

REQUEST FOR PROPOSALS

FEASIBILITY STUDY FOR THE

ROYAL POWER GAS-FIRED IPP

Submission Deadline: **5:00 PM**
LOCAL (LAGOS) TIME
July 25, 2014

Submission Place: Mr. Sasha Israni
Managing Director
Royal Power Integrated & General Services LTD
Plot 1218 B, Sam Adebite Close, Off Amodu Ojikutu Street
Victoria Island, Lagos
Nigeria

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.

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Section 1: INTRODUCTION

The U.S. Trade and Development Agency (USTDA) has provided a grant in the amount of US\$667,000 to Royal Power Integrated & General Services LTD (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 feasibility study (“Feasibility Study”) on the proposed Royal Power gas-fired IPP (“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 Feasibility Study.

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 Feasibility Study.

1.1 BACKGROUND SUMMARY

Nigeria generates approximately 4,000 MW of electricity, an amount which is inadequate for a country of 160 million people. As Nigeria’s population continues to grow and its middle class continues to flourish, electricity demand is only expected to grow. To meet the growing demand for electricity, the Government of Nigeria (“GoN”) has developed the Vision 2020 initiative, which aims to address its energy needs by adding 40,000 MW in on-grid and off-grid generation capacity by liberalizing its power sector and encouraging the entrance of independent power producers (“IPPs”). Nigeria’s commitment to IPPs extends to the development of new, “greenfield” power generation plants such as the proposed Royal Power gas-fired power plant.

Prospective developers of IPPs must obtain a generation license from the Nigerian Electricity Regulatory Commission (“NERC”) which requires: (1) a feasibility study with an associated financial model; (2) an environmental impact assessment (“EIA”) report approved by the Federal Ministry of Environment, Housing, and Urban Development; (3) a load evacuation report approved by the Transmission Company of Nigeria (“TCN”); and (4) a land ownership title. The Feasibility Study will support Royal Power in obtaining the required power generation license to facilitate a PPA with NBET for the construction of a 275 MW simple cycle gas-fired power plant.

The Grantee’s project site is located in the town of Badagry in west Lagos State near the border of Benin. Royal Power recently acquired approximately 10 acres of land for the plant site.

Portions of a background Desk Study is provided for reference in Annex 2.

1.2 OBJECTIVE

The objective of this feasibility study is to assist Royal Power in addressing the technical and financial feasibility analyses that are required to obtain a power generation license from the

Federal Government of Nigeria to support the implementation and operation of an approximately 275 MW (“MW”) simple cycle gas-fired power plant located in Lagos State, Nigeria (“Project”). The Terms of Reference (TOR) for this Feasibility Study 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\$667,000. **The USTDA grant of \$US667,000 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\$667,000 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 Royal Power Gas-Fired IPP Feasibility Study.

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 DESK STUDY REPORT

USTDA sponsored a Desk Study 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 Feasibility Study.

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 Feasibility Study.

2.5 PROJECT FUNDING SOURCE

The Feasibility Study will be funded under a grant from USTDA. The total amount of the grant is not to exceed US\$667,000.

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. Sasha Israni
Managing Director
Royal Power Integrated & General Services LTD
Plot 1218 B, Sam Adegbite Close, Off Amodu Ojikutu Street
Victoria Island, Lagos
Nigeria

Email: bidbox@rpisltd.com

An Original and three (3) copies of your proposal must be received at the above address no later than 5:00pm, local (Lagos) time, on July 25, 2014.

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. Along with the hardcopies of the proposal, the Offeror is required to submit a flash drive which will contain one (1) .pdf version of the proposal. The flash drive is required to be password protected, and the password is RPIS2014BID. Any proposal received after the deadline will be returned unopened. The Grantee will promptly notify any Offeror if its proposal was received late.

An email detailing the Offeror's contact information is required to be sent by the Offeror upon submitting the proposal package. Email communication pertaining to the submission of the proposal should be sent to bidbox@rpisltd.com. All questions related to the RFP can be sent to Rfpquestions@ustda.gov.

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 three (3) 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, feasibility study 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 (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\$667,000, which is a fixed amount.

Offerors shall submit one (1) original and three (3) copies of the proposal. 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 Feasibility Study. 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 Feasibility Study.

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 Feasibility Study.

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 Feasibility Study. 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 Feasibility Study 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:

- The contractor must have demonstrated experience in similar feasibility studies for power generation plants, including financing, technology selection, design, construction methods and operation and maintenance for gas-fired turbines and power generation facilities. (30%)
- The contractor must demonstrate a clear organizational structure and management plan for the feasibility study. (20%)
- The contractor must have demonstrated engineering expertise in the power sector with substantial experience with all aspects of project management, preparation of bid documents and bid evaluation and stakeholder liaison on projects. (20%)
- The contractor must have familiarity with OPIC's or other development partners' financial management and project sponsorship processes as well as their environmental and social safeguard policies. (20%)

- The contractor must have familiarity with Nigeria's privatization of DISCOs and GENCOs, NIPP Privatization or Nigeria's independent power producer sector. (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. Sasha Israni
Managing Director
Royal Power Integrated & General Services LTD
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Nigeria

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Nigeria Royal Power Gas-Fired IPP Feasibility Study
USTDA Activity No. 2014-11017A

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. Royal Gas-Fired Power IPP Feasibility Study. 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 feasibility study to assess the technical and financial requirements for building a 275 MW simple cycle gas-fired power plant for Royal Power Integrated & General Services Limited.

In order to meet its rising energy demands, the Government of Nigeria (GoN) has developed the Vision 2020 Initiative with the goal of adding 40,000 MW in on-grid and off-grid generation capacity. With the privatization of Nigeria's distribution companies (DISCOs), the GoN has liberalized its power sector to encourage the entrance of independent power producers (IPPs).

Royal Power Integrated & General Services LTD is a Nigerian registered independent power producer with expertise in the power generation industry and as such, must obtain a generation license from the Nigerian Electricity Regulatory Commission ("NERC"), which requires: (1) a feasibility study with an associated financial model; (2) an environmental impact assessment ("EIA") report approved by the Federal Ministry of Environment, Housing, and Urban Development; (3) a load evacuation report approved by the Transmission Company of Nigeria ("TCN"); and (4) a land ownership title. The Feasibility Study will support Royal Power in obtaining the required power generation license to facilitate a purchase power agreement with NBET for the construction of a 275 MW simple cycle gas-fired power plant.

The Feasibility Study would help Royal Power Integrated & General Services LTD in addressing the technical and financial feasibility analyses that are required to obtain a power generation license from the Federal Government of Nigeria to support the implementation and operation of a 275 MW simple cycle gas-fired power plant located in Lagos State, Nigeria.

The U.S. firm selected will be paid in U.S. dollars from a \$667,000 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 desk study report are 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/businessopp/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, July 25, 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.

ANNEX 2

PUBLIC MARKET REPORT

Nigeria, Royal Gas-Fired IPP Desk Study

TDA-PO201411041
May 2014



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The U.S. 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.



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Royal Power Independent Power Project (IPP) Public Market Report

1 Executive Summary

Royal Power Integrated & General Services (“RPIS”) requests United States Trade and Development Agency’s (USTDA) support on funding a feasibility study for a proposed gas-fired IPP project in Badagry, Lagos State, Nigeria. Nigeria is also a Power Africa Country with U.S. Government support in building out power generation and transmission to access electrical power for sustainable economic growth and development. Furthermore, Nigeria’s privatization provides opportunities for private investment to meet surging and underserved demand for electricity and support economic growth. The proposed gas-fired IPP project would result in over \$100 million of U.S. exports from equipment sales. Additional exports could result if the EPC contractor selected for the project is a U.S. company.

2 Nigerian Economic and Power Market

Nigeria is Africa's most populous country and the world's eighth largest oil producer. The major goals of economic development for the Nigerian government are to integrate agriculture and industry more closely, including, privatization or commercialization of a number of parastatals and government-owned enterprises; improve Nigeria’s infrastructure, particularly, through increasing electric power generation, enlarging and modernizing communications systems, and performing needed maintenance on existing transportation systems; reduce dependence on oil; and create an effective national planning body

2.1 Nigeria – Economic Fundamentals

Nigeria is a middle income, mixed economy and emerging market, with expanding financial, service, communications, technology and entertainment sectors. It is ranked 30th (40th in 2005, 52nd in 2000), in the world in terms of Gross Domestic Product (GDP) purchasing power parity (PPP) as of 2013, and the 2nd largest economy in Africa (behind South Africa and on track to become the richest country in Africa in 2014 when their new GDP rebasing result is out early 2014 and also becoming one of the 20 largest economies in the world by 2020). Its re-emergent, though currently underperforming, manufacturing sector is the third largest on in Africa, and produces a large proportion of goods and services for the West African region.

Previously hindered by years of mismanagement, economic reforms of the past decade have put Nigeria back on track towards achieving its full economic potential. Nigerian GDP at PPP has almost trebled from \$170 billion in 2000 to \$451 billion in 2012, although estimates of the size of the informal sector (which is not included in official figures) put the actual numbers closer to \$630 billion. Correspondingly, the GDP per capita doubled from \$1400 per person in 2000 to an estimated \$2,800 per person in 2012 (again, with the inclusion of the informal sector, it is estimated that GDP per capita hovers around \$3,900 per person). (Population increased from 120 million in 2000 to 160 million in 2010). These figures might be revised upwards by as much as 40% when the country completes the rebasing of its economy later in 2013.

