LT) network infrastructure
- High losses
- High meter and transformer failure rate
- Low rate of meter installation.
- Inefficient billing; most are billed by estimate; much is not collected.
- Almost non-existent customer service.
- Untrained manpower to handle preventive and breakdown network maintenance
- Lack of adequate generation capacity.
- Minimal IT systems in place.

After taking over the distribution company, Vigeo Power plans to address the following:

- Assured fixed hours of supply to customers every day.
- Connectivity to all in urban areas.
- Spreading awareness to customers about safety, health and electricity conservation.
- Training the field manpower to make them capable of handling preventive and breakdown maintenance.
- Enlightening the field manpower about safety procedures while undertaking network repair and maintenance activities.
- Ensuring zero fatal and non-fatal accidents amongst field manpower.

The major factors contributing the Non-Technical losses for Benin Disco:

- Direct theft from the network
- Pilferage of energy by meter tampering
- High percentage of faulty meters
- Unmetered connections
- Losses incurred on account of lack of revenue collection mechanisms
- Very high percentage of unpaid accounts are from the Government of Nigeria and other public bodies
- Lack of technology intervention to curb revenue leakage

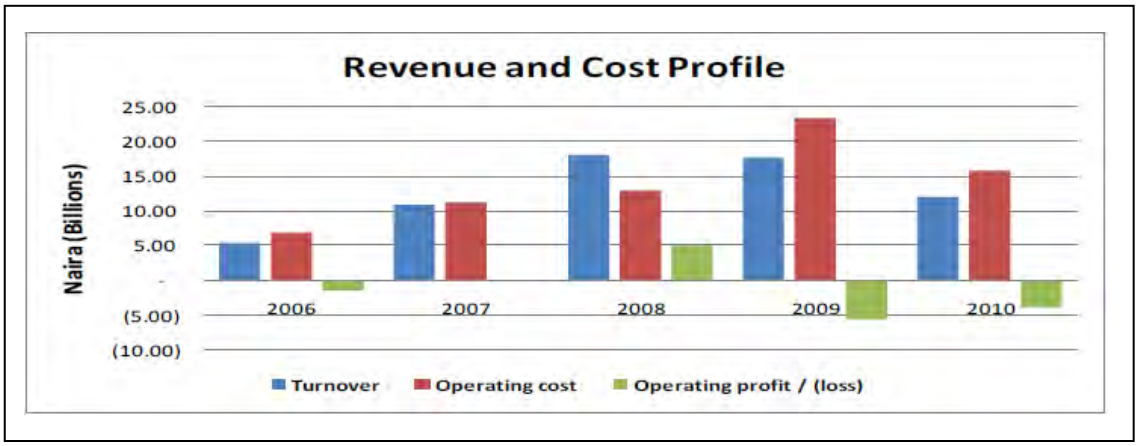
According to their business plan, this would require the following initiatives:

- 100% meter change of all the existing customers and immediate metering of the new connections.
- Undertaking network refurbishment to reduce losses and replace or add assets wherever necessary.
- Outsourcing field service activities like bill delivery, payment collection, network maintenance and other related activities to ensure reliable and prompt service to customers.
- Establishing a 24 hour customer support center.
- Providing necessary equipment and tools to field staff for detection and rectification of faults.
- Provision of preliminary training to field staff on a priority basis to ensure best and safe service.

As seen in the revenue and cost profile below, the utility has been operating at a net loss in recent years. The key objective is to turn around the company to ensure net profits which will yield long

term sustainable growth of the utility.

Revenue and Cost Profile



Source: Vigeo Consortium Business Plan

Project Description

Vigeo Power understands the challenges BEDC faces and has created a business plan that addresses the key challenges and spells out the steps to dramatically improve the efficiency of the distribution company in delivering reliable electric power to its customers. The plan calls for: branding BEDC as a benchmark utility in the Nigerian power sector; introducing world class standards for reduction of technical and non-technical losses; reducing operating costs; providing for optimal use of the asset base; and improving quality and reliability of supply.

Vigeo's goal is to first improve the basic electricity service before undertaking deployment of advanced technologies. Based on the review of the existing technology at Benin, Vigeo created a technology roadmap and business process improvement measures for future incremental rollout. The plans include the use of a pilot project to test new Smart Grid technologies and systems prior to large scale deployment.

Key Targets for Benin Disco

Source: Strategic Business Plan for Benin Electricity Distribution Company for Period January 2013 to December 2018

Perfomance Area	Performance Measures	Target	Time Frame
Financial Performance	ROE	30%	5 years
Operational Efficiency	ATC Loss Reduction	69.50%	5 years
	Technical Loss Reduction	22%	2 years
	Commercial Loss Reduction	42%	2 years
	Collection Loss Reduction	67%	2 years
	Customer Metering	480,000 Meters	2 years
Internal Efficiency and Effectiveness	OPEX Reduction	50%	2 years
Long Term Development and Innovation	CAPEX	$293,209,877	5 years

Technology Roadmap

Presently very little technology intervention and process improvement tools are present. BEDC has a decentralized customer care setup with manual processes and with practically no network connectivity among the various customer care centers and operates without proper customer relationship software. One node of customer billing information software is provided at the customer care for handling billing complaints. The technical complaints are handled via regular telephone service.

In order to maximize the efficiency and effectiveness of Benin Disco's current and planned infrastructure and systems, the consortium recommends key technology solutions in the medium and long term:

- Automated Meter Reading of HT Consumers
- Creation of centralized commercial database
- SCADA (Supervisory Control and Data Acquisition) for more reliable network management
- Management Information Systems (MIS)
- GIS Mapping and Integrating GIS with other Business Processes
- Enterprise Resource Planning implementation for key functional area like Finance, Maintenance, Billing, and Inventory Management

These systems will, when implemented, greatly enhance Benin Disco's operations. They will provide accurate power system network information and analysis tools to support various engineering tasks ranging from planning and design through operations and maintenance and

customer service. Accurate information will also facilitate accurate investment decisions and optimization of network design that will result in more efficient investment for power system network construction. The planned roll out is proposed as follows:

Technology Road Map

Short Term	Medium Term	Long Term
Centralized commercial database Centralized call center Process automation and business process re-engineering (BPR) Automatic meter reading (AMR) and data analysis at the feeder level Energy audit system Interconnectivity of offices through LAN system	Enterprise resource planning for asset management, finance and billing Automation of human resource functions. Geographical Information System SCADA and substation automation	Network analysis application Distribution management system

Key Benefits of the Technology Road Map

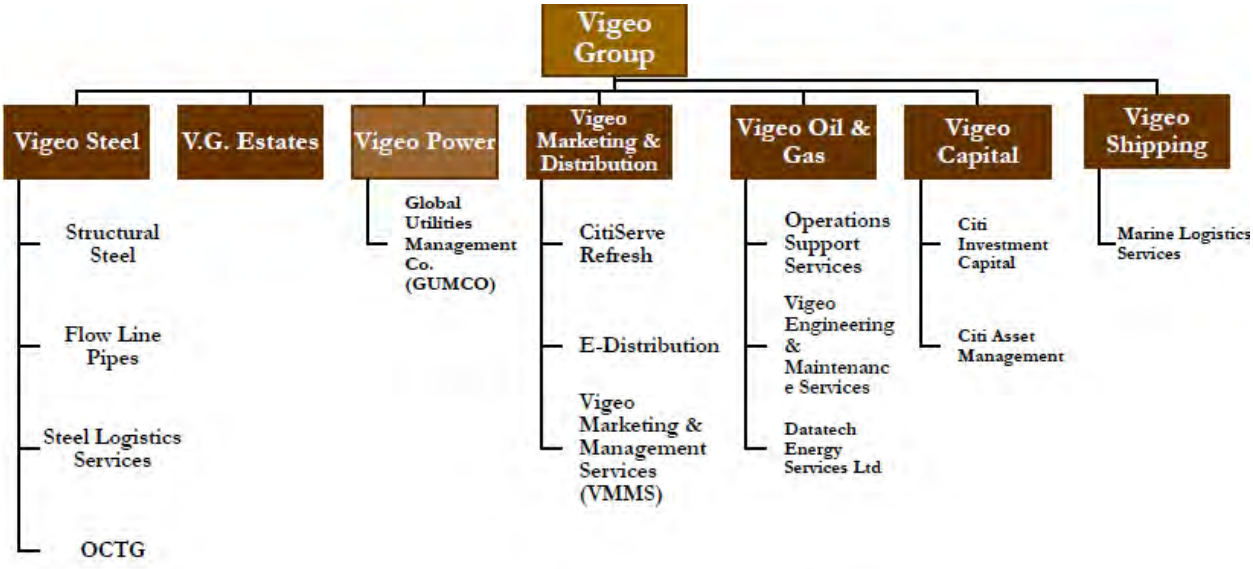
Time Frame	Proposed Actions	Proposed Benefits
Short Term	Centralized commercial database	Ease of monitoring and control Uniform business processes across the utility
Short Term	Process Automation and BPR	Reduction of cycle time Better productivity Better customer interface and increase in customer satisfaction
Short Term	AMR and data analysis	Less process time from meter reading to bill generation Analysis of data for preventing of fraud by customers Accurate billing for customers
Short Term	Energy audit system	System driven actual assessment of losses Profit center based approach Identified areas for loss reduction
Short Term	Interconnectivity of offices through LAN	Integrated work environment Ease of transmission for virtual data among offices Greater control from centralized locations

Medium Term	Enterprise resource planning for assets	Tracking asset life cycle from planning to retirement Ease of accounting and tracking of assets Ease of investment planning and decision making Maintenance Management
Medium Term	Automation of human resource functions	Balanced score card approach for people management Process driven approach for job description and targets
Medium Term	Geographical Information System	Centralized repository of asset detail with geospatial data Ease of decision making and investment decisions
Medium Term	Substation Automation & SCADA	Better load management Greater reliability of network operation Improvement of reliability indices
Long Term	Network Analysis Application	Better monitoring of weak links in network Ease of investment decision
Long Term	Distribution Management System	Flexible load management in distribution network Greater reliability of network operation Centralized control system of distribution network
Long Term	Outage Management System	Last mile process automation for greater customer satisfaction Control over customer outage

C. Project Sponsor Capabilities and Commitment

Vigeo Power Limited was set up to act as a Special Purpose Vehicle (SPV) in bidding for The Benin Disco. The Consortium consists of: Vigeo Holdings Limited, Global Utilities Management Co. Ltd (GUMCO), African Finance Corporation (AFC), and TATA Power Delhi Distribution Limited (TPDDL), with the following roles: Vigeo Holdings Limited - consortium lead and equity member; GUMCO - equity member and technical service provider (Local); African Finance Corporation - Equity member; TATA Power Delhi Distribution Limited - technical service provider

Incorporated in 1985, **Vigeo Holdings Limited is** a Nigeria based multi-business enterprise with service offerings through five distinct business divisions: Capital, Marketing & Distribution, Oil & Gas, Power, and Shipping.



Technical Service Provider **NDPL Infra Limited**, a wholly owned subsidiary of Tata Power Delhi Distribution Limited (TPDDL), is a joint venture of the Government of the National Capital Territory of Delhi and the distribution arm of Tata Power Company. NDPL would manage operations of BEDC. NDPL has the experience of successfully running a power distribution company under circumstances similar to the ones existing in Nigeria. The company has achieved targeted aggregated technical and commercial loss levels, but has also set industry benchmarks. The company is credited with record reduction of ATC losses from 53% in 2002 to 10.2% in March 2012. The company has embarked upon an ambitious plan to implement high-tech automated systems for its entire distribution network. Systems such as SCADA and GIS are the cornerstone of the company's distribution automation project. NDPL has produced several firsts in India: SCADA controlled substations, Automatic Meter Reading, GSM based Street Lighting system and SMS based Fault Management System. To ensure complete transparency, the company has provided online information on billing and payment to all its 1 million consumers.

Global Utilities Management Company (GUMCO), a member of the VIGEO Group, was founded in 1998 to support the Power Holding Company of Nigeria (PHCN) by providing services in the downstream sector of power distribution as a public private partnership initiative. The company has since gained an in-depth knowledge of the country's utility sector, beginning in 1998 with its participation in the PHCN Revenue Cycle Management Program (RCM). GUMCO brings considerable expertise to this project, having been involved in the National Prepaid Metering Program for BEDC which involved the procurement, installation and maintenance of 160,000 prepaid meters. It started from Benin City and later extended its operations to Warri, Asaba, Ondo and Ekiti.

Africa Finance Corporation's mission is to help address Africa's infrastructure development needs while seeking a competitive return on capital for its shareholders. Since it began operations in 2007, AFC has created the building blocks with which to achieve this objective. It has raised $1.1 billion in fully paid-in equity capital. Its shareholding base is private sector majority owned (57.5%). AFC is driven by a diverse team of experienced professionals from investment banking, engineering and other backgrounds.

AFC is an international organization established by treaty between sovereign states. Current member nations are Nigeria (host country), Guinea-Bissau, Sierra Leone, The Gambia, Liberia and Guinea. In addition, various prospective new member countries are now at different stages of due diligence. AFC shareholders include the various African financial institutions (47.6%), the Central

Bank of Nigeria (42.5%), and several industrial and corporate shareholders (9.8%). As a single institution, the Central Bank of Nigeria provided the anchor capital for the corporation's start-up in 2007.

D. U.S. Export Potential

The Project holds the potential to generate significant U.S. exports of goods and services. Nigeria does not currently have the means to manufacture the IT and automation systems required for implementation of the currently planned for the Benin Distribution Modernization Project. The procurement will be phased over an initial five year planning period. Individual procurements (e.g. metering rollout) may be issued as turnkey contracts. Consulting, engineering, and integration services are also limited in Nigeria. Accordingly, nearly all of the required technologies, equipment and services will have to be imported, with the exception of local labor.

The table below gives the total cost breakdown for major components with likelihood of U.S. exports and estimated realistic U.S. exports. Due to the fact that there is a high degree of variability in the manner in which various components may be implemented (i.e. the level of automation within an Outage Management System, number of substations to be automated, the number of meters to be deployed and their ability to collect data) costs could vary widely. Based on our analysis, the total Project costs could easily reach $100 million with a realistic U.S. export potential of $57 million in the next 10 years.

Level of Potential U.S. Exports

Project Component	Implementation Cost	Likelihood of US Exports	Realistic US Export Potential
IT Systems: Customer Database, Billing, ERP, Data Management	$11 million	High	$8 million
Advanced Metering Infrastructure, Automated Meter Reading and Meters (AMI, Smart, Pre-paid, etc.)	$70 million	Medium	$35 million
SCADA System/Distribution Management System (DMS)	$6.0 million	High	$4.5 million
Substation Automation	$3.0 million	High	$2.0 million
GIS AM/FM	$2.5 million	High	$2.0 million
Outage Management System (OMS)/ Trouble Call System	$5.5 million	High	$4.0 million

Communications, IT Systems and Distribution Automation Integration Services	$2.5 million	Medium	$1.5 million
TOTAL	**$100.5 million**		**$57.0 million**

As seen in the table above, U.S. exports of goods and services are very competitive internationally in all of the major components of the Project with the likelihood of U.S. exports ranked "High" for all but two. U.S. suppliers are the global leaders in Smart Grid technologies and are actively pursuing foreign markets, including African countries with great potential such as Nigeria, as U.S. Smart Grid spending slows down. We have spoken with several potential U.S. suppliers of goods and services, including GE, Oracle and Trilliant. All of the companies are interested in the opportunities presented by the Project.

The table below shows U.S. and foreign companies that could compete for procurements resulting from implementation of the Project.