Although much has been made of its status as a major exporter of oil, Nigeria produces only about 2.7% of the world's supply (Saudi Arabia: 12.9%, Russia: 12.7%, USA:8.6%). To put oil revenues in perspective: at an estimated export rate of 1.9 Mbbbl/d (300,000 m³/d), with a



Desk Study on Nigeria Royal Power Gas Fired IPP

projected sales price of \$65 per barrel in 2011, Nigeria's anticipated revenue from petroleum is about \$52.2 billion (2012 GDP: \$451 billion). This accounts about 11% of official GDP figures (and drops to 8% when the informal economy is included in these calculations). Therefore, though the petroleum sector is important, it remains in fact a small part of the country's overall vibrant and diversified economy.

2.2 Nigeria – Power Sector

Electricity power generation in Nigeria began in 1898 when the first generating plant was installed in Lagos under the Public Works Department. National Electric Power Authority (NEPA) was established in 1972 with a mandate to maintain an efficient, coordinated and economic system of electricity supply to all parts of the nation. NEPA had a generating capacity of 411 MW from four power stations; Ijora, Delta and Afam thermal stations and Kainji hydro power station. It had a peak demand of 390 MW (at that time).

Power Holding Company of Nigeria (PHCN), formerly NEPA, was founded in 2005. NEPA was unbundled into 18 successor companies that formed PHCN, which produced and distributed power through its subsidiaries.

PHCN faced a number of operational challenges that limited its ability to supply efficient, good quality power to the country. The following were some operational challenges faced by PHCN:

- Artificially low electricity tariff charged
- Inadequate gas supply
- Illegal connection to the distribution grid
- Vandalism and theft of equipment
- Low water level at the hydro power stations
- Rising consumer debt
- Poor maintenance culture (of plants and equipment)

In November 2013, PHCN ceased to exist after the privatization of the six generation companies (GENCOS) and eleven distribution companies (DISCOS) to private sector consortiums, while the Federal Government retained the transmission company, which it funds and operates. Table 1 delineates the successor company to PHCN. The privatization provides opportunities for private investment to meet surging and under-served demand for electricity and support economic growth.

Table 1: PHCN Successor Companies

Name	License Type	Capacity/Coverage
Abuja Electricity Distribution Company Plc	Distribution	Garki, Lafia, Lokoja, Min
Afam Power Plc	Generation	987.2MW
Benin Electricity Distribution Company Plc	Distribution	Ado-Ekiti, Akpakpava, Aku
Egbin Power Plc	Generation	1,320MW
Eko Electricity Distribution Company Plc	Distribution	Festac, Ijora, Islands, B
Enugu Electricity Distribution Company Plc	Distribution	Aba, Abakaliki, Awka, Aba
Ibadan Electricity Distribution Company Plc	Distribution	Abeokuta, Dugbe, Ijebu-Od
Ikeja Electricity Distribution Company Plc	Distribution	Alimosho, Ikeja, Ikorodu
Jos Electricity Distribution Company Plc	Distribution	Bauchi, Gombe, Jos, Makur
Kainji Hydro Electric Plc	Generation	760MW
Kano Electricity Distribution Company	Distribution	Dala, Dutse, Funtua, Kati
Port Harcourt Electricity Distribution Company Plc	Distribution	Borokiri, Calabar, Diobu
Sapele Power Plc	Generation	1,020MW
Shiroro Hydro Electric Plc	Generation	600MW
Transmission Company Of Nigeria (TCN)	Transmission	TCN remains in government ownership, and is being managed by Canadian firm Manitoba Hydro under a contract
Ughelli Power Plc	Generation	942MW
Yola Electricity Distribution Company Plc	Distribution	Damaturu, Jalingo, Maidug

2.2.1 Electricity Demand

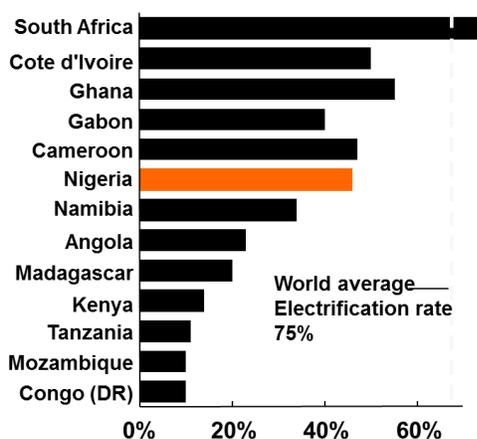
Nigeria currently generates approximately four gigawatts (GW) of electricity, with an installed capacity of approximately 10 GW. As demonstrated in Table 2, the Nigeria's installed capacity is severely smaller than other major economics in Africa with smaller populations. Given a population estimated at over 160 million people, this is grossly inadequate. Figure 1 demonstrates Nigeria's electricity per capita, which is less than 1/1000 of the United States of America.

Table 2: Energy Generation Comparables

Country	Population (in million)	Electricity Generated
Nigeria	160	4 GW
South Africa	52	47 GW
Egypt	60	20 GW

Figure 1: Nigeria Electrification

Africa electrification rates



Source: IEA World Energy Outlook, 2011

World Electricity per Capita

C'try	Watts/Capita
USA	3,153
EU	1,258
S.Africa	918
Malaysia	813
Nigeria	30

Source: GECAD 2010

Key Issues

- ▶ Low electrification rate
- ▶ Weak Infrastructure (Generation, transmission and distribution)
- ▶ Massive investment required

2.2.2 Transmission

Transmission Company of Nigeria (TCN) was incorporated in November 2005. On April 1, 2004, TCN emerged from the defunct NEPA as a product of the merger of the Transmission and Operations. Being one of the 18 unbundled business units under the PHCN, the company was issued a transmission license on July 1, 2006. TCN is licensed for the activities: electricity transmission, system operation and electricity trading, which is ring fenced.

TCN is responsible for evacuating generated electric power from GENCOs and wheeling it to DISCOs. TCN has eight Transmission Regions and a National Control Centre, (NCC). The NCC is located in Osogbo and the transmission regions are Lagos, Osogbo, Kaduna, Bauchi, Benin, Shiroro, Enugu and Port Harcourt.

2.3 Legal/Regulatory

The Federal Ministry of Power is the policy making arm of the Federal Government with the responsibility for the provision of power in Nigeria.

The Ministry is governed by the provisions of the National Electric Power Policy (NEPP) of 2001, the Electric Power Sector Reform (ESPR) Act of 2005 and the Roadmap for Power Sector Reform of August 2010.

The Federal Ministry of Power has the following responsibilities:

- Initiating and formulating broad policies and programs on the development of the power sector (electricity)
- Initiating concessions in the power sector
- Licensing of electricity generating sets of 1MW capacity and below and electrical contractors
- Conducting investigation on electrical accidents and to ensure safety in the electrical

industry in Nigeria

- Conducting statutory tests and certification of electrical poles and other major electrical materials before they are used on the grid and networks in Nigeria
- Implementing renewable energy programs/initiatives
- Coordinating activities of the power sector
- Handling policy matters relating to research and development in the power sector
- Promoting the development of hydro power plants through public private partnership (PPP)
- Participating in bilateral and multilateral relations affecting the power sector
- Facilitating the overall condition of the activities of the parastatals under its supervision.

2.3.1 Nigerian Electricity Regulatory Commission

Nigerian Electricity Regulatory Commission (NERC) was established under Electric Power Sector Reform Act, 2005, and was officially inaugurated on October 31, 2005. It was established as an Independent Regulator to drive the power sector reform program of the Federal Government:

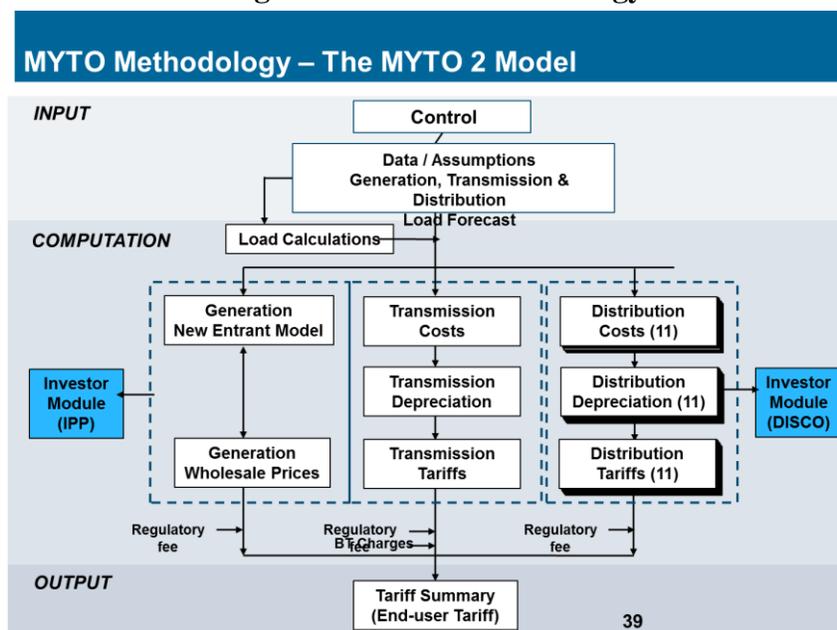
- Regulating through tariff the generation, trading, distribution, transmission and system operations of the Nigerian power sector
- Ensuring fairness, transparency & level playing ground for all investors
- Development and enhancement of indigenous capacity in the electricity sector
- Creation, promotion and preservation of efficient industry and market structures and ensuring optimal utilization of electricity resources
- Maximization of access to electricity services, by promoting and facilitating consumer connections to distribution systems in both rural and urban areas
- Price regulation
- Ensuring regulation is fair and balanced for licensees, consumers, investors, and other stakeholders

In December 2011, NERC issued power generation licenses to 29 IPPs.