U.S. Suppliers and Foreign Competition for Distribution Modernization Projects

Equipment Category	Potential US Firms	Foreign Competitors
IT Systems: Customer Database, Billing, ERP,	▪ Ciber ▪ Oracle ▪ IBM	▪ SAP ▪ Fuji Electric Information Systems (Japan)
AMI, AMR, Meters	▪ Itron ▪ eMeter ▪ GE ▪ Echelon ▪ Distribution Control Systems, Inc (DCSI) ▪ Hunt Technologies ▪ Trillient, Inc. ▪ Silver Spring ▪ Ambient – Communications ▪ EC Infosystems, Inc. ▪ Structure SG Control ▪ Silver Spring Networks ▪ Sensus Metering Systems ▪ GridPoint ▪ Comverge ▪ EnerNOC	▪ Landis+Gyr (Switzerland) ▪ WebCom (France) ▪ Sony Ericsson (Japan);

SCADA, DMS and Substation Automation	▪ Siemens (US) ▪ Campbell Scientific, Inc. ▪ GE ▪ Rockwell Automation ▪ Johnson Controls	▪ Catapult Software (New Zealand) ▪ Citect (Australia) ▪ Wallingford Software (England) ▪ Control Microsystems (Canada) ▪ AlterSys, Inc. (Canada) ▪ Alsthom (France) ▪ Vatech (U.K.)
GIS AM/FM	▪ GE ▪ ESRI ▪ ValueCAD ▪ Intergraph	▪ Alsthom (France)
Outage Management System	▪ ABB (US) ▪ Oracle ▪ GE ▪ Telvent	▪ ABB (Switzerland) ▪ Siemens (Germany) ▪ LeT Sys (Ireland
Communications, IT Systems and IT Integration Services	▪ Deloitte Consulting, LLP ▪ Micon Consulting ▪ Cisco ▪ IBM ▪ SAIC ▪ Oracle ▪ KEMA ▪ HP ▪ Dell ▪ Corning ▪ Motorola	▪ Axon Global (UK) ▪ Parsons Brinckerhoff Ltd (UK) ▪ ABB (Switzerland) ▪ Siemens (Germany) ▪ Schneider (France) ▪ Fuji Electric Information Systems (Japan) ▪ Acumen Pty Ltd (South Africa) ▪ Schneider (France) ▪ Farukawa (Japan)
Trouble Call System	▪ Cisco ▪ Microsoft ▪ IBM	▪ ABB (Switzerland) ▪ Siemens (Germany)
Data Management and Analysis	▪ Itron ▪ eMeter ▪ Red Planet Consulting ▪ Alliance Data Corporation	▪ Fuji Electric Information Systems (Japan)
Distribution Consulting and Advisory Services	▪ CGI Utility Solutions ▪ Bechtel ▪ KEMA ▪ ESTA International ▪ DCSI ▪ Xtensible Solutions ▪ Global Enterprise Managers ▪ Utility Integration Solutions (UISOL) ▪ AESI Acumen Engineering Solutions ▪ Electric Utility Consultants, Inc.	▪ Dessau-Soprin International (Canada) ▪ Connell Wagner Pty Ltd (Australia) ▪ NEWJEC Inc. (Japan) ▪ Powertech IST (South Africa) ▪ SNC Lavalin (Canada)

	▪ Power System Engineers (PSE) ▪ Burns & McDonnell

Another factor supporting U.S. exports is that NDPL, the technical partner for Vigeo Power that will play a key role in managing the Benin Distribution Company, has a history of selecting U.S. companies for modernization of their utility. USTDA has played a key role in NDPL's smart grid project development through several technical assistance grants. As a result, NDPL has deployed technologies from a number of U.S. companies, including GE, Siemens US, and IBM. NDPL has also sent employees to the U.S. to learn best practices for a variety of the functions it undertakes.

E. Foreign Competition and Market Entry issues

Spurred by the single largest grid modernization investment in U.S. history following passage of the American Recovery and Reinvestment Act (ARRA) of 2009, U.S. utilities are in the midst of spending at least $8 billion on Smart Grid modernization upgrades. As a result, the U.S. will dominate global capital expenditure on Smart Grid over the next five years, with a projected $60 billion to be spent on grid modernization by 2030. Because of the U.S. leadership position in Smart Grid, U.S. Smart Grid and technology service providers are also pioneering the development of equipment, services, systems and technologies that power Smart Grid projects around the globe, giving the U.S. a first-mover advantage.

However, as the U.S. market matures, new opportunities for U.S. products are essential to sustaining and increasing this advantage. U.S. Smart Grid companies are actively pursuing overseas markets including Nigeria, but even with their technical and commercial advantages they face many barriers. While U.S. industry is a recognized global leader in providing Smart Grid goods and services, they face stiff competition from European and Asian suppliers in these markets, and are sometimes at an unfair trade advantage due to concessionary project finance from competitor governments. As seen in the table in Section D above, there are a large number of non-US suppliers of technologies, equipment, and services actively pursuing Smart Grid projects in India, primarily from Asia and Europe.

Furthermore, the cost of Smart Grid hardware such as smart meters is rapidly declining and approaching commodity pricing. The value in the system is migrating from the hardware to communications, networking and software, where the U.S. has a significant advantage over other countries due to its leadership in innovation.

F. Evaluation Strategy

There DM Team recommends the following strategy for evaluating the effectiveness for its funding of this activity:

1. Project Sponsor Goals – Vigeo Power's goals are to introduce new IT, automation and management, or Smart Grid, technologies and systems that will move BEDCO toward a fully automated system in order to improve the quality and the reliability of electric power supply; expand access throughout its designated service area; reduce technical and non-technical losses within the system; increase the efficiency and effectiveness of its commercial operations; and improve the economic and financial viability of the company.
2. Project Timeline – Vigeo Power has a 5 year investment plan for the Benin Distribution Company. Most of the IT, automation and management systems to be deployed as part of

the Benin Distribution Modernization Project would be deployed after the first 2 years of Vigeo Power owning and operating the utility and our estimate is that the full deployment will take 5 – 7 years. Based on a 6 month expected timeline for the TA, approximately 4 months for the TA Contractor to begin work, and other delays, we expect the TA will be completed by the 2nd quarter of 2015. We expect Vigeo to begin deployment of the proposed technology solutions within 6 months of completion of the TA, in the 1st quarter of 2016. The Project will be deployed in phases which could vary significantly based on the recommendations, estimated return on investment, and funding priorities.

3. Phases of the Project would likely be built through individual contracts and procurement of various components (i.e. SCADA, GIS, AMI). However there would likely be a turnkey contract for deployment of a pilot project and there may be larger turnkey contracts for deployment of utility wide integrated IT and automation solutions.
4. Potential risks faced during Project implementation include:
    a. Smart Grid technologies are continually evolving and Vigeo Power must ensure that the Project plans remain current.
    b. Large scale IT and automation projects are always complex and have significant human resource components which must be managed well (i.e. training, organizational restructuring, change management) to ensure success.
    c. This Project is one component of Nigeria's power sector restructuring and there are multiple components that could fail, with adverse effects on the Project. For example, if the power generation sector fails to increase power supply then the Benin Distribution Company will not have adequate supply to grow its customer base and implement the planned Project.
    d. After the large investment in the purchase of BEDC and given the current dilapidated state of the utility, securing financing for large capital expenditure projects may be challenging.
5. The Project does not require any special approvals, per se. As an independent company, Vigeo Power has the autonomy to make investment decisions. However, Vigeo Power must work within the regulatory framework to secure approval for capital expenditures for which it will receive an agreed return on investment. The TOR addresses this through a task which looks at regulatory issues. The DM team met with the senior management team for Vigeo Power, which demonstrated its commitment to implementing the Project. The Project is considered viable based on the fact that it is driven primarily by return on investment as a result of decreased technical and commercial losses and increased revenues.
6. Regarding the evaluation of Project implementation, including U.S. export success, Vigeo Power should be the primary source of information regarding the implementation of the Project and any U.S. company involvement.

G. Implementation Financing

Vigeo Power has secured financing for 25% of the purchase of shares in BEDC and is prepared to make the second 75% payment by September 1, 2013 for a total investment of $129 million (Vigeo Holdings owns 75% of Vigeo Power, AFC owns 17%, and GUMCO owns 8%). Vigeo Holdings has access to domestic and regional commercial banks from which it expects to secure debt financing

for the Project. It expects capital expenditure spending of around $300 million over the first three years, all of which would be financed with debt.

Generally speaking, clean energy projects such as Smart Grid projects are attractive to bilateral and multilateral financing agencies. Vigeo Power has approached the World Bank with respect to utilizing the Bank's Partial Risk Guarantee (PRG) program. The PRG supports private sector investment projects, including Public-Private Partnership (PPP) projects, green-field and rehabilitation/expansion projects, concession and privatization transactions. PRG can be structured to protect lenders of limited-recourse project finance debt, or to protect the project company. The World Bank is active in Nigeria in the electric power sector and has done considerable work to support Nigeria's power sector reform program and to increase investment in the country's generation, transmission and distribution infrastructure.

Depending on ownership structure of the utility and US content of the project, the Project would be eligible for Ex-Im Bank support, including direct loans and loan guarantees, that would be available to U.S. and foreign companies, including foreign leasing companies, for U.S. made equipment, provided that the transaction is guaranteed by the full faith and credit of the host government, or if the private sector buyers of the U.S. goods and services are adequately capitalized to make the transaction sufficiently creditworthy. The most useful tool that it would likely provide in support of the Project would be working capital guarantees for US companies based on the credit worthiness of those companies.

It is possible that ExIm Bank could provide debt financing to Vigeo Power, but it is unlikely that there would be a suitable credit structure for the Project. Generally, US ExIm Bank has found that utilities are highly leveraged and find it difficult to establish appropriate credit structures for debt financing. The excerpt from the U.S. ExIm Bank country limitation schedule below shows that ExIm is open for public and private sector transactions in Nigeria for short, medium and long term financing.[2]

[2] #1. Discretionary Credit Limits under Short Term Insurance Policies are withdrawn. Cover not available unless specified in a Special Buyer Credit Limit endorsement, an Issuing Bank Credit Limit endorsement, or a Country Limit of Liability endorsement.

#3. Prior to accepting an application for a preliminary or final commitment for a public sector transaction, or for any insurance or WCGP coverage for a public sector transaction, Ex-Im Bank will require an indication of host government support for the application. Contact Ex-Im Bank for more detailed information on specific markets.

#4. Ex-Im Bank cover/support for private sector transactions is typically limited to transactions with a commercial bank as obligor or guarantor. Coverage under the WCGP for private sector transactions requires that the transaction be supported by an irrevocable Letter of Credit. Ex-Im Bank will consider transactions without a bank undertaking on a case-by-case basis. As conditions pursuant to which we may consider non-bank transactions vary in markets subject to this note, please contact the Credit Policy Division for further information.

#5. Ex-Im Bank cover/support for public sector transactions is typically limited to transactions which commit the full faith and credit of the government.

	PUBLIC SECTOR			PRIVATE SECTOR			
COUNTRY	Up to 1 Year	1 to 7 Years	Over 7 Years	Up to 1 Year	1 to 7 Years	Over 7 Years	NOTE(S)
Nigeria							1, 3, 4, 5

H. Development Impact

Nigeria is embarking upon an infrastructure evolution of impressive scale as the country expands and modernizes its entire electric power sector, including the generation, transmission and distribution of power. The expansion and modernization of the Benin Distribution Company system is a critical part of this initiative. The modernization of the distribution system will allow for:

- faster and more efficient expansion of the system through advanced IT planning tools, such as GIS AM/FM;
- less frequent and reduced time of outages and reduced technical losses in the system through improved monitoring and more efficient management through SCADA, substation automation, OMS and DMS;
- increased efficiency and effectiveness of commercial operations through improved metering, billing, and collection systems, therefore bringing more revenues into the system to cover capital and operating costs of the system.

The proposed Project would have significant developmental impacts if fully implemented, including the following:

Infrastructure – Specific infrastructure impacts resulting from the Project include the construction of modern substations and the deployment of utility wide IT and automation systems such as advanced metering technology (AMI, AMR, Smart Meters, pre-paid meters), GIS AM/FM, OMS, DMS, SCADA and substation automation. Measures of impact could include kilowatt hours delivered due to decreased technical losses as a result of Project implementation.

Human Capacity Building – Implementation of the Project will require considerable training in new technologies. Training is typically provided as part of a procurement package for new systems. In addition, the proposed Technical Assistance will recommend a long-term training program for the Project, which, if implemented, would provide significant training to Benin Distribution Company staff required to manage, build out and modernize the distribution system. The overall Benin Distribution Company privatization will entail significant growth of the overall utility and company as well as rationalization of human resources as the company becomes more efficient and modernizes overall operations. The IT and automation technologies component of the Project will require employment of at least 20 local IT and distribution automation technical experts to deploy and operate the new systems.

Technology Transfer and Productivity Improvement – The Project will introduce a wide range of Smart Grid technologies not currently used within the Benin Distribution Company or in Nigeria. The use of those technologies is expected to dramatically improve productivity of staff to manage the distribution system. Automation typically reduces the amount of manpower per unit of

production. As an example, the use of a SCADA system with substation automation would decrease manpower requirements from 5-6 persons to 1 person per substation, thus increasing productivity by at least 400%. Skilled personnel are an exceptionally scarce resource in Nigeria so the redeployment of such personnel to other tasks within the distribution system would prove very beneficial.

Environment: The overall environmental impact of Smart Grid technology implementation is positive due to the fact that they improve demand side management and efficient use of existing and planned generation, transmission and distribution assets. Among the positive environmental impacts of the Project are the following:

- Less fossil fuel requirements per kilowatt hour of power delivered as existing resources will be utilized more efficiently;
- Air emission reductions due to less fossil fuel generation and reduced distribution losses;
- Less distribution infrastructure requirements as existing resources will be utilized more efficiently; and
- Promotion of renewable energy resources development as Smart Grid technologies facilitate the delivery of highly variable generation onto the grid.

Other Developmental Impacts: The increased availability of reliable electric power will stimulate commercial, industrial and agricultural development within the Benin Distribution area. It will make commercial activities more efficient and it will open up industrial opportunities. In short it will spur economic activity and bring economic growth and improve the quality of life in the region.

Alternatives: While a number of advanced technologies and systems will be evaluated during the Study, the use of basic management systems can have equally dramatic results on improving the delivery of power. Management systems (e.g. work flow management systems) are one example and even outage management and trouble call systems can be improved through procedural and administrative changes without the use of advanced technologies. These will be considered in the overall requirements analysis. The integration of IT and other systems will come at a cost but will be maximizing existing technologies and systems and may not require the procurement of significant new systems.

I. Environmental Impact

The Project, if fully implemented, would entail the deployment of IT and automation technologies for the modernization of the Benin Distribution Company in Nigeria. The construction of facilities such as new substations may lead to certain negative environmental impacts, which must be mitigated through the use of modern construction practices in accordance with applicable laws in Nigeria. The negative environmental impact of Smart Grid technologies is generally due to increased manufacturing of the equipment, but with proper application of industry best practices these can be mitigated or minimized. The terms of reference includes a preliminary environmental impact analysis of the Project.

J. Impact on US Labor

The Project, if fully implemented, would entail the deployment of Smart Grid technologies for the modernization of the Benin Distribution Company in Nigeria. Based upon DM team's review, this Project does not provide: (a) any financial incentive to a business enterprise currently located in

the United States for the purpose of inducing such an enterprise to relocate outside the United States if such incentive or inducement is likely to reduce the number of employees of such business enterprise in the United States because United States production is being replaced by such enterprise outside the United States; (b) assistance for any project or activity that contributes to the violation of internationally recognized workers' rights; or (c) direct assistance for establishing or expanding production of any commodity for export by any country other than the United States, if the commodity is likely to be in surplus on world markets at the time the resulting productive capacity is expected to become operative and if the assistance will cause substantial injury to United States producers of the same, similar, or competing commodity.

K. Recommendation

The Benin Distribution Modernization Project is a unique opportunity for USTDA to promote the use of advanced IT and automation, or Smart Grid, technologies in Nigeria. The use of these technologies in Nigeria will be critical not only for the success of the Benin Distribution Company but of the entire electric power sector in Nigeria. Without the efficient and reliable delivery of power at the distribution level none of the other reforms taking place in the regulatory, generation, and transmission areas will be successful. Stable, commercially viable distribution companies that can expand service and be reliable offtakers of delivered power are essential to the financial sustainability of the sector.

The magnitude of the market for U.S. Smart Grid technologies in Nigeria is significant and there is a window of opportunity that is critical to the success of U.S. companies in capturing this market. The rapid deployment of Smart Meters and other Smart Grid hardware worldwide at its current pace may soon make these a commodity in which US suppliers would be less competitive. U.S. firms need to capture as much of the volume as possible while they still have a competitive advantage. The deployment of U.S. technologies versus their foreign competitors in the early stage of Nigeria's Smart Grid deployment will have a multiplier effect as proven technologies will be adopted and replicated at other utilities. USTDA support for this Project should thus be mobilized and implemented as soon as possible in order to help realize these benefits.

U.S. suppliers are the global leaders in Smart Grid technologies and are actively pursuing foreign markets, including African countries with great potential such as Nigeria, as U.S. Smart Grid spending slows down. Based on our analysis, the total Project costs could easily reach $100 million with a realistic U.S. export potential of $57 million in the next 10 years. The Project has strong potential developmental impacts, overall positive environmental impacts, and fits well with the Government of Nigeria's plans to modernize generation, transmission and distribution infrastructure in the country. The DM team recommends USTDA funding for the Benin Distribution Modernization Technical Assistance in the amount of $629,500.

L. Contacts

Gbenga Ade Sonuga | Investment
Vigeo Holdings Limited
6 Osborne Road, Ikoyi, Lagos
Tel: +234 1 271 9450
Cel: +234 706 267 2127
email: adesonuga@vigeoholdings.com

Funke Osibodu
Vigeo Holdings Limited
Tel: +234 802 778 2000
funkeosibodu@citiinvetmentcap.com

Yemi Omoyelu
Global Utilities Management Company Ltd. (A Vigeo Holdings Company)
368 ikorodu Road, Maryland, Lagos
Tel: +234 802 344 0357
email: yemi.omoyelu@gumco.net

Rick Angiuoni Director
Africa Global Business Development Division
Export-Import Bank of the United States
811 Vermont Avenue, NW #1101
Washington, DC 20571
USA tel.:202-565-3903 fax:202-565-3839
email:rick.angiuoni@exim.gov

Appendix 1. Benin DISCO Background

BENIN ELECTRICITY DISTRIBUTION PLC
5, Akpakpava Road, Benin City, Edo State, Nigeria.

Benin Electricity Distribution Plc, or Benin Disco, serves a primarily industrial customer base in Delta, Edo, Ondo and Ekiti States, Nigeria's industrial Mid-West, a region dominated by oil and energy-related companies. The districts in the Disco includes Ado-Ekiti, Afenmesan, Akure, Asaba, Akpapava, Ugbowo, Ikpoba-Hill, Ondo, Sapele, Ughelli and Warri. Benin Disco maintains electrical infrastructure from its base in Benin City, Edo State, considered the South East regional gateway. Benin Disco owns and maintains electrical installations and the distribution network within the zone, manages meter installations and servicing, billing, coordinates consumer credit services, and collects revenue. Benin Disco currently employs 3,071 staff as at May, 2007.

Benin Disco is one of 11 such distribution companies comprising a national distribution grid. The Transmission grid, in turn, is managed by a separate company, the Transmission Company of Nigeria (TCN) Plc, from a national control center at Oshogbo, and a supplementary center at Shiroro. TCN is a subsidiary of the Power Holding Company of Nigeria (PHCN).

In 2005, Benin Disco intensified collection efforts with the introduction of Banks in 2002 through which customers could make payment of their Bills and installation of pre-payment meters, route sequencing, bulk, and feeder-by-feeder energy audits. As a result, as of December 2006, most of the districts within the Disco recorded above 60% collection rate for the total energy billed for the period. Average collection efficiency as at March 2007, stood at 74.66%.

NETWORK & FACILITIES

In 2005, Benin Disco delivered a total of 438,434GWh of electricity to customers, generating revenue amounting to N1.238 billion. Benin Disco has a population of about 665,313 registered customers for the seven district plus an estimated "unmetered/unregistered" 155,877 customers.
In 2005, Benin Disco had a total distribution capacity of 1404.495MWA Per annum. Core and non-core assets of the company as at 2006 is N47,293,069.34.
33Kv - Interconnections GPL to PHCN (Km): -4803Km
i. Unit or MVA rating - 1055.06MVA

ii. Unit Cost CUSS or Naira

iii. Useful lifespan and qualities equipment; and

iv. Appropriate age to date.

11Kv and 6.5Kv - 5813Km

Low Voltage (LT)3 phase - 35,150Km
Low Voltage (LT) Single phase - 4,325Km
Cables, route (Km)
i. 33Kv - 18Km

ii. 11Kv - 152Km

iii. Low Voltage - 250Km

Ground Mounted Transformers
132/11Kv (15MVA) - Nil
132/6.6Kv - Nil
33/11Kv - 162
33/.415Kv - 102
11/.415 - 309
11/6.6.415Kv - 12

Pole mounted Transformer
i. Three Phase - 33/11Kv - Nil

ii. Three Phase - 33K/415V - Nil

iii. Three Phase - 11K/415V - Nil

iv. Single Phase

Injection substations
No. of i) 33Kv - 55
ii) 11Kv - 284
iii) 66Kv Circuit Breakers (Incomer Bus Coupler and Feeder - 10
In addition, Benin Disco's network includes 54,957.639km length of overhead and underground lines, electrical poles, telecommunication equipment, power transformers, 78 grid metering facilities and other metering equipment.

PRIVATIZATION
Benin Distribution Company Plc was established as a public limited liability company on November 7th, 2005, with electricity distribution and marketing franchise in Delta, Edo, Ondo, and Ekiti States. Benin Disco is managed by a Chief Executive Officer (CEO), who also serves as the Chief Accounting Officer and reports directly to the CEO, Power Holding Company of Nigeria (PHCN) Plc, Benin Disco's parent company. By July 1, 2006, Benin Disco became a stand alone company as a next step toward privatization.

Concessioning or core investor sale are the most likely privatization options but the exact strategy will depend on an evaluation of operations, assets, investment required, and other factors. In February 2007, FGN advertised for prospective investors with expertise in the power industry to respond with their Expressions of Interest (EOIs). Deadline for submission was 9th March, 2007.

In 1999, FGN began an aggressive restructuring of the power sector with several aims, including:

introduction of efficient, private sector standards and management principles, and methodology, leading to reliable power priced by the market.

In 2001, FGN approved a National Electric Power Policy (NEPP), followed in 2005 by the Electric Power Sector Reform (EPSR) Act. EPSR Act provides the legal authority for the unbundling of Nigeria's power utility as well as the introduction of a new state-of-the-art regulatory scheme managed by the Nigerian Electricity Regulatory Commission (NERC), an independent regulatory commission, to guarantee open access and ensure efficiency throughout the industry. EPSRA also provides for a consumer assistance fund, development of a competitive market, and establishment of a Rural Electrification Agency and Fund (REA & REF) and the Nigeria Electricity Liability Management Company (NELMCO)

Federal Republic of Nigeria
Bureau of Public Enterprises

Privatization of Generation and Distribution Companies Created out of the Power Holding Company of Nigeria Plc (PHCN)

Benin Electricity Distribution Plc, Nigeria
Sale of Equity (51%)
Information Brochure

Benin Electricity Distribution Plc (Benin Disco) is one of the successor companies created following the unbundling of the Power Holding Company of Nigeria Plc (PHCN).

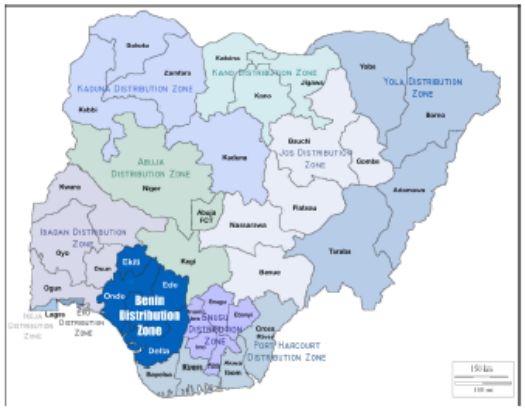
PHCN (formerly the National Electric Power Authority – NEPA) had been the state-owned agency responsible for generating, transmitting and distributing electricity for the entire country of Nigeria. As part of the ongoing power sector reform efforts by the Federal Government of Nigeria (FGN), much of state-owned interest in the electricity services industry is being divested.

Benin Disco is to be privatized through a sale of 51% of its equity to qualified long-term investors with necessary capital and technical expertise to service the company's customers in an efficient manner. The sale will be carried out as an international competitive tender.

FGN, having set aside over US$ 1.3-billion budget, will handle any labor and rightsizing liabilities that may arise before this sale transaction completes. The selected investors are expected to improve the company's operational efficiency to achieve commercial sustainability within a reasonable timeframe. Interim subsidy, if required, will be provided by FGN during the efficiency improvement period.

The National Electricity Regulatory Commission (NERC) is currently in the process of implementing the sector transition toward a fair and cost-reflective tariff regime through the revision of the Multi-Year Tariff Order. In addition, credit enhancement packages are to be provided to the sector by FGN.

Benin Disco is responsible for distributing electricity in Delta, Edo, Ekiti and Ondo States. Recently, Benin Disco delivered a total of 1,855 GWh to about 529,000 customers.



Benin Disco – Key Information				
Coverage	Delta, Edo, Ekiti and Ondo States (57,550 km²)			
Population	13,205,000 persons – Density 229/km² (2006) 3,678,000 households (2008)			
Income	522,000 N/household/year (2008 est.)			
Technical Characteristics (2008)	Peak Load (MW)		Feeder Length(km)	
	at 33kV	600	33kV	6,019
	at 11kV	565	11kV	4,465
	at 33kV	452	LT	94,218
	Substations (No)		Feeders (No.)	
	33/11kV	171	33kV	53
	33kV/LT	1,021	11kV	262
	11kV/LT	5,106	LT	17,156
	Transformer Cap. (MVA)		Customers (No.)	
	33/11kV	3,530	33kV	61
	33kV/LT	506	11kV	654
	11kV/LT	2,553	LT	528,626
Distribution	1,855 GWh (2009)			
Customers	529,341 (2008)			
Staff	3,642 (2009) – Retrenchment program planned			
Revenue	US$ 91 million (2009), of which: Revenue collected: US$ 64 million (88% tariff collection rate) Gov. Subsidy: US$ 27 million			
Operating Cost	US$ 146 million (2009), of which: Cost of power purchase: US$ 103 million Other (admin, dist. etc.): US$ 43 million			
Asset Value	US$ 113 million (2008 est.)			
Exp. Inv.	Ave. US$ 96 million/year for 2011 and 2012			
Dist. Losses	19% (2009, technical and non-technical)			

Exchange Rate: 151 Naira/USD (2009 interbank rate average).

Lead Transaction Advisor
CPCS
in association with:
Taylor-DeJongh · Herbert Smith · Castalia · ECA · BM UI · Adepetun Caxton-Martins Agbor & Segun · MTI · KOYO

For more information, contact:
Amaechi C. Aloke, Bureau of Public Enterprises, aaloke@bpeng.org
Arif Mohiuddin, CPCS, info@nigeriaelectricityprivatisation.com
Or visit: www.nigeriaelectricityprivatisation.com

USTDA Addendum to the Nigeria Energy Sector Definitional Mission Report (USTDA No. 2013-11008A)

This addendum is correcting the Project Sponsor Capabilities and Commitment section of the Definitional Mission Report on pages 32-34 of this RFP. The below table details the ownership structure of Vigeo Power Limited.

Vigeo Power Limited (VPL) Ownership Structure	
AFC	20.16%
GUMCO	6.63%
Vigeo Holdings Limited	32.06%
Design Innovation Limited	16.15%
VHL International Limited	25%

A N N E X 3

U.S. TRADE AND DEVELOPMENT AGENCY
Arlington, VA 22209-3901

NATIONALITY, SOURCE, AND ORIGIN REQUIREMENTS

[As of January 17, 2014]

The purpose of USTDA's nationality, source, and origin requirements is to ensure the maximum practicable participation of American contractors, technology, equipment and materials in the prefeasibility, feasibility, and implementation stages of a project.

USTDA STANDARD RULE (GRANT AGREEMENT STANDARD LANGUAGE):

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and professional services funded by USTDA under the Grant Agreement:

(a) the Contractor must be a U.S. firm;

(b) the Contractor may use U.S. subcontractors without limitation;

(c) employees of U.S. Contractor or U.S. subcontractor firms shall be U.S. citizens, non-U.S. citizens lawfully admitted for permanent residence in the United States or non-U.S. citizens lawfully admitted to work in the United States, except as provided pursuant to subpart (d) below;

(d) up to twenty percent (20%) of the USTDA Grant amount may be used to pay for services performed by (i) Host Country subcontractors, and/or (ii) Host Country nationals who are employees of the Contractor;

(e) a Host Country subcontractor may only be used for specific services from the Terms of Reference identified in the subcontract;

(f) subcontractors from countries other than the United States or Host Country may not be used;

(g) goods purchased for performance of the Study and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and

(h) goods and services incidental to Study support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions.

NATIONALITY:

1) Application

A U.S. firm that submits a proposal must meet USTDA's nationality requirements as of the date of submission of the proposal and, if selected, must continue to meet such requirements throughout the duration of the USTDA-funded activity. These nationality provisions apply to all portions of the Terms of Reference that are funded with the USTDA grant.

2) Definitions

A "U.S. firm" is a privately owned firm that is incorporated in the U.S., with its principal place of business in the U.S., and which is either (a) more than 50% owned by U.S. citizens and/or non-U.S. citizens lawfully admitted for permanent residence in the United States, or (b) has been incorporated in the U.S. for more than three (3) years prior to the issuance date of the request for proposals; has performed similar services in the U.S. for that three (3) year period; employs U.S. citizens in more than half of its permanent full-time positions in the U.S.; and has the existing capability in the U.S. to perform the work in question.

A partnership that is organized in the U.S., has its principal place of business in the U.S., and is more than 50% owned by U.S. citizens and/or permanent residents, qualifies as a "U.S. firm".

A nonprofit organization, such as an educational institution, foundation, or association, also qualifies as a "U.S. firm" if it is incorporated in the U.S. and managed by a governing body, a majority of whose members are U.S. citizens and/or permanent residents.

SOURCE AND ORIGIN:

Definitions

"Source" means the country from which shipment is made.

"Origin" means the place of production, through manufacturing, assembly or otherwise.

Questions regarding these nationality, source and origin requirements may be addressed to the USTDA Office of General Counsel.

Version 01.17.2014

ANNEX 4

LZ (Director) NIG 2014-11024 A

Regional Dir (LF)
Cnt Mgr (LB)
Reg. Anlst (MS)
Dep CFO (MB)
Fin. Spec. (EB)
IRC Proj. Spec (JV, MJ)
Grants Admin (PD)
Grants Spec. (SW)
Ex. Asst (SU)
COS (CJ)
GC (EE)
Director of Programs (CK)

GRANT AGREEMENT

This Grant Agreement is entered into between the Government of the United States of America, acting through the U.S. Trade and Development Agency ("USTDA") and Benin Electricity Distribution Plc ("Grantee"). USTDA agrees to provide the Grantee under the terms of this Grant Agreement US$630,000 ("USTDA Grant") to fund the cost of goods and services required for technical assistance ("TA") on the proposed Benin Electricity Distribution Modernization ("Project") in Nigeria ("Host Country").

1. USTDA Funding

The USTDA Grant to be provided under this Grant Agreement shall be used to fund the costs of a contract between the Grantee and the U.S. firm selected by the Grantee ("Contractor") under which the Contractor will perform the TA ("Contract"). Payment to the Contractor will be made directly by USTDA on behalf of the Grantee with the USTDA Grant funds provided under this Grant Agreement.

2. Terms of Reference

The terms of reference for the TA ("Terms of Reference") are attached as Annex I and are hereby incorporated by reference into this Grant Agreement. The TA will examine the technical, financial, environmental, and other critical aspects of the proposed Project. The Terms of Reference for the TA shall also be included in the Contract.

3. Standards of Conduct

USTDA and the Grantee recognize the existence of standards of conduct for public officials and commercial entities in their respective countries. Therefore, USTDA, the Grantee, and the Contractor shall not directly or indirectly provide, offer or promise to provide money or anything of value to any public official in violation of any United States or Host Country laws relating to corruption or bribery.

4. Grantee Responsibilities

The Grantee shall undertake its best efforts to provide reasonable support for the Contractor, such as local transportation, office space, and secretarial support.

5. Contract Matters and USTDA's Rights as Financier

(A) Grantee Competitive Selection Procedures

Selection of the U.S. Contractor shall be carried out by the Grantee according to its established procedures for the competitive selection of contractors with advance notice of the procurement published online through *Federal Business Opportunities*

(www.fedbizopps.gov). Upon request, the Grantee will submit these contracting procedures and related documents to USTDA for information and/or approval.

(B) USTDA's Right to Approve Contractor Selection

The Grantee shall notify USTDA at the address of record set forth in Article 16 below upon selection of the Contractor to perform the TA. USTDA then shall notify the Grantee whether or not USTDA approves the Grantee's Contractor selection. Upon USTDA approval of the Grantee's Contractor selection, the Grantee shall notify in writing the U.S. firms that submitted unsuccessful proposals to perform the TA that they were not selected. The Grantee and the Contractor then shall enter into a Contract for performance of the TA.

(C) USTDA's Right to Approve Contract Between Grantee and Contractor

(1) Contract

The Grantee and the Contractor shall enter into a Contract for performance of the TA. The Grantee (or the Contractor on the Grantee's behalf) shall transmit to USTDA, at the address set forth in Article 16 below, a photocopy of an English language version of the signed Contract or a final negotiated draft version of the Contract. USTDA then shall notify the Grantee and the Contractor whether or not USTDA approves the Contract.

(2) Amendments and Assignments

The Grantee or the Contractor may submit any proposed amendment to the Contract, including any proposed amendment to any annex thereto, or any proposed assignment of the Contract, to USTDA at the address set forth in Article 16 below. USTDA then shall notify the Grantee and the Contractor whether or not USTDA approves the proposed amendment or assignment.

(D) USTDA Not a Party to the Contract

It is understood by the parties that USTDA has reserved certain rights such as, but not limited to, the right to approve the terms of the Contract and any amendments thereto, including assignments, the selection of all contractors, the Terms of Reference, the Final Report, and any and all documents related to any Contract funded under the Grant Agreement. The parties hereto further understand and agree that USTDA, in reserving any or all of the foregoing approval rights, has acted solely as a financing entity to assure the proper use of U.S. Government funds, and that any decision by USTDA to exercise or refrain from exercising these approval rights shall be made as a financier in the course of funding the TA and shall not be construed as making USTDA a party to the Contract. The parties hereto understand and agree that USTDA may, from time to time, exercise the foregoing approval rights, or discuss matters related to these rights and the Project with the parties to the Contract or any subcontract, jointly or separately, without thereby incurring any

responsibility or liability to such parties. Any approval or failure to approve by USTDA shall not bar the Grantee or USTDA from asserting any right they might have against the Contractor, or relieve the Contractor of any liability which the Contractor might otherwise have to the Grantee or USTDA.