2.3.2 Multi Year Tariff Order

The Multi Year Tariff Order (MYTO) is the model used to determine the price for electric tariff for the Nigerian power sector. In Transmission and Distribution (Retail) the model uses a revenue requirement approach determined by building blocks methodology, while in prices for power generation the model uses a long run marginal cost method (LRMC) to produce a proxy for market price. In exceptional cases, a contract price would be set for each generator and this price would be a NERC determined price for each form of generation and each generation site that does not have a PPA.

Figure 2: MYTO Methodology



The following is a summary of the impact of MYTO:

- Adopts incentive regulation to attract investment due to inadequate generation capacity, poor transmission network, dilapidated distribution network and higher level of commercial losses
- Requires the Commission to “ensure that prices charged by Licensees are fair to consumers and are sufficient to allow the Licensees to finance their activities and to allow for reasonable earnings for efficient operation”
- Provides a Unified way to determine efficient total industry revenue requirement
- Establishes a 15-year look ahead for tariff in the sector due to long gestation periods required for investors to recoup investment
- Set wholesale and retail prices in the Nigerian Electricity Supply Industry (NESI)
- Enables recovery of costs and allows reasonable profits (i.e., the revenue requirement)

2.3.3 Tariff Principles

MYTO sets tariffs for the three electricity sectors – transmissions, distributions, and generation – based on certain principles and assumptions, namely:

- Cost recovery/financial viability – licensees recover efficient costs, including a reasonable return on capital
- Signals for investment – tariffs should encourage an efficient level and nature of investment (e.g., location)
- Certainty and stability of the tariff framework enables private sector investment
- Efficient use of the network – tariffs should reflect the marginal costs that users impose on the system, influence efficient use and reduce cross-subsidies

Allocation of risk – the tariff framework should allocate risks efficiently to those best placed to manage them

2.3.4 Generation Tariff Methodology

NERC has determined that the price of electricity to be paid to generators will be at the level required by an efficient new entrant to cover its life cycle costs (including its short run fuel and operating costs and its long run return on capital invested)

- The methodology used is the Long Run Marginal Cost (LRMC) method.
- LRMC involves calculating the full life cycle cost of the lowest-efficient-cost new entrant generator, taking into account current costs of plant and equipment, return on capital, operation and maintenance, fuel costs, etc.
- LRMC is applied in the following two ways:
 1. Benchmark costing - Creates a proxy for the market price which an efficient generator is expected to operate below.
 2. Individual long run marginal cost for each generator - This sets prices for each generator according to its plant and site specific costs.

The classic LRMC applies to the successor GENCOs, as set out in the 2008 Tariff Order, in which the long-run marginal cost of an open-cycle gas turbine (OCGT) plant will be calculated for the successor GENCOs by the NERC. But for the individual (site-specific) LRMC model requires each new entrant IPP that requires a tariff beyond the MYTO benchmark to apply to the NERC for approval. The IPP will open its procurement processes, accounts and financial model to scrutiny by the NERC, which will then apply prudence and relevance tests to determine whether such plant- and site-specific costs should be allowed in the tariff.

2.4 IPPs in Nigeria

Nigeria’s IPP market has been slow to grow with few privately developed IPPs completed in Nigeria. AES IPP (which was developed by Enron) and the IPPs developed by the International Oil Companies (IOCs) are the only privately developed IPPs in country. The introduction of IPPs has been gradual, but according to the country's power roadmap, the private power component will more than double in less than five years.

Table 3: Privately Developed IPPs in Nigeria (Operating)

Project	Company	Electricity Generated
Okpai IPP	Agip Nigeria Ltd	480 MW
AES IPP	AES Corporation	270 MW
Afam VI	Shell Nigeria Ltd	624 MW

The Federal Government of Nigeria developed most of Nigeria’s power plants. Five main power plants were recently sold via privatization in 2013. It is worth noting that majority of the financing for the acquisition of these plants was locally sourced. It is expected that the new owners would re-finance these loans with longer term, lower interest rate loans, sourced from foreign finance institutions.

Table 4: GENCOs listed and sold via Privatization

Name	Description	Announced Winner
Ughelli	Located in Delta State, completed in 1975, 972 MW	Transcorp/Woodrock/Symbion Power/PSL \$300 Million
Geregu	Located in Kogi State and Govt. built in 2006, 414 MW	Amperion Consortium (BSG, Forte Oil, Gridco China) \$132 Million
Sapele	Located in Delta State, 1020 ME	CMEC/Eurafric Energy \$201 Million
Kainji	First hydro in Nigeria, 1344 MW. Located in Niger State	Mainstream Energy \$257 Million
Shiroro	River Kaduna, built 1990, 600 MW. Located in Niger State.	North-South Power Co \$112 Million

2.4.1 Bankable PPA

NERC has licensed The Nigerian Bulk Electricity Trading Company (NBET) to purchase power from the IPPs. NBET was established with the main aim of purchasing power from the GENCOs and selling it to the DISCOs. One of the key tenets of setting up NBET was to mitigate the lack of credit worthiness of the DISCOs. All IPPs that sign PPAs with the NBET will have to be paid for their power. The IPPs will be paid according to their contracted available capacity

World Bank also provides Partial Risk Guarantees (PRG) to some IPPs. In April 2013, the World Bank signed a \$145 million with the Egbin state power authority, Chevron Nigeria and Deutsche Bank to secure gas supplies to the Egbin power station over the lifetime of the 10-year deal. This is on a case by case basis. World Bank provides the PRG as an interim solution to the long-delayed Petroleum Industry Bill (PIB), which would address gas supply issues.

Current PPAs varies by site and developer. Azura Power Holding Limited, the company that is developing the two-phase Azuro-Edo power project in Benin City, Edo State, signed a PPA with NBET on April 22, 2013, which is being used as a template for other project-financed independent power producers in the country. The PPA entails detailed negotiations with NBET, to allocate risk appropriately, and covers for gas supply, transport and evacuation risks.

Table 5: Nigerian Generation Tariff - MYTO 2

Year Commencing July 1	2012	2013	2014	2015	2016
PPA Cost (N/MWh)	7,950	8,691	10,181	10,964	11,773
Capacity Charge (N'000/MW/Month)	3,515	3,789	4,084	4,403	4,747
Energy Charge (N/MWh)	5,389	5,758	7,290	7,944	8,658



2.4.2 NIPP Privatization

National Integrated Power Projects (NIPP), a government developed project, included the development of ten thermal power plants in Nigeria, mostly in the oil rich southern region of Nigeria. The Nigerian government listed the ten plants’ assets, which were at various stages of completion, for sale via privatization. Over 60 companies submitted bids for the assets in November 2013, and it is expected that the winners will be announced in March 2014. When all the assets are completed and online, it is estimated that they will add over six (6) gigawatts to the national grid, more than doubling the current capacity today.

Table 6: NIPP Power Plants listed for sale via Privatization

Name	Capacity (MW)	Configuration
Alaoji	813.3	4 x GE Frame 9E, 2 x steam turbines
Benin	507.6	4 x GE Frame 9E
Calabar	634.5	5 x GE Frame 9E
Egbema	380.7	3 x GE Frame 9E
Gbarain	253.8	2 x GE Frame 9E
Geregu	506.1	3 x GE Frame 9E
Ogorode	507.6	4 x GE Frame 9E
Olorunsogo	754	4 x GE Frame 9E
Omoku	264.7	2 x GE Frame 9E
Omotosho	512.8	4 x GE Frame 9E

3 U.S. Export Potential

This project has immense export potential for the U.S. economy. Given that the technology provider and EPC contractor could potentially be American companies, there is a huge potential of over 70% of the estimated project cost of \$300 million will be realized within 12 months of financial closing (or EPC contract signing). Table 7 provides major line items in the project with potential U.S.

Table 7: Export Potential of Major Line Items

Line Item	Supplier	Sales Potential (in millions)
Gas Turbines	Equipment Supplier	\$100
Electric Generators	Equipment Supplier	\$5
Engineering	EPC Contractor	\$3
Steam Turbine	EPC Contractor	\$40
Heat Recover Steam	EPC Contractor	\$30
Transformer	EPC Contractor	\$10

With over \$100 million estimated in equipment/technology exports there is significant U.S. export potential in the project, if all of the equipment/technology is procured from the United States. Table 8 provides potential U.S. supplier for the project. For each equipment category/technology the export potential can be estimated based on the sales potential described above in Table 7.

Table 8: Export Items by Supplier

Export Item	Potential U.S. Supplier
Gas Turbines	General Electric Pratt and Whitney Solar Turbines
Transformers	Allan Bradley
Controls	Honeywell
Switchgear & Breakers	Square D
Generators	General Electric Cummins
EPC	Flour Daniel Bechtel Foster Wheeler AECOM KBR Inc. Jacobs Engineering Group Black & Veatch Corporation
Gas Turbines	General Electric Pratt and Whitney Solar Turbines
Transformers	Allan Bradley
Controls	Honeywell
Switchgear & Breakers	Square D

3.1 Turbines

The turbines are the prime mover in a power plant, and the selected technology is critical. General Electric LM 6000, with an output of 44 MW (at ISO conditions) and up to 55 MW, is a candidate for the project IPP project. Alternatively, the GE heavy duty Frame 9E turbine is another candidate for the prime mover in a power plant. With widespread adoption in the region, the maintenance and servicing of these units would be relatively less expensive due to economies of scale.