(E) Grant Agreement Controlling

Regardless of USTDA approval, the rights and obligations of any party to the Contract or any subcontract thereunder must be consistent with this Grant Agreement. In the event of any inconsistency between the Grant Agreement and the Contract or any subcontract funded by the Grant Agreement, the Grant Agreement shall control.

6. Disbursement Procedures

(A) USTDA Approval of Contract Required

USTDA will make disbursements of USTDA Grant funds directly to the Contractor only after USTDA approves the Grantee's Contract with the Contractor.

(B) Contractor Invoice Requirements

The Grantee should request disbursement of funds by USTDA to the Contractor for performance of the TA by submitting invoices in accordance with the procedures set forth in the USTDA Mandatory Contract Clauses in Annex II.

7. Effective Date

The effective date of this Grant Agreement ("Effective Date") shall be the date of signature by both parties or, if the parties sign on different dates, the date of the last signature. In the event that only one signature is dated, such date shall constitute the Effective Date.

8. TA Schedule

(A) TA Completion Date

The completion date for the TA, which is June 30, 2015, is the date by which the parties estimate that the TA will have been completed.

(B) Time Limitation on Disbursement of USTDA Grant Funds

Except as USTDA may otherwise agree, (i) no USTDA funds may be disbursed under this Grant Agreement for goods and services which are provided prior to the Effective Date of the Grant Agreement; and (ii) no USTDA funds may be disbursed more than four (4) years after the Effective Date of the Grant Agreement.

9. USTDA Mandatory Contract Clauses

All contracts funded under this Grant Agreement shall include the USTDA Mandatory Contract Clauses set forth in Annex II to this Grant Agreement. All subcontracts funded or partially funded with USTDA Grant funds shall include the USTDA Mandatory Contract Clauses, except for Clauses B(1), G, H, I, and S.

10. Use of U.S. Carriers

(A) Air

Transportation by air of persons or property funded under this Grant Agreement shall be on U.S. flag carriers in accordance with the Fly America Act, 49 U.S.C. 40118, to the extent service by such carriers is available, as provided under applicable U.S. Government regulations.

(B) Marine

Transportation by sea of property funded under this Grant Agreement shall be on U.S. carriers in accordance with U.S. cargo preference law.

11. Nationality, Source and Origin

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and professional services funded by USTDA under the Grant Agreement:

(a) the Contractor must be a U.S. firm;

(b) the Contractor may use U.S. subcontractors without limitation;

(c) employees of U.S. Contractor or U.S. subcontractor firms shall be U.S. citizens, non-U.S. citizens lawfully admitted for permanent residence in the United States or non-U.S. citizens lawfully admitted to work in the United States, except as provided pursuant to subpart (d) below;

(d) up to twenty percent (20%) of the USTDA Grant amount may be used to pay for services performed by (i) Host Country subcontractors, and/or (ii) Host Country nationals who are employees of the Contractor;

(e) a Host Country subcontractor may only be used for specific services from the Terms of Reference identified in the subcontract;

(f) subcontractors from countries other than the United States or Host Country may not be used;

(g) goods purchased for performance of the TA and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and

(h) goods and services incidental to TA support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions.

USTDA will make available further details concerning these provisions upon request.

12. Taxes

USTDA funds provided under this Grant Agreement shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in Host Country, except for taxes of a de minimis nature imposed on local lodging, food, transportation, or airport arrivals or departures. Neither the Grantee nor the Contractor will seek reimbursement from USTDA for taxes, tariffs, duties, fees or other levies, except for taxes of a de minimis nature referenced above.

13. USTDA Project Evaluation

The parties will cooperate to assure that the purposes of the Grant Agreement are accomplished. For five (5) years following receipt by USTDA of the Final Report, the Grantee agrees to respond to any reasonable inquiries from USTDA about the status of the Project. Inquiries will include, but not be limited to, whether the Final Report recommendations have been or will be used to implement the Project, anticipated Project implementation timeline, and likely source of financing. In addition, the Grantee agrees to notify USTDA any time the Grantee selects a new primary contact person for this Project during the five-year period referenced above.

14. Recordkeeping and Audit

The Grantee agrees to maintain books, records, and other documents relating to the TA and this Grant Agreement adequate to demonstrate implementation of its responsibilities under this Grant Agreement, including the selection of contractors, receipt and approval of Contract deliverables, and approval or disapproval of Contractor invoices for payment by USTDA. Such books, records, and other documents shall be separately maintained for three (3) years after the date of the final disbursement by USTDA. The Grantee shall afford USTDA or its authorized representatives the opportunity at reasonable times to review books, records, and other documents relating to the TA and the Grant Agreement.

15. Representation of Parties

For all purposes relevant to this Grant Agreement, the Government of the United States of America will be represented by the U. S. Ambassador to Host Country or USTDA and Grantee will be represented by its Chief Executive Officer. The parties hereto may, by written notice, designate additional representatives for all purposes under this Grant Agreement.

16. Addresses of Record for Parties

Any notice, request, document, or other communication submitted by either party to the other under the Grant Agreement shall be in writing or through an electronic medium that produces a

tangible record of the transmission, such as a facsimile or e-mail message, and will be deemed duly given or sent when delivered to such party at the following:

To: Mr. Gbenga Sonuga
Chief Operating Officer
Lagos Liaison Office
Benin Electricity Distribution Company
c/o Citi Asset Management Ltd. 47b Glover Road, Ikoyi
Lagos, Nigeria

Phone: +234 1 271 9620 Ext 206; +234 706 267 2127
E-Mail: gbengasonuga@citiinvestmentcap.com

Mr. Njekwa Mumbuna
Chief Financial Officer
Benin Electricity Distribution Company
5, Akpakpava Road
Benin City, Nigeria

Email: NjekwaMumbuna@bedcpower.com

To: U.S. Trade and Development Agency
1000 Wilson Boulevard, Suite 1600
Arlington, Virginia 22209-3901
USA

Phone: (703) 875-4357
Fax: (703) 875-4009
E-Mail: Africa@ustda.gov

All such communications shall be in English, unless the parties otherwise agree in writing. In addition, the Grantee shall provide the Commercial or Economic Section of the U.S. Embassy in Host Country with a copy of each communication sent to USTDA.

Any communication relating to this Grant Agreement shall include the following fiscal data:

Appropriation No.: 11 14/15 1001
Activity No.: 2014-11024A
Reservation No.: 2014208
Grant No.: GH201411208

17. Implementation Letters

To assist the Grantee in the implementation of the TA, USTDA may, from time to time, issue implementation letters that will provide additional information about matters covered by this

Grant Agreement. USTDA may also issue implementation letters to (i) extend the estimated completion date set forth in Article 8(A) above, or (ii) change the fiscal data set forth in Article 16 above. The parties may also use jointly agreed upon implementation letters to confirm and record their mutual understanding of matters covered by this Grant Agreement.

18. Grant Agreement Amendments

Either party may submit to the other party at any time a proposed amendment to the Grant Agreement. A Grant Agreement amendment shall be effective only if it has been signed by both parties.

19. Termination Clause

Either party may terminate this Grant Agreement by giving the other party written notice thereof. The termination of the Grant Agreement will end any obligations of the parties to provide financial or other resources for the TA, except for payments that may be made pursuant to Clause H of the USTDA Mandatory Contract Clauses set forth in Annex II to this Grant Agreement. This article and Articles 5, 12, 13, 14, and 21 of the Grant Agreement shall survive termination of the Grant Agreement.

20. Non-waiver of Rights and Remedies

No delay in exercising any right or remedy accruing to either party in connection with the Grant Agreement shall be construed as a waiver of such right or remedy.

21. U.S. Technology and Equipment

By funding this TA, USTDA seeks to promote the project objectives of the Host Country through the use of U.S. technology, goods, and services. In recognition of this purpose, the Grantee agrees that it will allow U.S. suppliers to compete in the procurement of technology, goods and services needed for Project implementation.

22. Governing Law

This Grant Agreement shall be governed by, and construed in accordance with, the applicable laws of the United States of America. In the absence of federal law, the laws of the State of New York shall apply.

23. Counterparts

This Grant Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same agreement. Counterparts may be delivered via electronic mail or other transmission method and any counterpart so delivered shall be deemed to be valid and effective for all purposes.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Government of the United States of America and Benin Electricity Distribution Plc, each acting through its duly authorized representative, have caused this Grant Agreement to be signed in the English language in their names and delivered as of the day and year written below. In the event that this Grant Agreement is signed in more than one language, the English language version shall govern.

For the Government of the United States of America

By: _____

Date: 5/22/14

For Benin Electricity Distribution Plc

By: _____

Date: 22-05-14

Witnessed:

By: _____

5/22/14

Witnessed:

By: _____

22/5/2014

Annex I -- Terms of Reference

Annex II -- USTDA Mandatory Contract Clauses

Annex I

Terms of Reference

The purpose of this technical assistance ("TA") is to update and modernize the electricity distribution network for the Benin Electricity Distribution Plc ("Grantee") in Nigeria ("Project"). The TA shall recommend a plan for the Grantee to update and modernize its electricity distribution network in Nigeria, including outlining the required investments and training.

Task 1: Kick-off Meeting, Document Review, Review of the Existing Management and Operations, Work Plan, and Inception Report

Subtask 1(a) Kick-Off Meeting and Document Review:

The Contractor shall obtain from the Grantee and review all available information and relevant studies of the current Benin electricity distribution system structure, operations, management and operating guidelines, and relevant information concerning the types and state of equipment used in the distribution system. This shall include a review of the Grantee's current business and investment plans.

The Contractor and the Grantee shall also review the following components of the TA: the Contractor's approach and methodology for specific tasks under this Terms of Reference, and the Contractor's documentation and project management reporting requirements under this Terms of Reference.

The Contractor shall organize a kickoff meeting with the Grantee and other relevant stakeholders. The Contractor shall recommend to the Grantee appropriate Contractor personnel to participate in the kickoff meeting. The Contractor, in consultation with the Grantee, shall also recommend relevant stakeholders to participate in the kickoff meeting. The Contractor's detailed work plan for the TA shall be reviewed with the Grantee during the kick-off meeting and the Contractor shall obtain the Grantee's concurrence on timelines and the work plan for the TA. The Contractor's detailed and complete work plan shall include all TA activities, milestones, deliverables, and schedule. This work plan shall be the guiding document for the completion of the TA and submission of all deliverables, and shall be used by the Contractor to assess the TA's progress and accomplishments on a monthly basis and report to the Grantee any deviation or delays from the timeline. During the kickoff meeting, the Contractor shall gather input from the Grantee regarding the Grantee's goals for the TA and salient issues surrounding the Grantee's plans for the Project.

For the kickoff meeting, the Contractor shall coordinate with the Grantee on appropriate meeting content; prepare an agenda, handouts, and presentation materials, as needed, for all meeting attendees; conduct the meeting and facilitate discussion; draft a report which summarizes the meeting, and distribute such report to the Grantee; and maintain meeting

records, including the agenda, any handouts and presentation materials, a list of all meeting participants, and the meeting report.

Subtask 1(b) Conduct a Thorough Review of the Current Distribution System Management and Operations Practices

The Contractor shall visit the Grantee's facilities and conduct a review of the Grantee's operations. The Contractor shall review all databases and data collection systems currently in use at the Grantee's facilities and identify any redundant and/or inefficient processes. The Contractor's review shall include the Grantee's systems, processes, and operations, including, but not limited to:

- Organizational framework and systems for all major departments (i.e. commercial, human resources, finance, technical operations), including an assessment of information technology (IT), communications and other technologies currently deployed at each of the departments, as well as an assessment of the technology integration and interface between these departments;
- Existing asset and consumer mapping tools, including, but not limited to geographic information systems (GIS);
- Current performance indicators and performance monitoring practices;
- Demand forecasting and cost-of-service assessment;
- Demand side management (DSM) and load management practices;
- Financial management and revenue collections (i.e. metering, billing, collections and debt management);
- Pre-paid metering programs;
- Network operations, control, and management systems; and
- Processes for regulatory compliance.

The Contractor shall meet with the National Transmission Company (TCN) staff serving the Grantee to better understand how the Grantee interacts with TCN at the electricity transmission level. The Contractor shall also assess the future needs and integration requirements that will allow for better management of the Grantee's distribution system and links to TCN.

The Contractor shall also hold discussions with the Nigerian Electricity Regulatory Commission (NERC) to assess the regulatory requirements and the areas where the Grantee may need to enhance its regulatory compliance. The Contractor shall conduct a review of Nigeria's current electricity tariff regime and analyze its anticipated economic and financial impact on the Grantee's network.

Based on the Contractor's review of currently available data, the Contractor shall assess what the Grantee would need in order to integrate the Grantee's distribution system (e.g.

what technologies may be needed). The Contractor shall outline its findings for the Grantee.

Subtask 1(c) Network Study

The Contractor shall develop a reduced model of the Grantee's 33 kilovolt (kV) circuits that are deemed critical and currently under transmission control. The Contractor shall perform a 33kV system load flow analysis to identify bottlenecks and system weaknesses.

The Contractor shall perform a qualitative assessment of the Grantee's 11kV system and identify inhibitors to system performance. The Contractor shall develop planning and engineering guidelines to strengthen the system. The Contractor shall provide a plan for the Grantee to capture necessary data and build out the 11kV model to perform a more comprehensive study as additional data becomes available to the Grantee in the future.

Subtask 1(d) Conduct a Training Needs Assessment

The Contractor shall conduct an assessment of the training capacity building needs at all levels of the Grantee's operations. The Contractor shall review the Grantee's training and capacity building plans. The assessment shall focus on all business processes involved in the Benin electricity distribution system including the current human resource management at the Grantee's facilities. The Contractor shall document the full range of training and capacity building requirements in various functional areas of the Grantee's operations with a focus on the introduction of new IT, automation and management systems within the Grantee. Potential areas of training may include methods to mitigate high distribution losses and poor collections and/or planning and design of an integrated enterprise wide IT system for a distribution utility. The assessment shall recommend specific training to be provided as part of this TA under Task 2.

Subtask 1(e) Develop and Finalize the Inception Report

Based on the previous subtasks, the Contractor shall develop an inception report that details all of the findings in Task 1. Specifically, the inception report shall include any clarifications agreed to during the meetings, a list of the sites visited and key findings, a list of meetings held and summary of discussions, a detailed schedule of activities under the remainder of the TA, a list of data requirements, and the work plan agreed upon in Subtask 1(a), including proposed field trips under the various tasks.

Task 1 Deliverable: The Contractor shall prepare a report including all work performed under Task 1, including, but not limited to the inception report and a detailed work plan including schedule, milestones, and deliverables for the Project. The Task 1 Deliverable shall be included in the Final Report.

Task 2: Technical Assessment: Conduct an Assessment of the Grantee's Distribution Management and Business Plan and Identify Gaps and Requirements

Subtask 2(a) Conduct an Assessment of the Grantee's Business Plan and Investment Plan and Operations

Building on the information gathered in Task 1, the Contractor shall closely work with the Grantee's senior managers to conduct an analysis of the business operations and business processes currently in use at the Grantee's facilities. This analysis shall include an assessment of Grantee's business functions, information transfer and communication across the Grantee's departments, the decision-making processes within the Grantee, human resource management, business planning, and investment programming. The Contractor shall identify key performance indicators (KPIs) for the Project, identify their baselines, and document the findings and gaps of the Grantee's operations as compared to international best practices for electricity distribution business management.

Subtask 2(b) Conduct a Gap Analysis

Building on the work conducted under Task 1 and Subtask 2(a), the Contractor shall further define and describe the gaps and inefficiencies in the current electricity distribution management systems at the Grantee's facilities. These gaps and inefficiencies shall define and describe all factors and issues that stand between the present state of the Grantee's distribution management and operations and a technologically mature distribution operating company. The factors and issues covered in the Contractor's gap analysis shall include, but not be limited to, the following:

- Gaps and inefficiencies in management functions and processes
- Gaps and inefficiencies in current operational process and work flows
- Gaps and inefficiencies in data availability and data quality
- Gaps and inefficiencies in quality performance data that can be used to manage business processes
- Gaps and inefficiencies assessment in all technical and IT systems for network management; asset management; metering, billing, and collections; customer relations management; outage management; and quality of supply and service
- Gaps and inefficiencies in human resource management, capacity building, training and skills development

In addition, the Contractor shall compile quantitative data and KPIs to document the Grantee's current performance in the key operational areas reviewed by the Contractor, including, but not limited to commercial operations, human resources, finance, and technical operations. The Contractor shall also recommend performance targets for the Grantee for a five-year period.

Based on the activities conducted above, the Contractor shall prepare a gap analysis for each of the distribution management functions and processes. In addition, based on Subtasks 2(a) and 2(b), the Contractor shall advise the Grantee on improvements to the Grantee's business and investment plans.

Subtask 2(c) Develop Recommendations to Address the Identified Gaps

Based on the gap analysis, the Contractor shall develop a set of detailed recommendations for the Grantee that adhere to industry proven practices and that would enhance the Grantee's distribution system management and operations, focusing on the introduction of new IT, automation and management systems that will move the Grantee toward a fully automated system to achieve the Grantee's management and operational goals and objectives, and the performance targets for the Grantee for a five-year period defined in Subtask 2(b).

Specifically, the Contractor shall provide detailed recommendations to the Grantee in the following areas:

- Increased collections and loss reduction to improve the financial performance of the Grantee
- IT systems to improve information management, network control, and operations and quality of supply and service to consumers.
- Asset and customer mapping systems
- Improvements in regulatory compliance and revenue maximization based on the electricity tariff structure in Nigeria
- Improvements in human resource management, including a capacity building and training program for all levels of the Grantee's operations.

Based on the KPIs and baselines identified in Subtask 2(a) and Subtask 2(b), the Contractor shall propose annual performance targets for the timeframe of the business plan. If there are data gaps or significant problems with data quality, the Contractor shall develop recommendations on ways to improve data quality and availability in order to ensure accountability for results and objective monitoring of the Grantee's performance.

Subtask 2(d) Provide Training to Grantee Managers and Technical Personnel and Develop Long Term Training Program

Based on the training needs identified in Task 1 and gaps identified and the recommendations proposed by the Contractor under Task 2, the Contractor, in consultation with the Grantee, shall select two high priority capacity building and training subjects from in Subtask 1(d). The Contractor shall develop and deliver two one-week training programs to Grantee personnel in the two priority areas selected by the Grantee. The Contractor and Grantee shall mutually agree upon a location for the training. The training program shall include the following:

- A detailed definition of the subject areas and training contents
- A detailed training book with a day-by-day agenda for in-class course delivery
- Lab exercises and site visits developed in consultation with the Grantee to integrate field work with in-class training

- At least two case studies of other utilities in the United States to demonstrate the applicability of the recommended technologies and systems to the Grantee's distribution operations
- Frequent "Question and Answer " sessions to ensure comprehension of the subject matter by the participants
- A training course evaluation survey at the end of each five-day course

In addition to the two five-day courses, the Contractor shall provide informal on-the-job training to Grantee managers and engineers during all field missions, by working side-by-side with them and involving them in all site visits and simulation exercises. This on-the-job training shall include the Contractor's support to Grantee personnel on the specific analyses included in the remainder of the tasks in the TA.

Based on Tasks 1 and 2, the Contractor shall assess the Grantee's human capacity in the areas addressed in this TA, and assess the requirements for long-term capacity building, taking into account training to be provided by vendors through various procurements. The Contractor shall estimate expected costs and, through consultation with the Grantee and with consideration of prospective budgets available, recommend a long-term training program schedule for the Grantee.

Task 2 Deliverable: The Contractor shall prepare a report including all work performed under Task 2, including, but not limited to the gap analysis and long-term training program schedule for the Project. The Task 2 Deliverable shall be included in the Final Report.

Task 3: Develop Recommendations for the Grantee's Business and Investment Plans

Technologies and systems to be reviewed for inclusion in the business and investment plans shall include, but are not limited to: GIS; Enterprise Resource Planning (ERP); Customer Information System (CIS); Asset Management Systems (AMS); Supervisory Control and Data Acquisition (SCADA); Centralized Commercial Database; Centralized Call Center; Outage Management System (OMS); Automatic Meter Reading (AMR); Energy Audit System; and Distribution Automation.

Subtask 3(a) Recommendations for Business Plan

Based on the requirements developed under Tasks 1 and 2 to address the gaps and inefficiencies in the Grantee's distribution system, management practices, and the overall goals and objectives of the Grantee, the Contractor shall develop recommendations for the five-year business plan for the Grantee. The Contractor shall focus on the introduction of new IT, automation and management systems that will move the Grantee toward a fully automated system to achieve the Grantee's management and operational goals and objectives.

Subtask 3(b) Cost Estimates

The Contractor shall develop detailed cost estimates for the various equipment, hardware, software, licenses, and training needed for implementation of the recommendations. These cost estimates will be at the planning level rather than at the feasibility or design level.

Subtask 3(c) Recommendations for an Investment Plan
Once all of the cost estimates have been developed, the Contractor shall develop recommendations for a five-year investment plan for the Grantee. The recommendations for the investment plan shall include the following:

- Specific requirements and costs of systems, technology, and equipment needed for implementing the recommendations developed in Tasks 2 and 3.
- Capital cost estimates, operations and maintenance costs, and capacity building and training costs.
- A five-year schedule of investments

The Contractor shall perform life-cycle cost analysis and the Contractor shall account for this analysis in its development of the cost estimates and recommendations for the investment plan. In particular, the life-cycle cost shall examine the total initial capital costs to plan, design, develop, and build the Project, and also shall include a detailed analysis of the costs associated with the long-term operation of the Project, which includes maintaining the facilities, equipment, and other assets financed as part of the Project. Such costs include, but are not limited to, warranties, operation, maintenance, acquisition, installation, refurbishment, and disposal costs that could be encountered throughout the life of the Project.

Task 3 Deliverable: The Contractor shall prepare a report including all work performed under Task 3, including, but not limited to the Contractor's recommendations for the business and investment plans, and cost estimates for the Project. The Task 3 Deliverable shall be included in the Final Report.

Task 4: Financial and Economic Analysis

Based on the cost estimates and investment requirements recommended under Task 3 for the investment plan and life-cycle cost analysis of equipment and systems, the Contractor shall conduct detailed economic and financial analyses of the proposed investments using an internationally acceptable methodology for such analyses. The Contractor's financial analyses and financial model of the Project shall be based on a standard methodology used by international financing agencies, such as the World Bank, and banks for appraising projects for financing, and consistent with regulatory requirements.

The Contractor shall calculate both the economic and financial internal rates of return (EIRR and FIRR) for the recommended investments under a variety of different assumptions such as different interest rates, depreciation, licensing fees, import duties, etc. In addition, the Contractor shall conduct a sensitivity analysis of the return on investment (ROI) for at least two practical financial packages for financing the

investments. The Contractor's sensitivity analysis shall account for the cost recovery indicators based on different assumptions for key project variables, such as electricity tariffs, sales volumes, capital and operating cost estimates, and interest rates and investment requirements.

In addition to the capital costs, the Contractor shall provide an estimate of projected operating expenses, including a detailed breakdown of the general, administrative, operating, and maintenance costs for the Project. As part of the financial and economic analysis, the Contractor shall take into consideration the escalation of the costs over the five-year period.

The Contractor shall prepare a financial analysis and financial model of the Project, considering alternative methods and sources of financing, including concessionary financing and debt. The financial model shall be a tool for defining the terms and conditions of the financing structure and testing the volatility of the Project's ability to service its debt.

Following discussion with the Grantee, the Contractor shall develop an "optimum, "minimum," and "most likely" economic/financial scenario to develop financial documentation that may be used by the Grantee for presentation to its financial officials. This documentation and source documents shall be included in the Final Report.

The Contractor shall identify and contact potential sources of financing, with the Grantee's express permission, to assess the likelihood of financing. Sources shall include, but not be limited to, bilateral and multilateral financing institutions and local and regional commercial banks. The Contractor shall rank the investments in terms of their financial viability and likelihood to secure financing.

Task 4 Deliverable: The Contractor shall prepare a report including all work performed under Task 4, including, but not limited to the Contractor's economic and financial analysis for the Project. The Task 4 Deliverable shall be included in the Final Report.

Task 5: Conduct a Review of Regulatory Issues

The Contractor shall conduct an analysis of the current and anticipated Nigerian laws, standards, and institutions which could impact the Project's implementation. In addition, the Contractor shall identify and assess any regulatory barriers that may impede, or would be necessary or beneficial for the development, financing, and implementation of the Project. The Contractor shall provide the Grantee with options on how to avoid or mitigate any negative effects such regulations may have on the Project. In addition, the Contractor shall recommend actions to comply with all regulatory requirements.

Specifically, the Contractor shall analyze all regulatory issues that will impact the implementation of the proposed Project in the investment plan. The Contractor's analysis shall also include all permitting requirements, regulations that impact environmental requirements, tariffs and rate of return calculations, capital expenditure approvals, quality

of service and supply standards, and any other regulatory issues that may have a significant impact on the Project.

The Contractor shall outline its findings under this task into a regulatory report. The report shall highlight regulatory advantages or barriers that the Project may face in Nigeria. The report shall also include the Contractor's recommended plan on how the Grantee can avoid, mitigate, or overcome any potential regulatory barrier to the Project.

Task 5 Deliverable: The Contractor shall prepare a report including all work performed under Task 5, including, but not limited to the Contractor's regulatory report for the Project. The Task 5 Deliverable shall be included in the Final Report.

Task 6: Conduct Preliminary Environmental Impact Assessment

The Contractor shall conduct a preliminary review of the Project's anticipated impact on the environment with reference to local requirements and the requirements of international financial institutions including the World Bank Group and the African Development Bank. The Contractor's review shall identify potential negative impacts, discuss the extent to which they can be mitigated, and develop plans for a full environmental impact assessment (EIA) needed for the Project. The Contractor shall provide a roadmap that outlines the ways that any potential negative environmental impacts can be mitigated, including the identification of steps that will need to be undertaken by the Grantee prior to Project implementation.

Task 6 Deliverable: The Contractor shall prepare a report including all work performed under Task 6, including, but not limited to the Contractor's roadmap as to how to mitigate potential negative environmental impacts. The Task 6 Deliverable shall be included in the Final Report.

Task 7: Conduct an Analysis of the Key Host Country Development Impacts

The Contractor shall conduct a development impact assessment of the Project. The purpose of the development impact assessment is to provide the Project's decision makers and interested parties with a broader view of the Project's potential effects on Nigeria. The development impact assessment shall identify the anticipated impacts of the Project in the following categories:

Infrastructure: The Contractor shall identify the anticipated infrastructure impacts of the Project, giving a brief synopsis and concrete examples of infrastructure impacts. Examples of infrastructure impacts related to implementation of the Project may include the installation of smart meters, as well as associated communication infrastructure and other related hardware and software systems. The Contractor shall provide specific information about the anticipated infrastructure impacts of the Project, such as the anticipated number of equipment to be installed, details regarding anticipated improvements in the Grantee's communication infrastructure and other related hardware

and software systems, and the impact of the Project on the Grantee's existing and planned electricity distribution systems.

Human Capacity Building: The Contractor shall identify how the anticipated number and types of local jobs that will be impacted as a result of the Project, including temporary and permanent jobs created. The Contractor shall also identify the number of local people who would receive training and the types of training programs required to implement and sustain the Project. The Contractor shall not include training performed under these Terms of Reference in the development impact assessment.

Technology Transfer and Productivity Enhancement: The Contractor shall identify the anticipated advanced technologies that would be utilized for the Project, especially any technologies which would be new to the Nigerian market. The Contractor shall also identify anticipated efficiencies that would be gained as a result of the Project. Examples of efficiencies related to implementation of the Project may include higher output per resource use, lower costs, or other common measures of efficiency used in the electricity distribution industry.

Environment: The Contractor shall identify potential positive and negative impacts of the Project, such as the decrease or increase in emissions associated with the Project

Market Oriented Reform: The Contractor shall provide a description of any regulations, laws, or institutional changes that are recommended in connection to these Terms of Reference and the effect they would have if implemented.

Other: The Contractor shall identify any other anticipated development impacts that would result from the Project, such as any spin-off effects on unrelated economic sectors, impact on governance and transparency, private sector participation, any changes to the financial revenue flows to the Grantee and other stakeholders, any impacts in Nigeria's energy security, etc.

Task 7 Deliverable: The Contractor shall prepare a report including all work performed under Task 7, including, but not limited to the Contractor's analysis on the impact of the Project on infrastructure, market-oriented reforms, technology transfer and productivity enhancement, human capacity building and environment for the Project. The Task 7 Deliverable shall be included in the Final Report.

Task 8: Develop an Implementation Plan

Based on Tasks 1-7, specifically the gaps and inefficiencies identified in the Grantee's electricity distribution system and management practices, the Contractor shall develop a detailed five-year implementation plan and budget for the recommended Project components included in the business and investment plans. The Contractor's implementation plan and budget shall also be based on the final agreed-upon distribution projects and capacity building and training requirements as recommended by the Contractor and adopted by the Grantee. The Contractor's implementation plan shall

provide the Grantee with a detailed description of the gaps and the options to mitigate each of them, coupled with a cost/benefit breakdown for each option. The implementation plan shall also identify the KPIs, their baselines, and propose annual targets that align with regulatory and business plan targets. If there are data gaps or significant problems with data quality, the Contractor shall identify recommendations on how to improve data quality and availability in order to ensure accountability for results and objective monitoring of performance at the Grantee.

The Contractor shall include the following items in the implementation plan:

- A recommended schedule for Project implementation, including recommendations for phasing, milestones, and prioritization of investments
- An outline of all the steps the Grantee will need to take subsequent to the TA's completion and prior to Project implementation, such as:
  - Environmental and social impact assessments that comply with local environmental and social requirements and those of multilateral lending agencies such as the World Bank
  - Licensing, permitting, and other relevant legal and regulatory requirements
  - Financial arrangements
  - Procurements of goods and services
  - Systems integration
  - Operations and maintenance
  - Short- and long-term training requirements
  - An assessment of how the implementation of the Project will impact the Grantee's operations
  - Scope of work including training requirements
  - Annual budget requirement
  - Cost/benefit analysis
  - Technical and training needs to implement each change
  - An overall plan to implement the system upgrades

Task 8 Deliverable: The Contractor shall prepare a report including all work performed under Task 8, including, but not limited to the implementation plan for the Project. The Task 8 Deliverable shall be included in the Final Report.

Task 9: Conduct an Assessment of U.S. Sources of Supply

While aiming at the optimum specifications and characteristics of the Project, the Contractor shall conduct an assessment of the availability of potential U.S. sources of supply of equipment, systems, and services required for the implementation of the Project, as recommended in the TA. The Contractor shall develop a detailed list of U.S. companies that could provide equipment, services, and technology to the Project. This shall include at a minimum:

- U.S. companies which can provide technology licenses for the individual components of the Project;

- Potential U.S. service providers including consulting, procurement, construction, legal, and financial services;
- U.S. project management and oversight companies;
- U.S. suppliers of equipment, software and hardware such as IT systems, advanced metering infrastructure, distribution management systems, GIS, CIS, ERP, OMS, AMS, SCADA, AMR and distribution automation; and
- The identification of technology options for the Project, and the assessment of economic and commercial viability of the Project.

The Contractor shall also prepare a detailed list of potential U.S sources of services that the Grantee may need for the successful technical and commercial operations of the final installations in areas such as operating management, maintenance management, quality control, and marketing assistance where relevant.

These lists shall include (i) the possible U.S. sources of supply and/or services for the Project, (ii) a detailed description of relevant products, solutions and/or services to be provided, and (iii) contact information for the party or parties responsible for marketing/sales in Nigeria. The business name, point of contact, address, telephone number, and e-mail address shall be included for each identified party. The Contractor shall engage relevant potential suppliers in discussions and analyze their interest in supplying equipment and services for the Project. The Contractor shall inform the Grantee of which U.S. suppliers have expressed interest in the Project.

Task 9 Deliverable: The Contractor shall prepare a report including all work performed under Task 9, including, but not limited to the list of U.S. sources of supply for the Project. The Task 9 Deliverable shall be included in the Final Report.

Task 10: Final Report

The Contractor shall prepare and deliver to the Grantee and USTDA a substantive and comprehensive final report of all work performed under these Terms of Reference ("Final Report"). The Final Report shall be organized according to the above tasks, and shall include all deliverables and documents that have been provided to the Grantee. The Final Report shall be prepared in accordance with Clause I of Annex II of the Grant Agreement. The CD-ROM version of the final report will include:

- Adobe Acrobat readable copies of all documents;
- Source files for all drawings in AutoCAD or Visio format; and
- Source files for all documents in MS Office 2000 or later formats.

Annex II

USTDA Mandatory Contract Clauses

A. USTDA Mandatory Clauses Controlling

The parties to this Contract acknowledge that this Contract is funded in whole or in part by the U.S. Trade and Development Agency ("USTDA") under the Grant Agreement between the Government of the United States of America acting through USTDA and Benin Electricity Distribution Plc ("Client"), dated _____ ("Grant Agreement"). The Client has selected _____ ("Contractor") to perform the technical assistance ("TA") for the Benin Electricity Modernization project ("Project") in Nigeria ("Host Country"). The Client and the Contractor are the parties to this Contract, and they hereinafter are referred to collectively as the "Contract Parties." Notwithstanding any other provisions of this Contract, the following USTDA Mandatory Contract Clauses shall govern. All subcontracts entered into by Contractor funded or partially funded with USTDA Grant funds shall include these USTDA Mandatory Contract Clauses, except for Clauses B(1), G, H, I, and S. In addition, in the event of any inconsistency between the Grant Agreement and the Contract or any subcontract thereunder, the Grant Agreement shall be controlling.