3.2 Engineering, Procurement and Construction Contractor (EPC)

The Engineering, Procurement and Construction (EPC) contractor on power infrastructure projects is very critical, as the EPC contractor will be responsible for the implementation of the project from design, through construction to commissioning and testing. Major U.S. EPC companies in the power sector include Bechtel, Flour Daniel, KBR, Foster Wheeler and AECOM. None of these companies are active in the Nigerian power sector.

Asian EPC companies have been very active in the Nigerian market in the last decade. This includes Sepco III Electric Power Construction Corporation (SEPCO3), the Chinese state funded company, and China Construction and Engineering Company (CCEC). Both of these companies built the Ppalanto and Omotosho power plants respectively in Nigeria. Other Asian EPC companies active in Nigeria today include Hyundai Heavy Industries (HHI Korea), Marubeni (Japan) and Samsung (Korea).



4 Foreign Competition and Market Entry Issues

On power generation projects in Nigeria, it can be expected that competition will emerge from global power generation suppliers. There is a huge lack of capacity in the indigenous market, thus competition will primarily come from European and Asian companies.

4.1 Local Power Industry

The Nigerian power market is characterized by a huge deficit of manufacturing capacity. Advanced technology equipment, including, turbines, generators, transformers, are not manufactured in Nigeria, thus there is no advantage for local companies. Less advanced components like cables and junction boxes are manufactured locally and can be sourced locally.

The industry regulator (NERC) has been mulling the idea of establishing a “Local Content” Act, this is to promote the manufacturing of technology equipment and to hasten the transfer of technology in country.

Historically, four countries have been active in the Nigerian power sector.

1. United States of America (General Electric)
2. Germany (Siemens AG)
3. China (SEPCO)
4. Japan (Marubeni)

This dynamic has slightly changed with the emergence of Asian and Eastern European competitors. Other countries have emerged as new entrants to the Nigerian power sector.

1. India (Tata Power, Essar Power)
2. South Korea (KEPCO)
3. Canada (SNC Lavalin)
4. South Africa (Group Five)

4.2 Major End Item and Service

4.2.1 Turbines

- Major competitors for turbines in Nigeria include the two front runners on most projects; General Electric and Siemens (Germany). Other turbine manufacturers with a presence in the region include Alstom (France), Solar (USA), Hitachi (Japan) and Pratt and Whitney (USA)

4.2.2 EPC Contractors

- Various EPC contractors have successfully completed the construction of power plants in Nigeria. None of the EPCs have been from North America, even though SNC Lavalin (Canada) had an unsuccessfully bid on a project in the Nigeria.

Recent tenders in Nigeria have resulted in wins by Chinese and South Korean EPC companies. SEPCO3 of China constructed and managed the Olorunshogo phase II gas-fired plant. China Machinery Engineering Corporation (CMEC) is part of ownership



consortium of Sapele, Korea Electric Power Corporation owns the 1,320MW Egbin Power.

4.3 Power Plant Technology

Over the last two years, the industry regulator (NERC) has subtly encouraged IPP developers to promote combine cycle power plants over simple cycle power plants. This is to reduce the marginal cost of power generation in country.

Most of the recently built government plants under the NIPP Program were designed as simple cycle power plants, but they were configured in a way to enable them to be converted to combine cycle power plants with the addition of a steam boiler and heat recovery system.

ANNEX 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.

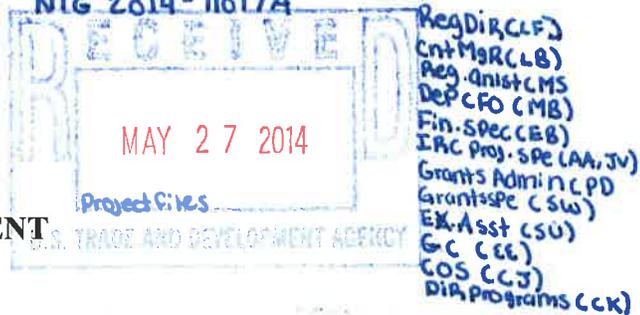
Questions regarding these nationality, source and origin requirements may be addressed to the USTDA Office of General Counsel.

Version 01.17.2014

ANNEX 4

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NIG 2014-11017A



GRANT AGREEMENT

U.S. TRADE AND DEVELOPMENT AGENCY

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 Royal Power Integrated & General Services LTD (“Grantee”). USTDA agrees to provide the Grantee under the terms of this Grant Agreement US\$667,000 (“USTDA Grant”) to fund the cost of goods and services required for a feasibility study (“Study”) on the proposed Royal Power gas-fired IPP (“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 Study (“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 Study (“Terms of Reference”) are attached as Annex I and are hereby incorporated by reference into this Grant Agreement. The Study will examine the technical, financial, environmental, and other critical aspects of the proposed Project. The Terms of Reference for the Study 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 Study. 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 Study that they were not selected. The Grantee and the Contractor then shall enter into a Contract for performance of the Study.

(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 Study. 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 Study 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 Study 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. Study Schedule

(A) Study Completion Date

The completion date for the Study, which is January 1, 2016 is the date by which the parties estimate that the Study 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 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.

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 Study 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 Study 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 Managing Director. 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: Royal Power Integrated & General Services LTD
Plot 1218 B, Sam Adegbite Close, Off Amodu Ojikutu Street
Victoria Island, Lagos
Nigeria

Phone: +234 01 - 2710512
E-Mail: sasha@rpeltd.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.: 2014-11017A
Reservation No.: 2014156
Grant No.: GH201411156

17. Implementation Letters

To assist the Grantee in the implementation of the Study, 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 Study, 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 Study, 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.

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IN WITNESS WHEREOF, the Government of the United States of America and Royal Power Integrated & General Services LTD, 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

For Royal Power Integrated & General Services LTD

By: [Signature]

By: SASHA ISRAELI [Signature]

Date: 5/22/14

Date: 22nd May

Witnessed:

Witnessed: [Signature] 22nd May '14.

By: [Signature]
5/22/2014

By: SYED MAGDOOM

Annex I -- Terms of Reference

Annex II -- USTDA Mandatory Contract Clauses

Annex I

Terms of Reference

The objective of this feasibility study is to assist Royal Power Integrated & General Services LTD (“Grantee”) in addressing the technical and financial feasibility analyses that are required to obtain a power generation license from the Nigerian Electricity Regulatory Commission (“NERC”) (“Study”). The Study shall help the Grantee prepare the necessary documentation to secure financing support for implementing and operating an approximately 275 Megawatt (“MW”) simple cycle gas-fired power plant located in Lagos State, Nigeria (“Project”).

The Contractor shall perform the following tasks:

Task 1: Kickoff Meeting, Data Collection and Review; Stakeholder Consultations and Work Plan

Task 1(a) Conduct a Kickoff Meeting

The Contractor shall organize a kickoff meeting with the Grantee and all other relevant stakeholders. In consultation with the Grantee, the Contractor shall identify key stakeholders for the development of the Project, which may include Nigerian Bulk Electricity Plc (“NBET”), NERC, the Gas Aggregation Company of Nigeria (“GACN”), the Nigerian Gas Company Limited (“NGC”), Shell Nigeria, Eko Electricity Distribution Company (“DISCO”) and Ikeja DISCO. The Contractor shall recommend to the Grantee appropriate Contractor personnel and relevant stakeholders to participate in the kickoff meeting.

During the kickoff meeting, the Contractor shall introduce the Contractor’s team; review the tasks to be performed under these Terms of Reference; and gather input from the Grantee regarding the Grantee’s goals for the Study 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 to any other attendees identified by the Grantee; and maintain meeting records, including the agenda, any handouts and presentation materials, a list of all meeting participants, and the meeting report.

Task 1(b) Data Collection and Review

The Contractor and the Grantee shall collect, review, and analyze available documents relevant to the Project, including, but not limited to, any studies performed by the

Grantee related to the Project, and Federal Government of Nigeria's policies and laws which could impact the Project. The review shall include, but not be limited to:

- The Federal Government of Nigeria's regulatory structure for electricity supply (e.g. regulatory structure for how power supply is generated and transmitted to the transmission grid) and its anticipated impact on the Project;
- Relevant licensing regulations, requirements, and electricity tariff structure as established by NERC;
- Power purchase agreement ("PPA") templates as established and made available by NBET;
- Relevant public documentation from the Ministry of Power such as any initiatives, policies, and programs which may affect the Project, including, but not limited to licensing of power plant and the sale of power;
- Relevant public gas supply agreement templates;
- Publicly available electricity supply and demand statistics for the Eko DISCO and Ikeja DISCO, including, but not limited to current and planned electricity distribution network maps, electricity distribution line routes, power injection characteristics and current transformer capacities, and data on the existing customer base, metering capabilities, load shedding and operations;
- Publicly available operational statistics for the Transmission Company of Nigeria ("TCN");
- Relevant initial assessments of grid connection; and
- Relevant initial environmental assessments.

In addition the Contractor shall collect and review all relevant documents related to the general requirements for the following items in Nigeria:

- The acquisition of a power generation license;
- Evacuation of power to Nigeria's electricity transmission grid;
- Embedded generation;
- Gas supply agreements; and
- Gas transportation agreements.

The Contractor shall also review any data on power plant construction and associated costs for Nigeria, environment data applicable to the site of the Project, and financial data and benchmarking information for the Project.