B. USTDA as Financier

(1) USTDA Approval of Contract

This Contract, and any amendment thereto, including any amendment to any annex thereto, and any proposed assignment of this Contract, must be approved by USTDA in writing in order to be effective with respect to the expenditure of USTDA Grant funds. USTDA will not authorize the disbursement of USTDA Grant funds until the Contract conforms to modifications required by USTDA during the Contract review process and the Contract has been formally approved by USTDA. To make this review in a timely fashion, USTDA must receive from either the Client or the Contractor an English language version of a final negotiated draft Contract or a signed Contract to the attention of the General Counsel's office at USTDA's address listed in Clause M below.

(2) USTDA Not a Party to the Contract

It is understood by the Contract Parties that USTDA has reserved certain rights such as, but not limited to, the right to approve the terms of this Contract and amendments thereto, including assignments, the selection of all contractors, the Terms of Reference, the Final Report, and any and all documents related to any contract funded under the Grant Agreement. The Contract Parties hereto further understand and agree that USTDA, in reserving any or all of the foregoing approval rights, has acted solely as a financing entity to assure the proper use of United States Government funds, and that any decision by USTDA to exercise or refrain from exercising these approval

rights shall be made as a financier in the course of financing the TA and shall not be construed as making USTDA a party to the Contract. The Contract Parties hereto understand and agree that USTDA may, from time to time, exercise the foregoing approval rights, or discuss matters related to these rights and the Project with the Contract Parties or the parties to any subcontract, jointly or separately; and in consideration of USTDA's role as financier, the Contract Parties further agree that USTDA's rights may be exercised without thereby incurring any responsibility or liability, in contract, tort, or otherwise, to the Contract Parties or the parties to any subcontract. Any approval or failure to approve by USTDA shall not bar the Client or USTDA from asserting any right they might have against the Contractor, or relieve the Contractor of any liability which the Contractor might otherwise have to the Client or USTDA.

C. Nationality, Source and Origin

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and professional services funded by USTDA under the Grant Agreement:

(a) the Contractor must be a U.S. firm;

(b) the Contractor may use U.S. subcontractors without limitation;

(c) employees of U.S. Contractor or U.S. subcontractor firms shall be U.S. citizens, non-U.S. citizens lawfully admitted for permanent residence in the United States or non-U.S. citizens lawfully admitted to work in the United States, except as provided pursuant to subpart (d) below;

(d) up to twenty percent (20%) of the USTDA Grant amount may be used to pay for services performed by (i) Host Country subcontractors, and/or (ii) Host Country nationals who are employees of the Contractor;

(e) a Host Country subcontractor may only be used for specific services from the Terms of Reference identified in the subcontract;

(f) subcontractors from countries other than the United States or Host Country may not be used;

(g) goods purchased for performance of the TA and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and

(h) goods and services incidental to TA support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions.

USTDA will make available further details concerning these provisions upon request.

D. Recordkeeping and Audit

The Contractor and subcontractors funded under the Grant Agreement shall maintain, in accordance with generally accepted accounting procedures, books, records, and other documents, sufficient to reflect properly all transactions under or in connection with the Contract. These books, records, and other documents shall clearly identify and track the use and expenditure of USTDA funds, separately from other funding sources. Such books, records, and documents shall be maintained during the period of performance of work provided for by this Contract, and for a period of three (3) years after final disbursement by USTDA. The Contractor and subcontractors shall afford USTDA, or its authorized representatives, the opportunity at reasonable times for inspection and audit of such books, records, and other documentation.

E. U.S. Carriers

(1) Air

Transportation by air of persons or property funded under the Grant Agreement shall be on U.S. flag carriers in accordance with the Fly America Act, 49 U.S.C. 40118, to the extent service by such carriers is available, as provided under applicable U.S. Government regulations.

(2) Marine

Transportation by sea of property funded under the Grant Agreement shall be on U.S. carriers in accordance with U.S. cargo preference law.

F. Workman's Compensation Insurance

The Contractor shall provide adequate Workman's Compensation Insurance coverage for work performed under this Contract.

G. Disbursement Procedures

(1) USTDA Approval of Contract

Disbursement of Grant funds will be made only after USTDA approval of this Contract.

(2) Payment Schedule Requirements

A payment schedule for disbursement of Grant funds to the Contractor shall be included in this Contract. Such payment schedule must conform to the following USTDA requirements: (1) up to twenty percent (20%) of the total USTDA Grant amount may be used as a mobilization payment; (2) all other payments, with the exception of the final payment, shall be based upon Contract performance milestones; and (3) the final payment may be no less than fifteen percent (15%) of the total USTDA Grant amount, payable upon approval by USTDA of a Final Report that has been (i) prepared and submitted in accordance with the requirements set forth in Clause I below, and (ii) approved in writing by the Client in the manner provided for by Clause G(3)(b)(iii) below. Invoicing procedures for all payments are described below.

(3) Contractor Invoice Requirements

USTDA will make all disbursements of USTDA Grant funds directly to the Contractor. The Contractor must provide USTDA with an ACH Vendor Enrollment Form (available from USTDA) with the first invoice. The Client shall request disbursement of funds by USTDA to the Contractor for performance of the Contract by submitting the following to USTDA:

(a) Contractor's Invoice

The Contractor's invoice shall include reference to an item listed in the Contract payment schedule, the requested payment amount, and an appropriate certification by the Contractor, as follows:

(i) For a mobilization payment (if any):

"As a condition for this mobilization payment, the Contractor certifies that it will perform all work in accordance with the terms of its Contract with the Client. To the extent that the Contractor does not comply with the terms and conditions of the Contract, including the USTDA Mandatory Contract Clauses contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA."

(ii) For Contract performance milestone payments:

"The Contractor has performed the work described in this invoice in accordance with the terms of its Contract with the Client and is entitled to payment thereunder. To the extent the Contractor has not complied with the terms and conditions of the Contract, including the USTDA Mandatory Contract Clauses contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA."

(iii) For final payment:

"The Contractor has performed the work described in this invoice in accordance with the terms of its Contract with the Client and is entitled to payment thereunder. Specifically, the Contractor has submitted the Final Report to the Client, as required by the Contract, and received the Client's approval of the Final Report. To the extent the Contractor has not complied with the terms and conditions of the Contract, including the USTDA Mandatory Contract Clauses contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA."

(b) Client's Approval of the Contractor's Invoice

(i) The invoice for a mobilization payment must be approved in writing by the Client.

(ii) For Contract performance milestone payments, the following certification by the Client must be provided on the invoice or separately:

"The services for which disbursement is requested by the Contractor have been performed satisfactorily, in accordance with applicable Contract provisions and the terms and conditions of the USTDA Grant Agreement."

(iii) For final payment, the following certification by the Client must be provided on the invoice or separately:

"The services for which disbursement is requested by the Contractor have been performed satisfactorily, in accordance with applicable Contract provisions and the terms and conditions of the USTDA Grant Agreement. The Final Report submitted by the Contractor has been reviewed and approved by the Client."

(c) USTDA Address for Disbursement Requests

Requests for disbursement shall be submitted to the attention of the Finance Department at USTDA's address listed in Clause M below, or by e-mail to invoices@ustda.gov.

H. Termination

(1) Method of Termination

Either Contract Party may terminate this Contract upon giving written notice to the other party and USTDA. This notice shall be effective after either 30 days, or any other period set forth elsewhere in this Contract. Furthermore, this Contract shall terminate immediately upon notification of USTDA's termination of the Grant Agreement or the term of availability of any funds thereunder.

(2) Ramifications of Termination

In the event that this Contract is terminated prior to completion, the Contractor will be eligible, subject to USTDA approval, for payment for the value of the work performed pursuant to the terms of this Contract. Likewise, in the event of such termination, USTDA is entitled to receive from the Contractor all USTDA Grant funds previously disbursed to the Contractor (including but not limited to mobilization payments) which exceed the value of the work performed pursuant to the terms of this Contract.

(3) Survivability

Clauses B, D, G, H, N and S of the USTDA Mandatory Contract Clauses shall survive the termination of this Contract.

I. USTDA Final Report

(1) Definition

"Final Report" shall mean the Final Report described in the attached Annex I Terms of Reference or, if no such "Final Report" is described therein, "Final Report" shall mean a substantive and comprehensive report of work performed in accordance with the attached Annex I Terms of Reference, including any documents delivered to the Client.

(2) Final Report Submission Requirements

The Contractor shall provide the following to USTDA:

(a) One (1) complete hard copy of the Final Report for USTDA's records. This version shall have been approved by the Client in writing and must be in the English language. It is the responsibility of the Contractor to ensure that confidential information, if any, contained in this version be clearly marked. USTDA will maintain the confidentiality of such information in accordance with applicable law.

and

(b) One (1) hard copy of the Final Report suitable for public distribution ("Public Version"). The Public Version shall have been approved by the Client in writing and must be in the English language. As this version will be available for public distribution, it must not contain any confidential information. If the report in (a) above contains no confidential information, it may be used as the Public Version. In any event, the Public Version must be informative and contain sufficient Project detail to be useful to prospective equipment and service providers.

and

(c) Two (2) CD-ROMs, each containing a complete copy of the Public Version of the Final Report. The electronic files on the CD-ROMs shall be submitted in a commonly accessible read-only format. As these CD-ROMs will be available for public distribution, they must not contain any confidential information. It is the responsibility of the Contractor to ensure that no confidential information is contained on the CD-ROMs.

The Contractor shall also provide one (1) hard copy of the Public Version of the Final Report to the Commercial or Economic Section of the U.S. Embassy in Host Country for informational purposes.

(3) Final Report Presentation

All Final Reports submitted to USTDA must be paginated and include the following:

(a) The front cover of every Final Report shall contain the name of the Client, the name of the Contractor who prepared the report, a report title, USTDA's logo, and USTDA's address. If the complete version of the Final Report contains confidential information, the Contractor shall be responsible for labeling the front cover of that version of the Final Report with the term "Confidential Version". The Contractor shall be responsible for labeling the front cover of the Public Version of the Final Report with the term "Public Version". The front cover of every Final Report shall also contain the following disclaimer:

> "This report was funded by the U.S. Trade and Development Agency (USTDA), an agency of the U.S. Government. The opinions, findings, conclusions or recommendations expressed in this document are those of the author(s) and do not necessarily represent the official position or policies of USTDA. USTDA makes no representation about, nor does it accept responsibility for, the accuracy or completeness of the information contained in this report."

(b) The inside front cover of every Final Report shall contain USTDA's logo, USTDA's address, and USTDA's mission statement. Camera-ready copy of USTDA Final Report specifications will be available from USTDA upon request.

(c) The Contractor shall affix to the front of the CD-ROM a label identifying the Host Country, USTDA Activity Number, the name of the Client, the name of the Contractor who prepared the report, a report title, and the following language:

> "The Contractor certifies that this CD-ROM contains the Public Version of the Final Report and that all contents are suitable for public distribution."

(d) The Contractor and any subcontractors that perform work pursuant to the Grant Agreement must be clearly identified in the Final Report. Business name, point of contact, address, telephone and fax numbers, and e-mail address shall be included for Contractor and each subcontractor.

(e) The Final Report, while aiming at optimum specifications and characteristics for the Project, shall identify the availability of prospective U.S. sources of supply. Business name, point of contact, address, telephone and fax numbers, and e-mail address shall be included for each commercial source.

(f) The Final Report shall be accompanied by a letter or other notation by the Client which states that the Client approves the Final Report. A certification by the Client to this effect provided on or with the invoice for final payment will meet this requirement.

(g) The Client, USTDA, and the Commercial and/or Economic Section(s) of the U.S. Embassy in Host Country shall have irrevocable, worldwide, royalty-free, non-exclusive rights to use and distribute the Final Report.

J. Modifications

All changes, modifications, assignments or amendments to this Contract, including the appendices, shall be made only by written agreement by the Contract Parties hereto, subject to written USTDA approval.

K. TA Schedule

(1) TA Completion Date

The completion date for the TA, which is June 30, 2015 is the date by which the Contract Parties estimate that the TA will have been completed.

(2) Time Limitation on Disbursement of USTDA Grant Funds

Except as USTDA may otherwise agree, (a) no USTDA funds may be disbursed under this Contract for goods and services which are provided prior to the Effective Date of the Grant Agreement; and (b) no USTDA funds may be disbursed more than four (4) years after the Effective Date of the Grant Agreement.

L. Business Practices

The Contract Parties recognize the existence of standards of conduct for public officials and commercial entities in their respective countries. Therefore, the Contract Parties shall fully comply with all United States and Host Country laws relating to corruption or bribery. For example, the Contractor and its subcontractors shall fully comply with the

requirements of the Foreign Corrupt Practices Act, as amended (15 U.S.C. §§ 78dd-1 et seq.). Each Contract Party agrees that it shall require that any agent or representative hired to represent it in connection with the TA will comply with this paragraph and all laws which apply to activities and obligations of that Contract Party, including, but not limited to, those laws and obligations referenced above.

M. USTDA Address and Fiscal Data

Any communication with USTDA regarding this Contract shall be sent to the following address and include the fiscal data listed below:

U.S. Trade and Development Agency
1000 Wilson Boulevard, Suite 1600
Arlington, Virginia 22209-3901
USA

Phone: (703) 875-4357
Fax: (703) 875-4009

Fiscal Data:
Appropriation No.: 11 14/15 1001
Activity No.: 2014-11024A
Reservation No.: 2014208
Grant No.: GH201411208

N. Taxes

USTDA funds provided under the Grant Agreement shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in Host Country, except for taxes of a de minimis nature imposed on local lodging, food, transportation, or airport arrivals or departures. Neither the Client nor the Contractor will seek reimbursement from USTDA for taxes, tariffs, duties, fees or other levies, except for taxes of a de minimis nature referenced above.

O. Export Licensing

The Contractor and all subcontractors are responsible for compliance with U.S. export licensing requirements, if applicable, in the performance of the Terms of Reference.

P. Contact Persons

The Client designates the following person as the contact person for matters concerning this Contract:

Name: Mr. Gbenga Sonuga
Title: Chief Operating Officer

Phone: +234 1 271 9620 Ext 206; +234 706 267 2127
E-Mail: gbengasonuga@citiinvestmentcap.com

Name: Mr. Njekwa Mumbuna
Title: Chief Financial Officer
Phone:
E-Mail: NjekwaMumbuna@bedcpower.com

The Contractor designates the following person as the contact person for matters concerning this Contract:

Name:
Title:
Phone:
Fax:
E-Mail:

If anyone designated by a Contract Party as a contact person ceases service as a contact person at any point during the ten-year period following the date of signing of this Contract, the Contract Party that had designated that contact person shall provide USTDA and the other Contract Party with the name and contact information of a replacement contact person.

Q. Liability

This Contract may include a clause that limits the liability of the Contract Parties, provided that such a clause does not (i) disclaim liability for special, incidental, general, or punitive damages, or (ii) limit the total amount of damages recoverable to an amount less than the total amount disbursed to the Contractor pursuant to this Contract.

R. Arbitration

If the Contract Parties submit any dispute arising under this Contract for arbitration, the scope of any such arbitration shall be limited to the Contract Parties' rights and/or obligations under this Contract and may not extend to any right or obligation of USTDA. The arbitrator(s) shall not arbitrate issues directly affecting the rights or obligations of USTDA.

S. Reporting Requirements *[Note: This Clause is not applicable if there is a cost share agreement with the U.S. Contractor.]*

The Contractor shall advise USTDA by letter as to the status of the Project on March 1st annually for a period of two (2) years after completion of the TA. In addition, if at any time the Contractor receives follow-on work from the Client, the Contractor shall so notify USTDA and designate the Contractor's contact point including name, telephone, fax number, and e-mail address. Since this information may be made publicly available

by USTDA, any information which is confidential shall be designated as such by the Contractor and provided separately to USTDA. USTDA will maintain the confidentiality of such information in accordance with applicable law.

T. Cost Share *[Note: This Clause is only applicable if there is a cost share agreement with the U.S. Contractor.]*

The Contractor agrees that, in addition to the funding provided by the USTDA Grant, it shall be responsible for ensuring that it and/or its subcontractors cover at least US$ _____ of costs to complete the full Terms of Reference as set forth in Annex I to the Grant Agreement and this Contract. In order to receive final payment of USTDA Grant funds, a financial officer of the Contractor must provide a final invoice to USTDA accompanied by a cost share certification and a detailed breakdown of direct labor and/or other direct costs. If such certification and breakdown are not provided or are inaccurate, USTDA shall be entitled to a refund from Contractor of the total amount of the USTDA-disbursed Grant funds.

ANNEX 5

Annex I

Terms of Reference

The purpose of this technical assistance ("TA") is to update and modernize the electricity distribution network for the Benin Electricity Distribution Plc ("Grantee") in Nigeria ("Project"). The TA shall recommend a plan for the Grantee to update and modernize its electricity distribution network in Nigeria, including outlining the required investments and training.

Task 1: Kick-off Meeting, Document Review, Review of the Existing Management and Operations, Work Plan, and Inception Report

Subtask 1(a) Kick-Off Meeting and Document Review:

The Contractor shall obtain from the Grantee and review all available information and relevant studies of the current Benin electricity distribution system structure, operations, management and operating guidelines, and relevant information concerning the types and state of equipment used in the distribution system. This shall include a review of the Grantee's current business and investment plans.