Task 1 Deliverable: The Contractor shall prepare a report including all work performed under Task 1, including, but not limited to the findings of the initial meetings and documentation and analysis of all gathered information. The Task 1 Deliverable shall be included in the Final Report.

Task 2: Market Analyses

Task 2(a) Market Research and Analysis

The Contractor shall perform market research and analysis for the electric distribution and generation markets for the short-term (0 to 5 year period) and long-term (5 to 15 year period), including, but not limited to the following segments:

- Electric generation capacity and forecasted growth for the national transmission grid;
- Electric generation capacity and forecasted growth for embedded generation for relevant electricity distribution networks; and
- Potential electricity offtakers and their projected growth.

The Contractor shall provide the Grantee with a comprehensive description of these findings, including an overview of the major suppliers in the market, current transmission grid capacity and demand as well as projected demand for electricity as outlined above. In addition, the Contractor shall identify current and potential electricity generation competitors. The Contractor shall identify the new and upcoming generation capacity to be added in Nigeria and analyze how such capacity may affect the Project.

Task 2(b) Market Forecast

Based on the market research and analysis, the Contractor shall prepare a short-term (0 to 5 year period) and long-term (5 to 15 year period) market forecast, including, but not limited to the following components:

- The demand for electricity at relevant electricity load centers for the Project, and the anticipated load for the identified load centers; and
- Anticipated projects in Nigeria's power sector (including electricity generation, distribution and transmission) which could affect the demand for the Project.

The Contractor shall also analyze the relationship between key electricity load centers, their demand growth, generation capacity and proposed transmission upgrades. The Contractor shall review proposed plans by the distribution companies to increase their distributed generation by embarking on embedded generation projects. Based on the review, the Contractor shall complete an analysis of the impact of the data gathered on the proposed Project, and the Contractor shall provide the Grantee with the data analysis which should include a description of the load centers that have demand for the Project.

The Contractor shall also conduct a market survey to identify potential offtakers for the Project. Based on the findings in this Task 2(a) and (b), the Contractor should make a recommendation to the Grantee as who the offtaker(s) should be for the Project. Further,

based on these findings, the Contractor shall make a recommendation to the Grantee as to whether the Grantee should consider a combined cycle or simple cycle configuration for the Project, and provide the Grantee with guidance as to how market demand for power could affect the Grantee's decision for a combined cycle configuration for the Project.

Task 2 Deliverable: The Contractor shall prepare a report including all work performed under Task 2, including, but not limited to the Contractor's recommendation of potential offtaker(s). The Task 2 Deliverable shall be included in the Final Report.

Task 3: Gas Availability

The Contractor shall review all available information on available gas supply infrastructure for the Project and determine the technical and economic feasibility of supporting the energy requirements of the Project. The Contractor shall examine all current available gas sources for the Project including, but not limited to gas supply from the Escravos-Lagos Gas Pipeline, the NGC, Shell Nigeria, and GACN, in various forms as relevant including, but not limited to compressed natural gas ("CNG") and liquefied natural gas ("LNG"). The Contractor shall also forecast anticipated available gas supply for the Project for a short-term (0 to 5 year period) and long-term (5 to 15 year period).

The Contractor shall also review the key requirements, including, but not limited to regulatory, legal and financial requirements, by the potential gas suppliers, including, but not limited to NGC, Shell Nigeria, and GACN requirements, for allocation of gas. The Contractor shall review and analyze key gas supply metrics including, but not limited to pricing, availability and transportation to the Project. The Contractor shall perform an analysis of gas supply security concerns and the Contractor shall propose recommendations to mitigate any potential gas supply security concerns.

Based on these findings, the Contractor shall make a recommendation to the Grantee for the types of gas and potential gas sources for the Project. The Contractor shall specify the configuration of the gas delivery facilities and prepare specifications and documents to facilitate the engineering design, procurement, and construction of any required gas supply infrastructure, and the selection of environmental impact assessment, drilling, production, measurement and other service providers for the gas supply infrastructure on a competitive basis. Further, based on these findings and the findings in Task 2 above, the Contractor shall make a recommendation to the Grantee as to whether the Grantee should consider a combined cycle or simple cycle configuration for the Project, and provide the Grantee with guidance as to how gas supply could affect the Grantee's decision for a combined cycle configuration for the Project.

In addition, based on the Contractor's findings under this task and the findings in Task 2 above, the Contractor shall deliver a proposed energy pricing strategy to the Grantee that would propose price structures for the proposed offtakers based on the level of demand and gas supply for 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 recommendation for the types of gas and potential gas sources for the Project. The Task 3 Deliverable shall be included in the Final Report.

Task 4: Power Station and Transmission

The Contractor shall evaluate the location for the Project and provide the Grantee with a report on its suitability for the Project in areas such as technical, social, environmental and commercial. The Contractor shall conduct a review of potential technologies for the Project including, but not limited to turbines, generators, transformers, switchgears, and controls. For each technology component, the Contractor shall assess, at a minimum, the Nigerian market usage of the technology, technology availability for the Project, technology environmental impact, technology heat rate, technology reliability, technology service options, and ease of use. Based on this assessment, the Contractor shall recommend technology components for the Project.

The Contractor shall:

- Recommend an optimal plant efficiency configuration to the Grantee. This recommendation shall consider all pertinent metrics including price, dispatch curve or methodology, efficiency, feedstock, water source and technical capability of the operator;
- Provide a recommendation as to the optimal fuel mix for the Project which may include diesel, low pour fuel oil, or heavy fuel oil in addition to gas;
- Recommend and outline equipment, facilities and infrastructure that may be required for the implementation of the Project, including but not limited to electricity transmission infrastructure and electricity metering infrastructure; gas and liquid fuel pipelines, flow stations and metering stations; liquid fuel cargo vessels; vehicles; and civil works;
- Specify the transmission (i.e. TCN) and distribution infrastructure required to deliver the electricity to potential offtakers and advise on suitable arrangements for acquiring access to such transmission and distribution infrastructure;
- Propose the optimal structure, terms and conditions of potential lease, refurbishment and/or management agreements to be executed with potential offtakers which may include TCN, Eko DISCO or Ikeja DISCO; and
- Evaluate the potential for Nigeria's electricity transmission grid to successfully evacuate output from the Project.

Based on its findings, the Contractor shall recommend a size and configuration of the Project, which shall include specifications and documents to facilitate the detailed engineering design, procurement and construction of all components of the Project on a lump sum, turnkey, competitive basis.

Based on the foregoing tasks, the Contractor shall provide an optimal design for the Project that includes, but is not limited to, the following items:

- Site plan and layout;
- Process flow diagrams;
- Energy and water balance;
- Electrical single line diagram;
- Instrumentation and control architecture;¹
- Gas and liquid fuel pipelines, flow stations and metering stations
- Major equipment list with sizing;
- Major equipment specifications;
- Plant cost estimation (implementation and operation); and
- Energy production estimation.

Based on its findings from above and from Tasks 2-3 and on any other factors deemed relevant by the Contractor and Grantee, the Contractor shall recommend to the Grantee whether the Project should include a combined cycle configuration.

Task 4 Deliverable: The Contractor shall prepare a report including all work performed under Task 4, including, but not limited to the Contractor's optimal design and recommendations of size and configuration for the Project. The Task 4 Deliverable shall be included in the Final Report.

Task 5: Financial and Economic Analyses

The Contractor shall perform economic and financial analyses for the Project using an internationally acceptable methodology. The Contractor's financial analyses and financial model of the Project shall be based on a standard methodology used by donors, such as the World Bank, the African Development Bank, and any other relevant investors as determined by the Contractor, and approved by the Grantee, for appraising investment projects. The Contractor shall calculate both the economic and financial internal rates of return for the recommended investments under a variety of different assumptions including, but not limited to factors such as interest rates, gas prices, and PPA tariffs.

Based on Tasks 1-4, the Contractor shall prepare detailed engineering, procurement, and construction ("EPC") cost estimates for the Project, the gas supply infrastructure, the equipment for the Project, and operations & maintenance ("O&M") requirements. The Contractor shall recommend a fee/payment structure for the Project and outline the assumptions used in its analysis. The Contractor's estimate shall include a detailed breakdown of equipment and materials for all major components, including, but not

¹ Instrumentation and control architecture refers to all of the systems that will monitor and control the power station (for example, the supervisory control and data acquisition ("SCADA") system, distributed control systems, Fieldbus solutions, as well as other systems that ensure that all of the power station's systems are functioning and integrated, alert the plant manager of any problems, and allow a means of response to any such problems).

limited to, major equipment, balance of plant, instrumentation and controls, gas supply infrastructure, water treatment, and electrical interconnection.

The Contractor shall develop a comprehensive financial model for the Project indicating project development, construction and operational costs, and revenues over a twenty year period. Based on the Contractor's review and analyses of (a) the current electricity tariffs, (b) the levels of tariffs in current PPAs in the Nigerian electricity market, and (c) the financial analyses of the Project, the Contractor shall recommend to the Grantee the optimal electricity tariff for each of the different classes of customers for power generation and electricity distribution that would be applicable to the Project. The Contractor shall include in its analysis a cash flow analysis, market conditions, raw material availability, supply agreements, off-take agreements, and competing alternative methods of achieving the same or similar Project objectives. The Contractor's financial model shall consider all initial capital costs (i.e. plan, design, develop, and build) and long-term operational costs (i.e. warranties, operation, maintenance, acquisition, installation, refurbishment, and disposal).

The Contractor's financial analysis shall consider, at a minimum, the following items:

- Forecast financial statements and supporting information;
- Forecast sources and uses of funding;
- Forecast key financial ratios and financial covenants;
- Price and revenues;
- Inflation;
- Cost of capital (equity finance and external debt finance);
- Taxes; and
- Development fee and success payments.

The Contractor shall perform a sensitivity analysis related to project risk, including, but not limited to, capital expenditure (from negative 20 percent to 20 percent, in increments of five percent), operating expenditure to include gas price, power purchase price (capacity and energy charges), fuel substitution (if dual fuel capability), and operations and maintenance costs (from negative 20 percent to 20 percent in increments of five percent), inflation indices where appropriate, exchange rates, and funding terms. The Contractor shall advise on the overall commercial viability of the Project under different scenarios. The Contractor's shall prepare a risk matrix for the Project and advise on appropriate risk allocation and mitigation strategies and instruments.

The Contractor shall specify the amount of funding required to develop and implement the Project, which funding shall include but not be limited to engineering fees, construction costs, interest during construction, working capital, advisory fees, financial advisory success fees, and adequate financial provision for the sustainable operation of the power station. Based on the financial model, financial analyses, and risk matrix, the Contractor shall prepare a business plan for the implementation of 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 economic, financial and technical analyses for the Project. The Task 5 Deliverable shall be included in the Final Report.

Task 6: Social and Environmental Impact Assessment

The Contractor shall perform a full environmental impact assessment ("EIA") to ensure that the proposed Project shall comply with all relevant local environmental regulations and environmental permits secured by the Grantee, as well as with the criteria of the Overseas Private Investment Corporation, The Export-Import Bank of the United States, and other relevant development finance institutions. The Contractor's EIA shall include, but not be limited to, the following:

- Air/water quality and noise;
- Comprehensive Monitoring, Health and Safety risk assessment for the Project cycle;
- Environmental and regulatory considerations;
- Environmental impacts across the design, construction, operation, and decommissioning phases;
- Environmental risk assessments;
- Mitigation or enhancement measures that can be put in place for any negative impacts;
- Public participation processes;
- Site environmental assessments;
- Site environmental restrictions;
- Offshore marine study for water intake and outfall location;
- Topographic survey
- Geotechnical investigation
- Safe grade elevation study (i.e. flood analysis); and
- Waste management.

The EIA shall comply with the laws of the Federal Republic of Nigeria, and be performed in accordance with Nigerian environmental regulations as outlined by the Nigerian Federal Ministry of Environment and NERC. The EIA shall also comply with the World Bank standards and Equator Principles². The EIA shall include a time-bound action plan, with cost estimates, to mitigate against all material social and environmental risks.

The Contractor shall identify potential negative environmental impacts and discuss the extent to which they can be mitigated. If necessary, the Contractor shall identify steps that will need to be undertaken by the Grantee subsequent to the completion of the Study

² The Equator Principles (EPs) is a risk management framework, adopted by financial institutions, for determining, assessing and managing environmental and social risk in projects and is primarily intended to provide a minimum standard for due diligence to support responsible risk decision-making.

and prior to Project implementation. The Contractor shall identify areas requiring special consideration for environmental controls, including any aspect that may influence the Project. The Contractor's assessment shall also include any potential positive impacts.

In addition, based on the standard approach used by the international financial institutions, especially the International Finance Corporation, the Contractor shall draft a Social Impact Assessment that considers Right-of-Way (ROW) and resettlement requirements and estimates the number of Project-Affected Parties (PAPs) as a result of the construction of the proposed Project.

Task 6 Deliverable: The Contractor shall prepare a report including all work performed under Task 6, including, but not limited to the Contractor's EIA for the Project. The Task 6 Deliverable shall be included in the Final Report.

Task 7: U.S. Sources of Supply

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 facility for the Project;
- Potential U.S. engineering and construction companies which can provide design, engineering, and construction services;
- Potential U.S. service providers including consulting, procurement, construction, legal, and financial services;
- U.S. project management and oversight companies; and
- U.S. suppliers of equipment such as turbines, generators, transformers, switchgears, and controls.
- The identification of technology options for the Project, and the assessment of economic and commercial viability of the Project. These factors shall be based on the proposed configuration(s) for 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 notify the Grantee of which potential suppliers are interested in supplying equipment and services for the Project.

Task 7 Deliverable: The Contractor shall prepare a report including all work performed under Task 7, including, but not limited to the list of potential U.S. sources of supply for the Project. The Task 7 Deliverable shall be included in the Final Report.

Task 8: Host Country Development Impact Assessment

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 Contractor shall analyze the impact of the Project on infrastructure, market-oriented reforms, technology transfer and productivity, human capacity building and environment. The analysis shall focus on the development impacts that are likely to occur if the Project is implemented according to the Study's recommendations. While specific attention shall be paid to the immediate impacts of the Project, the analysis shall also include any development impacts that may result from the Project's implementation, where appropriate, including spin-off and demonstration effects such as the potential for additional captive power projects. In particular, the Contractor shall assess the impact of the Project on:

- (1) **Infrastructure:** The Contractor shall identify the anticipated direct and indirect infrastructure impacts of the Project, giving a brief synopsis and concrete examples of such impacts, specifically addressing new infrastructure that would be developed and how existing infrastructure was affected. The Contractor shall estimate the impact on the electric power infrastructure development as well as other infrastructure including the number facilities that could potentially accelerate their implementation or expansion plans due to access to more reliable electricity.
- (2) **Technology Transfer and Productivity Enhancement:** The Contractor shall identify the anticipated advancements in technologies that would be mobilized through this Project, especially any technologies which would be new to the Nigerian market. The Contractor shall also identify anticipated impacts due to the Project, which may include changes in productivity or production costs.
- (3) **Human Capacity Building:** The Contractor shall identify the anticipated number and types of local jobs that will be impacted as a result of the Project, including any 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 for the Project.
- (4) **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.

- (5) Environment: The Contractor shall estimate the potential positive and negative environmental impacts of the Project.
- (6) 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, etc.

Task 8 Deliverable: The Contractor shall prepare a report including all work performed under Task 8, 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 8 Deliverable shall be included in the Final Report.

Task 9: Legal, Regulatory, and Institutional Review

The Contractor shall outline the current regulatory environment and requirements in Nigeria for gas-fired power plants. The Contractor shall identify any pending or proposed policy and/or legislative actions that could either act as potential barriers to the implementation of the Project or would be necessary for implementation of the Project. The Contractor's analysis shall also include all permitting requirements, regulations regarding participation by foreign entities, regulations that impact environmental requirements, and any other regulatory issues that may have a significant impact on the Project, as well as reporting on the quality of service and supply standards required by the regulators.

The Contractor's analysis shall include all pertinent documents that deal with import taxes, duties and fees, corporate and personal income taxes, and property and other taxes related to the implementation of the Project.

The Contractor shall describe international standards for the gas-fired power projects and assess any disparities between the international standards and Nigeria's current regulatory environment. The Contractor shall determine if the disparities may become impediments to the Project and provide the Grantee with a roadmap outlining ways that these disparities could be mitigated.

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 within the Nigeria. The report shall also describe ways that the Grantee can avoid or overcome any legal and/or regulatory barriers that the Project may face.

Task 9 Deliverable: The Contractor shall prepare a report including all work performed under Task 9, including, but not limited to the Contractor's regulatory report for the Project. The Task 9 Deliverable shall be included in the Final Report.

Task 10: Tender Documents Preparation

With the Grantee's input, the Contractor shall prepare tender documents for the EPC contract, O&M contract, and, if required, gas supply and fuel supply agreements. The Contractor shall also provide the Grantee with key terms from relevant Nigerian power purchase agreements (PPA) which could be utilized for the Project's PPA. The Contractor shall also recommend a procurement strategy for the acquisition of the gas supply infrastructure, and the power plant and associated infrastructure, indicating key activities, estimated time schedules (with and without tendering) and associated costs, highlighting key milestones such as contract signature, site mobilization, factory tests, shipment, commissioning and commercial operations. The Contractor shall perform market research on potential EPC contractors, to assess their ability to deliver on the proposed project. The Contractor shall rank the EPC contractors for the Grantee based on the potential EPC contractors' past projects, staff strength, financial strength and construction projects in the region.

The Contractor shall prepare the tender documents. The documents shall include, but not be limited to:

- Project background and information;
- Technical specifications, including basic engineering, drawing, and performance model simulation results; and
- Draft contract clauses which include all appropriate commercial terms for Project execution, including terms for performance guarantees and framework arrangements.

Task 10 Deliverable: The Contractor shall prepare a report including all work performed under Task 10, including, but not limited to the tender documents for the Project. The Task 10 Deliverable shall be included in the Final Report.

Task 11: Project Implementation Plan

The Contractor shall provide the Grantee with a description of the Contractor's recommendations for the Project's implementation strategy which may include:

- A recommended schedule for Project implementation, including recommendations for phasing, milestones, and investments required;
- An outline of all the steps the Grantee will need to take subsequent to the Study's completion and prior to project implementation, such as:
 - Licensing, permitting, and other relevant legal and regulatory requirements, including, but not limited to, the requirements to obtain a generation license from NERC;
 - Financial arrangements;
 - Procurements of goods and services;
 - Systems integration;
 - Operations and maintenance; and

- Short- and long-term training requirements.
- An assessment of how the implementation of the Project will impact the Grantee's operations;
- Annual budget requirement for the Project;
- Technical and training needs to implement the Project; and
- Any relevant changes to the Grantee's corporate structure that could bolster the implementation of the Project.