The Contractor and the Grantee shall also review the following components of the TA: the Contractor's approach and methodology for specific tasks under this Terms of Reference, and the Contractor's documentation and project management reporting requirements under this Terms of Reference.

The Contractor shall organize a kickoff meeting with the Grantee and other relevant stakeholders. The Contractor shall recommend to the Grantee appropriate Contractor personnel to participate in the kickoff meeting. The Contractor, in consultation with the Grantee, shall also recommend relevant stakeholders to participate in the kickoff meeting. The Contractor's detailed work plan for the TA shall be reviewed with the Grantee during the kick-off meeting and the Contractor shall obtain the Grantee's concurrence on timelines and the work plan for the TA. The Contractor's detailed and complete work plan shall include all TA activities, milestones, deliverables, and schedule. This work plan shall be the guiding document for the completion of the TA and submission of all deliverables, and shall be used by the Contractor to assess the TA's progress and accomplishments on a monthly basis and report to the Grantee any deviation or delays from the timeline. During the kickoff meeting, the Contractor shall gather input from the Grantee regarding the Grantee's goals for the TA and salient issues surrounding the Grantee's plans for the Project.

For the kickoff meeting, the Contractor shall coordinate with the Grantee on appropriate meeting content; prepare an agenda, handouts, and presentation materials, as needed, for all meeting attendees; conduct the meeting and facilitate discussion; draft a report which summarizes the meeting, and distribute such report to the Grantee; and maintain meeting

records, including the agenda, any handouts and presentation materials, a list of all meeting participants, and the meeting report.

Subtask 1(b) Conduct a Thorough Review of the Current Distribution System Management and Operations Practices

The Contractor shall visit the Grantee's facilities and conduct a review of the Grantee's operations. The Contractor shall review all databases and data collection systems currently in use at the Grantee's facilities and identify any redundant and/or inefficient processes. The Contractor's review shall include the Grantee's systems, processes, and operations, including, but not limited to:

- Organizational framework and systems for all major departments (i.e. commercial, human resources, finance, technical operations), including an assessment of information technology (IT), communications and other technologies currently deployed at each of the departments, as well as an assessment of the technology integration and interface between these departments;
- Existing asset and consumer mapping tools, including, but not limited to geographic information systems (GIS);
- Current performance indicators and performance monitoring practices;
- Demand forecasting and cost-of-service assessment;
- Demand side management (DSM) and load management practices;
- Financial management and revenue collections (i.e. metering, billing, collections and debt management);
- Pre-paid metering programs;
- Network operations, control, and management systems; and
- Processes for regulatory compliance.

The Contractor shall meet with the National Transmission Company (TCN) staff serving the Grantee to better understand how the Grantee interacts with TCN at the electricity transmission level. The Contractor shall also assess the future needs and integration requirements that will allow for better management of the Grantee's distribution system and links to TCN.

The Contractor shall also hold discussions with the Nigerian Electricity Regulatory Commission (NERC) to assess the regulatory requirements and the areas where the Grantee may need to enhance its regulatory compliance. The Contractor shall conduct a review of Nigeria's current electricity tariff regime and analyze its anticipated economic and financial impact on the Grantee's network.

Based on the Contractor's review of currently available data, the Contractor shall assess what the Grantee would need in order to integrate the Grantee's distribution system (e.g.

what technologies may be needed). The Contractor shall outline its findings for the Grantee.

Subtask 1(c) Network Study

The Contractor shall develop a reduced model of the Grantee's 33 kilovolt (kV) circuits that are deemed critical and currently under transmission control. The Contractor shall perform a 33kV system load flow analysis to identify bottlenecks and system weaknesses.

The Contractor shall perform a qualitative assessment of the Grantee's 11kV system and identify inhibitors to system performance. The Contractor shall develop planning and engineering guidelines to strengthen the system. The Contractor shall provide a plan for the Grantee to capture necessary data and build out the 11kV model to perform a more comprehensive study as additional data becomes available to the Grantee in the future.

Subtask 1(d) Conduct a Training Needs Assessment

The Contractor shall conduct an assessment of the training capacity building needs at all levels of the Grantee's operations. The Contractor shall review the Grantee's training and capacity building plans. The assessment shall focus on all business processes involved in the Benin electricity distribution system including the current human resource management at the Grantee's facilities. The Contractor shall document the full range of training and capacity building requirements in various functional areas of the Grantee's operations with a focus on the introduction of new IT, automation and management systems within the Grantee. Potential areas of training may include methods to mitigate high distribution losses and poor collections and/or planning and design of an integrated enterprise wide IT system for a distribution utility. The assessment shall recommend specific training to be provided as part of this TA under Task 2.

Subtask 1(e) Develop and Finalize the Inception Report

Based on the previous subtasks, the Contractor shall develop an inception report that details all of the findings in Task 1. Specifically, the inception report shall include any clarifications agreed to during the meetings, a list of the sites visited and key findings, a list of meetings held and summary of discussions, a detailed schedule of activities under the remainder of the TA, a list of data requirements, and the work plan agreed upon in Subtask 1(a), including proposed field trips under the various tasks.

Task 1 Deliverable: The Contractor shall prepare a report including all work performed under Task 1, including, but not limited to the inception report and a detailed work plan including schedule, milestones, and deliverables for the Project. The Task 1 Deliverable shall be included in the Final Report.

Task 2: Technical Assessment: Conduct an Assessment of the Grantee's Distribution Management and Business Plan and Identify Gaps and Requirements

Subtask 2(a) Conduct an Assessment of the Grantee's Business Plan and Investment Plan and Operations

Building on the information gathered in Task 1, the Contractor shall closely work with the Grantee's senior managers to conduct an analysis of the business operations and business processes currently in use at the Grantee's facilities. This analysis shall include an assessment of Grantee's business functions, information transfer and communication across the Grantee's departments, the decision-making processes within the Grantee, human resource management, business planning, and investment programming. The Contractor shall identify key performance indicators (KPIs) for the Project, identify their baselines, and document the findings and gaps of the Grantee's operations as compared to international best practices for electricity distribution business management.

Subtask 2(b) Conduct a Gap Analysis

Building on the work conducted under Task 1 and Subtask 2(a), the Contractor shall further define and describe the gaps and inefficiencies in the current electricity distribution management systems at the Grantee's facilities. These gaps and inefficiencies shall define and describe all factors and issues that stand between the present state of the Grantee's distribution management and operations and a technologically mature distribution operating company. The factors and issues covered in the Contractor's gap analysis shall include, but not be limited to, the following:

- Gaps and inefficiencies in management functions and processes
- Gaps and inefficiencies in current operational process and work flows
- Gaps and inefficiencies in data availability and data quality
- Gaps and inefficiencies in quality performance data that can be used to manage business processes
- Gaps and inefficiencies assessment in all technical and IT systems for network management; asset management; metering, billing, and collections; customer relations management; outage management; and quality of supply and service
- Gaps and inefficiencies in human resource management, capacity building, training and skills development

In addition, the Contractor shall compile quantitative data and KPIs to document the Grantee's current performance in the key operational areas reviewed by the Contractor, including, but not limited to commercial operations, human resources, finance, and technical operations. The Contractor shall also recommend performance targets for the Grantee for a five-year period.

Based on the activities conducted above, the Contractor shall prepare a gap analysis for each of the distribution management functions and processes. In addition, based on Subtasks 2(a) and 2(b), the Contractor shall advise the Grantee on improvements to the Grantee's business and investment plans.

Subtask 2(c) Develop Recommendations to Address the Identified Gaps

Based on the gap analysis, the Contractor shall develop a set of detailed recommendations for the Grantee that adhere to industry proven practices and that would enhance the Grantee's distribution system management and operations, focusing on the introduction of new IT, automation and management systems that will move the Grantee toward a fully automated system to achieve the Grantee's management and operational goals and objectives, and the performance targets for the Grantee for a five-year period defined in Subtask 2(b).

Specifically, the Contractor shall provide detailed recommendations to the Grantee in the following areas:

- Increased collections and loss reduction to improve the financial performance of the Grantee
- IT systems to improve information management, network control, and operations and quality of supply and service to consumers.
- Asset and customer mapping systems
- Improvements in regulatory compliance and revenue maximization based on the electricity tariff structure in Nigeria
- Improvements in human resource management, including a capacity building and training program for all levels of the Grantee's operations.

Based on the KPIs and baselines identified in Subtask 2(a) and Subtask 2(b), the Contractor shall propose annual performance targets for the timeframe of the business plan. If there are data gaps or significant problems with data quality, the Contractor shall develop recommendations on ways to improve data quality and availability in order to ensure accountability for results and objective monitoring of the Grantee's performance.

Subtask 2(d) Provide Training to Grantee Managers and Technical Personnel and Develop Long Term Training Program

Based on the training needs identified in Task 1 and gaps identified and the recommendations proposed by the Contractor under Task 2, the Contractor, in consultation with the Grantee, shall select two high priority capacity building and training subjects from in Subtask 1(d). The Contractor shall develop and deliver two one-week training programs to Grantee personnel in the two priority areas selected by the Grantee. The Contractor and Grantee shall mutually agree upon a location for the training. The training program shall include the following:

- A detailed definition of the subject areas and training contents
- A detailed training book with a day-by-day agenda for in-class course delivery
- Lab exercises and site visits developed in consultation with the Grantee to integrate field work with in-class training

- At least two case studies of other utilities in the United States to demonstrate the applicability of the recommended technologies and systems to the Grantee's distribution operations
- Frequent "Question and Answer " sessions to ensure comprehension of the subject matter by the participants
- A training course evaluation survey at the end of each five-day course

In addition to the two five-day courses, the Contractor shall provide informal on-the-job training to Grantee managers and engineers during all field missions, by working side-by-side with them and involving them in all site visits and simulation exercises. This on-the-job training shall include the Contractor's support to Grantee personnel on the specific analyses included in the remainder of the tasks in the TA.

Based on Tasks 1 and 2, the Contractor shall assess the Grantee's human capacity in the areas addressed in this TA, and assess the requirements for long-term capacity building, taking into account training to be provided by vendors through various procurements. The Contractor shall estimate expected costs and, through consultation with the Grantee and with consideration of prospective budgets available, recommend a long-term training program schedule for the Grantee.

Task 2 Deliverable: The Contractor shall prepare a report including all work performed under Task 2, including, but not limited to the gap analysis and long-term training program schedule for the Project. The Task 2 Deliverable shall be included in the Final Report.

Task 3: Develop Recommendations for the Grantee's Business and Investment Plans

Technologies and systems to be reviewed for inclusion in the business and investment plans shall include, but are not limited to: GIS; Enterprise Resource Planning (ERP); Customer Information System (CIS); Asset Management Systems (AMS); Supervisory Control and Data Acquisition (SCADA); Centralized Commercial Database; Centralized Call Center; Outage Management System (OMS); Automatic Meter Reading (AMR); Energy Audit System; and Distribution Automation.

Subtask 3(a) Recommendations for Business Plan

Based on the requirements developed under Tasks 1 and 2 to address the gaps and inefficiencies in the Grantee's distribution system, management practices, and the overall goals and objectives of the Grantee, the Contractor shall develop recommendations for the five-year business plan for the Grantee. The Contractor shall focus on the introduction of new IT, automation and management systems that will move the Grantee toward a fully automated system to achieve the Grantee's management and operational goals and objectives.

Subtask 3(b) Cost Estimates

The Contractor shall develop detailed cost estimates for the various equipment, hardware, software, licenses, and training needed for implementation of the recommendations. These cost estimates will be at the planning level rather than at the feasibility or design level.

Subtask 3(c) Recommendations for an Investment Plan
Once all of the cost estimates have been developed, the Contractor shall develop recommendations for a five-year investment plan for the Grantee. The recommendations for the investment plan shall include the following:

- Specific requirements and costs of systems, technology, and equipment needed for implementing the recommendations developed in Tasks 2 and 3.
- Capital cost estimates, operations and maintenance costs, and capacity building and training costs.
- A five-year schedule of investments

The Contractor shall perform life-cycle cost analysis and the Contractor shall account for this analysis in its development of the cost estimates and recommendations for the investment plan. In particular, the life-cycle cost shall examine the total initial capital costs to plan, design, develop, and build the Project, and also shall include a detailed analysis of the costs associated with the long-term operation of the Project, which includes maintaining the facilities, equipment, and other assets financed as part of the Project. Such costs include, but are not limited to, warranties, operation, maintenance, acquisition, installation, refurbishment, and disposal costs that could be encountered throughout the life of the Project.

Task 3 Deliverable: The Contractor shall prepare a report including all work performed under Task 3, including, but not limited to the Contractor's recommendations for the business and investment plans, and cost estimates for the Project. The Task 3 Deliverable shall be included in the Final Report.

Task 4: Financial and Economic Analysis

Based on the cost estimates and investment requirements recommended under Task 3 for the investment plan and life-cycle cost analysis of equipment and systems, the Contractor shall conduct detailed economic and financial analyses of the proposed investments using an internationally acceptable methodology for such analyses. The Contractor's financial analyses and financial model of the Project shall be based on a standard methodology used by international financing agencies, such as the World Bank, and banks for appraising projects for financing, and consistent with regulatory requirements.

The Contractor shall calculate both the economic and financial internal rates of return (EIRR and FIRR) for the recommended investments under a variety of different assumptions such as different interest rates, depreciation, licensing fees, import duties, etc. In addition, the Contractor shall conduct a sensitivity analysis of the return on investment (ROI) for at least two practical financial packages for financing the

investments. The Contractor's sensitivity analysis shall account for the cost recovery indicators based on different assumptions for key project variables, such as electricity tariffs, sales volumes, capital and operating cost estimates, and interest rates and investment requirements.

In addition to the capital costs, the Contractor shall provide an estimate of projected operating expenses, including a detailed breakdown of the general, administrative, operating, and maintenance costs for the Project. As part of the financial and economic analysis, the Contractor shall take into consideration the escalation of the costs over the five-year period.

The Contractor shall prepare a financial analysis and financial model of the Project, considering alternative methods and sources of financing, including concessionary financing and debt. The financial model shall be a tool for defining the terms and conditions of the financing structure and testing the volatility of the Project's ability to service its debt.

Following discussion with the Grantee, the Contractor shall develop an "optimum, "minimum," and "most likely" economic/financial scenario to develop financial documentation that may be used by the Grantee for presentation to its financial officials. This documentation and source documents shall be included in the Final Report.

The Contractor shall identify and contact potential sources of financing, with the Grantee's express permission, to assess the likelihood of financing. Sources shall include, but not be limited to, bilateral and multilateral financing institutions and local and regional commercial banks. The Contractor shall rank the investments in terms of their financial viability and likelihood to secure financing.

Task 4 Deliverable: The Contractor shall prepare a report including all work performed under Task 4, including, but not limited to the Contractor's economic and financial analysis for the Project. The Task 4 Deliverable shall be included in the Final Report.

Task 5: Conduct a Review of Regulatory Issues

The Contractor shall conduct an analysis of the current and anticipated Nigerian laws, standards, and institutions which could impact the Project's implementation. In addition, the Contractor shall identify and assess any regulatory barriers that may impede, or would be necessary or beneficial for the development, financing, and implementation of the Project. The Contractor shall provide the Grantee with options on how to avoid or mitigate any negative effects such regulations may have on the Project. In addition, the Contractor shall recommend actions to comply with all regulatory requirements.

Specifically, the Contractor shall analyze all regulatory issues that will impact the implementation of the proposed Project in the investment plan. The Contractor's analysis shall also include all permitting requirements, regulations that impact environmental requirements, tariffs and rate of return calculations, capital expenditure approvals, quality

of service and supply standards, and any other regulatory issues that may have a significant impact on the Project.

The Contractor shall outline its findings under this task into a regulatory report. The report shall highlight regulatory advantages or barriers that the Project may face in Nigeria. The report shall also include the Contractor's recommended plan on how the Grantee can avoid, mitigate, or overcome any potential regulatory barrier to the Project.

Task 5 Deliverable: The Contractor shall prepare a report including all work performed under Task 5, including, but not limited to the Contractor's regulatory report for the Project. The Task 5 Deliverable shall be included in the Final Report.

Task 6: Conduct Preliminary Environmental Impact Assessment

The Contractor shall conduct a preliminary review of the Project's anticipated impact on the environment with reference to local requirements and the requirements of international financial institutions including the World Bank Group and the African Development Bank. The Contractor's review shall identify potential negative impacts, discuss the extent to which they can be mitigated, and develop plans for a full environmental impact assessment (EIA) needed for the Project. The Contractor shall provide a roadmap that outlines the ways that any potential negative environmental impacts can be mitigated, including the identification of steps that will need to be undertaken by the Grantee prior to Project implementation.

Task 6 Deliverable: The Contractor shall prepare a report including all work performed under Task 6, including, but not limited to the Contractor's roadmap as to how to mitigate potential negative environmental impacts. The Task 6 Deliverable shall be included in the Final Report.