Task 11 Deliverable: The Contractor shall prepare a report including all work performed under Task 11, including, but not limited to the implementation plan for the Project. The Task 11 Deliverable shall be included in the Final Report.

Task 12 Final Report Preparation and Presentation

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 shall include:

- Adobe Acrobat readable copies of all documents
- Source files for all drawings and documents
- Source files for any analytical tools used to complete the Terms of Reference

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 Royal Power Integrated & General Services LTD (“Client”), dated _____ (“Grant Agreement”). The Client has selected _____ (“Contractor”) to perform the feasibility study (“Study”) for the proposed Royal Power gas-fired IPP 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 Study 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 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.

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. Study Schedule

(1) Study Completion Date

The completion date for the Study, which is January 1, 2016 is the date by which the Contract Parties estimate that the Study 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 Study 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.:	2014-11017A
Reservation No.:	2014156
Grant No.:	GH201411156

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. Sasha Israni

Title: Managing Director
Phone: +234 01 - 2710512
E-Mail: sasha@rpeltd.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 Study. 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 objective of this feasibility study is to assist Royal Power Integrated & General Services LTD (“Grantee”) in addressing the technical and financial feasibility analyses that are required to obtain a power generation license from the Nigerian Electricity Regulatory Commission (“NERC”) (“Study”). The Study shall help the Grantee prepare the necessary documentation to secure financing support for implementing and operating an approximately 275 Megawatt (“MW”) simple cycle gas-fired power plant located in Lagos State, Nigeria (“Project”).

The Contractor shall perform the following tasks:

Task 1: Kickoff Meeting, Data Collection and Review; Stakeholder Consultations and Work Plan

Task 1(a) Conduct a Kickoff Meeting

The Contractor shall organize a kickoff meeting with the Grantee and all other relevant stakeholders. In consultation with the Grantee, the Contractor shall identify key stakeholders for the development of the Project, which may include Nigerian Bulk Electricity Plc (“NBET”), NERC, the Gas Aggregation Company of Nigeria (“GACN”), the Nigerian Gas Company Limited (“NGC”), Shell Nigeria, Eko Electricity Distribution Company (“DISCO”) and Ikeja DISCO. The Contractor shall recommend to the Grantee appropriate Contractor personnel and relevant stakeholders to participate in the kickoff meeting.

During the kickoff meeting, the Contractor shall introduce the Contractor’s team; review the tasks to be performed under these Terms of Reference; and gather input from the Grantee regarding the Grantee’s goals for the Study 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 to any other attendees identified by the Grantee; and maintain meeting records, including the agenda, any handouts and presentation materials, a list of all meeting participants, and the meeting report.

Task 1(b) Data Collection and Review

The Contractor and the Grantee shall collect, review, and analyze available documents relevant to the Project, including, but not limited to, any studies performed by the

Grantee related to the Project, and Federal Government of Nigeria's policies and laws which could impact the Project. The review shall include, but not be limited to:

- The Federal Government of Nigeria's regulatory structure for electricity supply (e.g. regulatory structure for how power supply is generated and transmitted to the transmission grid) and its anticipated impact on the Project;
- Relevant licensing regulations, requirements, and electricity tariff structure as established by NERC;
- Power purchase agreement ("PPA") templates as established and made available by NBET;
- Relevant public documentation from the Ministry of Power such as any initiatives, policies, and programs which may affect the Project, including, but not limited to licensing of power plant and the sale of power;
- Relevant public gas supply agreement templates;
- Publicly available electricity supply and demand statistics for the Eko DISCO and Ikeja DISCO, including, but not limited to current and planned electricity distribution network maps, electricity distribution line routes, power injection characteristics and current transformer capacities, and data on the existing customer base, metering capabilities, load shedding and operations;
- Publicly available operational statistics for the Transmission Company of Nigeria ("TCN");
- Relevant initial assessments of grid connection; and
- Relevant initial environmental assessments.

In addition the Contractor shall collect and review all relevant documents related to the general requirements for the following items in Nigeria:

- The acquisition of a power generation license;
- Evacuation of power to Nigeria's electricity transmission grid;
- Embedded generation;
- Gas supply agreements; and
- Gas transportation agreements.

The Contractor shall also review any data on power plant construction and associated costs for Nigeria, environment data applicable to the site of the Project, and financial data and benchmarking information for the Project.

Task 1 Deliverable: The Contractor shall prepare a report including all work performed under Task 1, including, but not limited to the findings of the initial meetings and documentation and analysis of all gathered information. The Task 1 Deliverable shall be included in the Final Report.

Task 2: Market Analyses

Task 2(a) Market Research and Analysis

The Contractor shall perform market research and analysis for the electric distribution and generation markets for the short-term (0 to 5 year period) and long-term (5 to 15 year period), including, but not limited to the following segments:

- Electric generation capacity and forecasted growth for the national transmission grid;
- Electric generation capacity and forecasted growth for embedded generation for relevant electricity distribution networks; and
- Potential electricity offtakers and their projected growth.

The Contractor shall provide the Grantee with a comprehensive description of these findings, including an overview of the major suppliers in the market, current transmission grid capacity and demand as well as projected demand for electricity as outlined above. In addition, the Contractor shall identify current and potential electricity generation competitors. The Contractor shall identify the new and upcoming generation capacity to be added in Nigeria and analyze how such capacity may affect the Project.

Task 2(b) Market Forecast

Based on the market research and analysis, the Contractor shall prepare a short-term (0 to 5 year period) and long-term (5 to 15 year period) market forecast, including, but not limited to the following components:

- The demand for electricity at relevant electricity load centers for the Project, and the anticipated load for the identified load centers; and
- Anticipated projects in Nigeria's power sector (including electricity generation, distribution and transmission) which could affect the demand for the Project.

The Contractor shall also analyze the relationship between key electricity load centers, their demand growth, generation capacity and proposed transmission upgrades. The Contractor shall review proposed plans by the distribution companies to increase their distributed generation by embarking on embedded generation projects. Based on the review, the Contractor shall complete an analysis of the impact of the data gathered on the proposed Project, and the Contractor shall provide the Grantee with the data analysis which should include a description of the load centers that have demand for the Project.

The Contractor shall also conduct a market survey to identify potential offtakers for the Project. Based on the findings in this Task 2(a) and (b), the Contractor should make a recommendation to the Grantee as who the offtaker(s) should be for the Project. Further,

based on these findings, the Contractor shall make a recommendation to the Grantee as to whether the Grantee should consider a combined cycle or simple cycle configuration for the Project, and provide the Grantee with guidance as to how market demand for power could affect the Grantee's decision for a combined cycle configuration for the Project.

Task 2 Deliverable: The Contractor shall prepare a report including all work performed under Task 2, including, but not limited to the Contractor's recommendation of potential offtaker(s). The Task 2 Deliverable shall be included in the Final Report.

Task 3: Gas Availability

The Contractor shall review all available information on available gas supply infrastructure for the Project and determine the technical and economic feasibility of supporting the energy requirements of the Project. The Contractor shall examine all current available gas sources for the Project including, but not limited to gas supply from the Escravos-Lagos Gas Pipeline, the NGC, Shell Nigeria, and GACN, in various forms as relevant including, but not limited to compressed natural gas ("CNG") and liquefied natural gas ("LNG"). The Contractor shall also forecast anticipated available gas supply for the Project for a short-term (0 to 5 year period) and long-term (5 to 15 year period).

The Contractor shall also review the key requirements, including, but not limited to regulatory, legal and financial requirements, by the potential gas suppliers, including, but not limited to NGC, Shell Nigeria, and GACN requirements, for allocation of gas. The Contractor shall review and analyze key gas supply metrics including, but not limited to pricing, availability and transportation to the Project. The Contractor shall perform an analysis of gas supply security concerns and the Contractor shall propose recommendations to mitigate any potential gas supply security concerns.

Based on these findings, the Contractor shall make a recommendation to the Grantee for the types of gas and potential gas sources for the Project. The Contractor shall specify the configuration of the gas delivery facilities and prepare specifications and documents to facilitate the engineering design, procurement, and construction of any required gas supply infrastructure, and the selection of environmental impact assessment, drilling, production, measurement and other service providers for the gas supply infrastructure on a competitive basis. Further, based on these findings and the findings in Task 2 above, the Contractor shall make a recommendation to the Grantee as to whether the Grantee should consider a combined cycle or simple cycle configuration for the Project, and provide the Grantee with guidance as to how gas supply could affect the Grantee's decision for a combined cycle configuration for the Project.

In addition, based on the Contractor's findings under this task and the findings in Task 2 above, the Contractor shall deliver a proposed energy pricing strategy to the Grantee that would propose price structures for the proposed offtakers based on the level of demand and gas supply for 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 recommendation for the types of gas and potential gas sources for the Project. The Task 3 Deliverable shall be included in the Final Report.

Task 4: Power Station and Transmission

The Contractor shall evaluate the location for the Project and provide the Grantee with a report on its suitability for the Project in areas such as technical, social, environmental and commercial. The Contractor shall conduct a review of potential technologies for the Project including, but not limited to turbines, generators, transformers, switchgears, and controls. For each technology component, the Contractor shall assess, at a minimum, the Nigerian market usage of the technology, technology availability for the Project, technology environmental impact, technology heat rate, technology reliability, technology service options, and ease of use. Based on this assessment, the Contractor shall recommend technology components for the Project.