Task 7: Conduct an Analysis of the Key Host Country Development Impacts

The Contractor shall conduct a development impact assessment of the Project. The purpose of the development impact assessment is to provide the Project's decision makers and interested parties with a broader view of the Project's potential effects on Nigeria. The development impact assessment shall identify the anticipated impacts of the Project in the following categories:

Infrastructure: The Contractor shall identify the anticipated infrastructure impacts of the Project, giving a brief synopsis and concrete examples of infrastructure impacts. Examples of infrastructure impacts related to implementation of the Project may include the installation of smart meters, as well as associated communication infrastructure and other related hardware and software systems. The Contractor shall provide specific information about the anticipated infrastructure impacts of the Project, such as the anticipated number of equipment to be installed, details regarding anticipated improvements in the Grantee's communication infrastructure and other related hardware

and software systems, and the impact of the Project on the Grantee's existing and planned electricity distribution systems.

Human Capacity Building: The Contractor shall identify how the anticipated number and types of local jobs that will be impacted as a result of the Project, including temporary and permanent jobs created. The Contractor shall also identify the number of local people who would receive training and the types of training programs required to implement and sustain the Project. The Contractor shall not include training performed under these Terms of Reference in the development impact assessment.

Technology Transfer and Productivity Enhancement: The Contractor shall identify the anticipated advanced technologies that would be utilized for the Project, especially any technologies which would be new to the Nigerian market. The Contractor shall also identify anticipated efficiencies that would be gained as a result of the Project. Examples of efficiencies related to implementation of the Project may include higher output per resource use, lower costs, or other common measures of efficiency used in the electricity distribution industry.

Environment: The Contractor shall identify potential positive and negative impacts of the Project, such as the decrease or increase in emissions associated with the Project

Market Oriented Reform: The Contractor shall provide a description of any regulations, laws, or institutional changes that are recommended in connection to these Terms of Reference and the effect they would have if implemented.

Other: The Contractor shall identify any other anticipated development impacts that would result from the Project, such as any spin-off effects on unrelated economic sectors, impact on governance and transparency, private sector participation, any changes to the financial revenue flows to the Grantee and other stakeholders, any impacts in Nigeria's energy security, etc.

Task 7 Deliverable: The Contractor shall prepare a report including all work performed under Task 7, including, but not limited to the Contractor's analysis on the impact of the Project on infrastructure, market-oriented reforms, technology transfer and productivity enhancement, human capacity building and environment for the Project. The Task 7 Deliverable shall be included in the Final Report.

Task 8: Develop an Implementation Plan

Based on Tasks 1-7, specifically the gaps and inefficiencies identified in the Grantee's electricity distribution system and management practices, the Contractor shall develop a detailed five-year implementation plan and budget for the recommended Project components included in the business and investment plans. The Contractor's implementation plan and budget shall also be based on the final agreed-upon distribution projects and capacity building and training requirements as recommended by the Contractor and adopted by the Grantee. The Contractor's implementation plan shall

provide the Grantee with a detailed description of the gaps and the options to mitigate each of them, coupled with a cost/benefit breakdown for each option. The implementation plan shall also identify the KPIs, their baselines, and propose annual targets that align with regulatory and business plan targets. If there are data gaps or significant problems with data quality, the Contractor shall identify recommendations on how to improve data quality and availability in order to ensure accountability for results and objective monitoring of performance at the Grantee.

The Contractor shall include the following items in the implementation plan:

- A recommended schedule for Project implementation, including recommendations for phasing, milestones, and prioritization of investments
- An outline of all the steps the Grantee will need to take subsequent to the TA's completion and prior to Project implementation, such as:
  - Environmental and social impact assessments that comply with local environmental and social requirements and those of multilateral lending agencies such as the World Bank
  - Licensing, permitting, and other relevant legal and regulatory requirements
  - Financial arrangements
  - Procurements of goods and services
  - Systems integration
  - Operations and maintenance
  - Short- and long-term training requirements
  - An assessment of how the implementation of the Project will impact the Grantee's operations
  - Scope of work including training requirements
  - Annual budget requirement
  - Cost/benefit analysis
  - Technical and training needs to implement each change
  - An overall plan to implement the system upgrades

Task 8 Deliverable: The Contractor shall prepare a report including all work performed under Task 8, including, but not limited to the implementation plan for the Project. The Task 8 Deliverable shall be included in the Final Report.

Task 9: Conduct an Assessment of U.S. Sources of Supply

While aiming at the optimum specifications and characteristics of the Project, the Contractor shall conduct an assessment of the availability of potential U.S. sources of supply of equipment, systems, and services required for the implementation of the Project, as recommended in the TA. The Contractor shall develop a detailed list of U.S. companies that could provide equipment, services, and technology to the Project. This shall include at a minimum:

- U.S. companies which can provide technology licenses for the individual components of the Project;

- Potential U.S. service providers including consulting, procurement, construction, legal, and financial services;
- U.S. project management and oversight companies;
- U.S. suppliers of equipment, software and hardware such as IT systems, advanced metering infrastructure, distribution management systems, GIS, CIS, ERP, OMS, AMS, SCADA, AMR and distribution automation; and
- The identification of technology options for the Project, and the assessment of economic and commercial viability of the Project.

The Contractor shall also prepare a detailed list of potential U.S sources of services that the Grantee may need for the successful technical and commercial operations of the final installations in areas such as operating management, maintenance management, quality control, and marketing assistance where relevant.

These lists shall include (i) the possible U.S. sources of supply and/or services for the Project, (ii) a detailed description of relevant products, solutions and/or services to be provided, and (iii) contact information for the party or parties responsible for marketing/sales in Nigeria. The business name, point of contact, address, telephone number, and e-mail address shall be included for each identified party. The Contractor shall engage relevant potential suppliers in discussions and analyze their interest in supplying equipment and services for the Project. The Contractor shall inform the Grantee of which U.S. suppliers have expressed interest in the Project.

Task 9 Deliverable: The Contractor shall prepare a report including all work performed under Task 9, including, but not limited to the list of U.S. sources of supply for the Project. The Task 9 Deliverable shall be included in the Final Report.

Task 10: Final Report

The Contractor shall prepare and deliver to the Grantee and USTDA a substantive and comprehensive final report of all work performed under these Terms of Reference ("Final Report"). The Final Report shall be organized according to the above tasks, and shall include all deliverables and documents that have been provided to the Grantee. The Final Report shall be prepared in accordance with Clause I of Annex II of the Grant Agreement. The CD-ROM version of the final report will include:

- Adobe Acrobat readable copies of all documents;
- Source files for all drawings in AutoCAD or Visio format; and
- Source files for all documents in MS Office 2000 or later formats.

A N N E X 6

USTDA-Funded Feasibility Study, Technical Assistance, or Training Grant

U.S. Firm Information Form

This form is designed to enable the U.S. Trade and Development Agency ("USTDA") to obtain information about entities and individuals proposed for participation in USTDA-funded activities. Information in this form is used to conduct screening of entities and individuals to ensure compliance with legislative and executive branch prohibitions on providing support or resources to, or engaging in transactions with, certain individuals or entities with which USTDA must comply.

USTDA Activity Number [*To be completed by USTDA*]	2014-11024A						
Activity Type [*To be completed by USTDA*]	☐	Feasibility Study	✔	Technical Assistance	☐	Other (specify)	
Activity Title [*To be completed by USTDA*]	Benin Electricity Distribution Modernization						
Full Legal Name of U.S. Firm							
Business Address (street address only)							
Telephone		Fax		Website			
Year Established (include any predecessor company(s) and year(s) established, if appropriate). Please attach additional pages as necessary.							
Type of Ownership	☐	Publicly Traded Company					
	☐	Private Company					
	☐	Other (please specify)					
Please provide a list of directors and principal officers as detailed in Attachment A. Attached? (Not Applicable for U.S. Publicly Traded Company)	☐	Yes					
If Private Company or Other (if applicable), provide a list of shareholders and the percentage of their ownership. In addition, for each shareholder that owns 15% or more shares in U.S. Firm, please complete Attachment B.							
Is the U.S. Firm a wholly-owned or partially owned subsidiary?	☐	Yes					
	☐	No					
If so, please provide the name of the U.S. Firm's parent company(ies). In addition, for any parent identified, please complete Attachment B.							
Is the U.S. Firm proposing to subcontract some of the proposed work to another firm?	☐	Yes					
	☐	No					
If yes, U.S. Firm shall complete Attachment C for each subcontractor. Attached?	☐	Yes					
	☐	Not applicable					
Project Manager							
Name	Surname						
	Given Name						
Address							
Telephone							
Fax							
Email							
Negotiation Prerequisites							
Discuss any current or anticipated commitments which may impact the ability of the U.S. Firm or its subcontractors to complete the Activity as proposed and reflect such impact within the project schedule.							
Identify any specific information which is needed from the Grantee before commencing negotiations.							

U.S. Firm may attach additional sheets, as necessary.

U.S. Firm's Representations

U.S. Firm shall certify to the following (or provide an explanation as to why any representation cannot be made):

1. U.S. Firm is a *[check one]* ☐ Corporation ☐ LLC ☐ Partnership ☐ Sole Proprietor ☐ Other:

duly organized, validly existing and in good standing under the laws of the State of: *[insert state]* .

The U.S. Firm has all the requisite corporate power and authority to conduct its business as presently conducted, to submit this proposal, and if selected, to execute and deliver a contract to the Grantee for the performance of the USTDA Activity. The U.S. Firm is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment or ineligible for the award of contracts by any federal or state governmental agency or authority.

2. The U.S. Firm has included herewith, a copy of its Articles of Incorporation (or equivalent charter or document issued by a designated authority in accordance with applicable laws that provides information and authentication regarding the legal status of an entity) and a Certificate of Good Standing (or equivalent document) issued within 1 month of the date of signature below by the State of: *[insert state]* .

The U.S. Firm commits to notify USTDA and the Grantee if it becomes aware of any change in its status in the state in which it is incorporated. USTDA retains the right to request an updated certificate of good standing. **(U.S. publicly traded companies need not include Articles of Incorporation or Good Standing Certificate)**

3. Neither the U.S. Firm nor any of its directors and principal officers have, within the ten-year period preceding the submission of this proposal, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.

4. Neither the U.S. Firm, nor any of its directors and principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 3 above.

5. There are no federal or state tax liens pending against the assets, property or business of the U.S. Firm. The U.S. Firm, has not, within the three-year period preceding the submission of this proposal, been notified of any delinquent federal or state taxes in an amount that exceeds US$3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.

6. The U.S. Firm has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself of its debts under any bankruptcy, insolvency or other similar law. The U.S. Firm has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.

7. The U.S. Firm certifies that it complies with USTDA Nationality, Source, and Origin Requirements and shall continue to comply with such requirements throughout the duration of the USTDA-funded activity. The U.S. Firm commits to notify USTDA and the Grantee if it becomes aware of any change which might affect U.S. Firm's ability to meet the USTDA Nationality, Source, and Origin Requirements.

The U.S. Firm shall notify USTDA if any of the representations are no longer true and correct.

U.S. Firm certifies that the information provided in this form is true and correct. U.S. Firm understands and agrees that the U.S. Government may rely on the accuracy of this information in processing a request to participate in a USTDA-funded activity. If at any time USTDA has reason to believe that any person or entity has willfully and knowingly provided incorrect information or made false statements, USTDA may take action under applicable law. The undersigned represents and warrants that he/she has the requisite power and authority to sign on behalf of the U.S. Firm.

Name		Signature	
Title			
Full Legal Name of U.S. Firm		Date	

ATTACHMENT A

USTDA-Funded Feasibility Study, Technical Assistance, or Training Grant

U.S. Firm Information Form – Directors and Principal Officers

(Not Applicable for U.S. Publicly Traded Company)

Provide a list of all directors and principal officers (e.g., President, Chief Executive Officer, Vice-President(s), Secretary and Treasurer). Please provide full names including surname and given name.

USTDA Activity Number [*To be completed by USTDA*]	2014-11024A
Activity Title [*To be completed by USTDA*]	Benin Electricity Distribution Modernization
Full Legal Name of Entity	

Title	Name		
(e.g., Director, President, Chief Executive Officer, Vice-President(s), Secretary, Treasurer) ***** *Please place an asterisk (*) next to the names of those principal officers who will be involved in the USTDA-funded activity*	**Surname**	**Given Name**	**Middle Name**

ATTACHMENT B

USTDA-Funded Feasibility Study, Technical Assistance, or Training Grant

U.S. Firm Information Form – Shareholder(s) and Parent Company(ies)

If applicable, U.S. Firm provided a list of shareholders and the percentage of their ownership. This form shall be completed for each shareholder that owns 15% or more shares in U.S. Firm, as well as any parent corporation of the U.S. Firm ("Shareholder"). In addition, this form shall be completed for each shareholder identified in Attachment B that owns 15% or more shares in any Shareholder, as well as any parent identified in Attachment B.

USTDA Activity Number [*To be completed by USTDA*]	2014-11024A
Activity Title [*To be completed by USTDA*]	Benin Electricity Distribution Modernization
Full Legal Name of U.S. Firm	
Full Legal Name of Shareholder	
Business Address of Shareholder (street address only)	
Telephone number	Fax Number
Year Established (include any predecessor company(s) and year(s) established, if appropriate). Please attach additional pages as necessary.	
Country of Shareholder's Principal Place of Business	
Please provide a list of directors and principal officers as detailed in Attachment A. Attached?	☐ Yes
Type of Ownership	☐ Publicly Traded Company ☐ Private Company ☐ Other
If applicable, provide a list of shareholders and the percentage of their ownership. In addition, for each shareholder that owns 15% or more shares in Shareholder, please complete Attachment B.	
Is the Shareholder a wholly-owned or partially owned subsidiary?	☐ Yes ☐ No
If so, please provide the name of the Shareholder's parent(s). In addition, for any parent identified, please complete Attachment B.	

Shareholder may attach additional sheets, as necessary.

ATTACHMENT C

USTDA-Funded Feasibility Study, Technical Assistance, or Training Grant

Subcontractor Information Form

This form is designed to enable the U.S. Trade and Development Agency ("USTDA") to obtain information about entities and individuals proposed for participation in USTDA-funded activities. Information in this form is used to conduct screening of entities and individuals to ensure compliance with legislative and executive branch prohibitions on providing support or resources to, or engaging in transactions with, certain individuals or entities with which USTDA must comply.

USTDA Activity Number [*To be completed by USTDA*]	2014-11024A
Activity Title [*To be completed by USTDA*]	Benin Electricity Distribution Modernization
Full Legal Name of Prime Contractor U.S. Firm ("U.S. Firm")	
Full Legal Name of Subcontractor	
Business Address of Subcontractor (street address only)	
Telephone Number	
Fax Number	
Year Established (include any predecessor company(s) and year(s) established, if appropriate). Please attach additional pages as necessary.	

Subcontractor Point of Contact

Name	Surname	
	Given Name	
Address		
Telephone		
Fax		
Email		

Subcontractor's Representations									
Subcontractor shall provide the following (or any explanation as to why any representation cannot be made), made as of the date of the proposal:									
1. Subcontractor is a *[check one]*	☐	Corporation	☐	LLC	☐	Partnership	☐	Sole Proprietor	☐	Other	
duly organized, validly existing and in good standing under the laws of:	*[insert state (if U.S.) or country]*	.									
The subcontractor has all the requisite corporate power and authority to conduct its business as presently conducted, to participate in this proposal, and if the U.S. Firm is selected, to execute and deliver a subcontract to the U.S. Firm for the performance of the USTDA Activity and to perform the USTDA Activity. The subcontractor is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment or ineligible for the award of contracts by any federal or state governmental agency or authority.									
2. Neither the subcontractor nor any of its directors and principal officers have, within the ten-year period preceding the submission of the Offeror's proposal, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.									
3. Neither the subcontractor, nor any of its directors and principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 2 above.									
4. There are no federal or state tax liens pending against the assets, property or business of the subcontractor. The subcontractor, has not, within the three-year period preceding this RFP, been notified of any delinquent federal or state taxes in an amount that exceeds $3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.									
5. The subcontractor has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law. The subcontractor has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.									
6. The Subcontractor certifies that it complies with the USTDA Nationality, Source, and Origin Requirements and shall continue to comply with such requirements throughout the duration of the USTDA-funded activity. The Subcontractor commits to notify USTDA, the Contractor, and the Grantee if it becomes aware of any change which might affect U.S. Firm's ability to meet the USTDA Nationality, Source, and Origin Requirements.									
The selected Subcontractor shall notify the U.S. Firm, Grantee and USTDA if any of the representations included in its proposal are no longer true and correct.									
Subcontractor certifies that the information provided in this form is true and correct. Subcontractor understands and agrees that the U.S. Government may rely on the accuracy of this information in processing a request to participate in a USTDA-funded activity. If at any time USTDA has reason to believe that any person or entity has willfully and knowingly provided incorrect information or made false statements, USTDA may take action under applicable law. The undersigned represents and warrants that he/she has the requisite power and authority to sign on behalf of the Subcontractor.									

Name		Signature	
Title			
Full Legal Name of Subcontractor		Date	