The Contractor shall:

- Recommend an optimal plant efficiency configuration to the Grantee. This recommendation shall consider all pertinent metrics including price, dispatch curve or methodology, efficiency, feedstock, water source and technical capability of the operator;
- Provide a recommendation as to the optimal fuel mix for the Project which may include diesel, low pour fuel oil, or heavy fuel oil in addition to gas;
- Recommend and outline equipment, facilities and infrastructure that may be required for the implementation of the Project, including but not limited to electricity transmission infrastructure and electricity metering infrastructure; gas and liquid fuel pipelines, flow stations and metering stations; liquid fuel cargo vessels; vehicles; and civil works;
- Specify the transmission (i.e. TCN) and distribution infrastructure required to deliver the electricity to potential offtakers and advise on suitable arrangements for acquiring access to such transmission and distribution infrastructure;
- Propose the optimal structure, terms and conditions of potential lease, refurbishment and/or management agreements to be executed with potential offtakers which may include TCN, Eko DISCO or Ikeja DISCO; and
- Evaluate the potential for Nigeria's electricity transmission grid to successfully evacuate output from the Project.

Based on its findings, the Contractor shall recommend a size and configuration of the Project, which shall include specifications and documents to facilitate the detailed engineering design, procurement and construction of all components of the Project on a lump sum, turnkey, competitive basis.

Based on the foregoing tasks, the Contractor shall provide an optimal design for the Project that includes, but is not limited to, the following items:

- Site plan and layout;
- Process flow diagrams;
- Energy and water balance;
- Electrical single line diagram;
- Instrumentation and control architecture;¹
- Gas and liquid fuel pipelines, flow stations and metering stations
- Major equipment list with sizing;
- Major equipment specifications;
- Plant cost estimation (implementation and operation); and
- Energy production estimation.

Based on its findings from above and from Tasks 2-3 and on any other factors deemed relevant by the Contractor and Grantee, the Contractor shall recommend to the Grantee whether the Project should include a combined cycle configuration.

Task 4 Deliverable: The Contractor shall prepare a report including all work performed under Task 4, including, but not limited to the Contractor's optimal design and recommendations of size and configuration for the Project. The Task 4 Deliverable shall be included in the Final Report.

Task 5: Financial and Economic Analyses

The Contractor shall perform economic and financial analyses for the Project using an internationally acceptable methodology. The Contractor's financial analyses and financial model of the Project shall be based on a standard methodology used by donors, such as the World Bank, the African Development Bank, and any other relevant investors as determined by the Contractor, and approved by the Grantee, for appraising investment projects. The Contractor shall calculate both the economic and financial internal rates of return for the recommended investments under a variety of different assumptions including, but not limited to factors such as interest rates, gas prices, and PPA tariffs.

Based on Tasks 1-4, the Contractor shall prepare detailed engineering, procurement, and construction ("EPC") cost estimates for the Project, the gas supply infrastructure, the equipment for the Project, and operations & maintenance ("O&M") requirements. The Contractor shall recommend a fee/payment structure for the Project and outline the assumptions used in its analysis. The Contractor's estimate shall include a detailed breakdown of equipment and materials for all major components, including, but not

¹ Instrumentation and control architecture refers to all of the systems that will monitor and control the power station (for example, the supervisory control and data acquisition ("SCADA") system, distributed control systems, Fieldbus solutions, as well as other systems that ensure that all of the power station's systems are functioning and integrated, alert the plant manager of any problems, and allow a means of response to any such problems).

limited to, major equipment, balance of plant, instrumentation and controls, gas supply infrastructure, water treatment, and electrical interconnection.

The Contractor shall develop a comprehensive financial model for the Project indicating project development, construction and operational costs, and revenues over a twenty year period. Based on the Contractor's review and analyses of (a) the current electricity tariffs, (b) the levels of tariffs in current PPAs in the Nigerian electricity market, and (c) the financial analyses of the Project, the Contractor shall recommend to the Grantee the optimal electricity tariff for each of the different classes of customers for power generation and electricity distribution that would be applicable to the Project. The Contractor shall include in its analysis a cash flow analysis, market conditions, raw material availability, supply agreements, off-take agreements, and competing alternative methods of achieving the same or similar Project objectives. The Contractor's financial model shall consider all initial capital costs (i.e. plan, design, develop, and build) and long-term operational costs (i.e. warranties, operation, maintenance, acquisition, installation, refurbishment, and disposal).

The Contractor's financial analysis shall consider, at a minimum, the following items:

- Forecast financial statements and supporting information;
- Forecast sources and uses of funding;
- Forecast key financial ratios and financial covenants;
- Price and revenues;
- Inflation;
- Cost of capital (equity finance and external debt finance);
- Taxes; and
- Development fee and success payments.

The Contractor shall perform a sensitivity analysis related to project risk, including, but not limited to, capital expenditure (from negative 20 percent to 20 percent, in increments of five percent), operating expenditure to include gas price, power purchase price (capacity and energy charges), fuel substitution (if dual fuel capability), and operations and maintenance costs (from negative 20 percent to 20 percent in increments of five percent), inflation indices where appropriate, exchange rates, and funding terms. The Contractor shall advise on the overall commercial viability of the Project under different scenarios. The Contractor's shall prepare a risk matrix for the Project and advise on appropriate risk allocation and mitigation strategies and instruments.

The Contractor shall specify the amount of funding required to develop and implement the Project, which funding shall include but not be limited to engineering fees, construction costs, interest during construction, working capital, advisory fees, financial advisory success fees, and adequate financial provision for the sustainable operation of the power station. Based on the financial model, financial analyses, and risk matrix, the Contractor shall prepare a business plan for the implementation of 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 economic, financial and technical analyses for the Project. The Task 5 Deliverable shall be included in the Final Report.

Task 6: Social and Environmental Impact Assessment

The Contractor shall perform a full environmental impact assessment ("EIA") to ensure that the proposed Project shall comply with all relevant local environmental regulations and environmental permits secured by the Grantee, as well as with the criteria of the Overseas Private Investment Corporation, The Export-Import Bank of the United States, and other relevant development finance institutions. The Contractor's EIA shall include, but not be limited to, the following:

- Air/water quality and noise;
- Comprehensive Monitoring, Health and Safety risk assessment for the Project cycle;
- Environmental and regulatory considerations;
- Environmental impacts across the design, construction, operation, and decommissioning phases;
- Environmental risk assessments;
- Mitigation or enhancement measures that can be put in place for any negative impacts;
- Public participation processes;
- Site environmental assessments;
- Site environmental restrictions;
- Offshore marine study for water intake and outfall location;
- Topographic survey
- Geotechnical investigation
- Safe grade elevation study (i.e. flood analysis); and
- Waste management.

The EIA shall comply with the laws of the Federal Republic of Nigeria, and be performed in accordance with Nigerian environmental regulations as outlined by the Nigerian Federal Ministry of Environment and NERC. The EIA shall also comply with the World Bank standards and Equator Principles². The EIA shall include a time-bound action plan, with cost estimates, to mitigate against all material social and environmental risks.

The Contractor shall identify potential negative environmental impacts and discuss the extent to which they can be mitigated. If necessary, the Contractor shall identify steps that will need to be undertaken by the Grantee subsequent to the completion of the Study

² The Equator Principles (EPs) is a risk management framework, adopted by financial institutions, for determining, assessing and managing environmental and social risk in projects and is primarily intended to provide a minimum standard for due diligence to support responsible risk decision-making.

and prior to Project implementation. The Contractor shall identify areas requiring special consideration for environmental controls, including any aspect that may influence the Project. The Contractor's assessment shall also include any potential positive impacts.

In addition, based on the standard approach used by the international financial institutions, especially the International Finance Corporation, the Contractor shall draft a Social Impact Assessment that considers Right-of-Way (ROW) and resettlement requirements and estimates the number of Project-Affected Parties (PAPs) as a result of the construction of the proposed Project.

Task 6 Deliverable: The Contractor shall prepare a report including all work performed under Task 6, including, but not limited to the Contractor's EIA for the Project. The Task 6 Deliverable shall be included in the Final Report.

Task 7: U.S. Sources of Supply

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 facility for the Project;
- Potential U.S. engineering and construction companies which can provide design, engineering, and construction services;
- Potential U.S. service providers including consulting, procurement, construction, legal, and financial services;
- U.S. project management and oversight companies; and
- U.S. suppliers of equipment such as turbines, generators, transformers, switchgears, and controls.
- The identification of technology options for the Project, and the assessment of economic and commercial viability of the Project. These factors shall be based on the proposed configuration(s) for 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 notify the Grantee of which potential suppliers are interested in supplying equipment and services for the Project.

Task 7 Deliverable: The Contractor shall prepare a report including all work performed under Task 7, including, but not limited to the list of potential U.S. sources of supply for the Project. The Task 7 Deliverable shall be included in the Final Report.

Task 8: Host Country Development Impact Assessment

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 Contractor shall analyze the impact of the Project on infrastructure, market-oriented reforms, technology transfer and productivity, human capacity building and environment. The analysis shall focus on the development impacts that are likely to occur if the Project is implemented according to the Study's recommendations. While specific attention shall be paid to the immediate impacts of the Project, the analysis shall also include any development impacts that may result from the Project's implementation, where appropriate, including spin-off and demonstration effects such as the potential for additional captive power projects. In particular, the Contractor shall assess the impact of the Project on:

- (1) **Infrastructure:** The Contractor shall identify the anticipated direct and indirect infrastructure impacts of the Project, giving a brief synopsis and concrete examples of such impacts, specifically addressing new infrastructure that would be developed and how existing infrastructure was affected. The Contractor shall estimate the impact on the electric power infrastructure development as well as other infrastructure including the number facilities that could potentially accelerate their implementation or expansion plans due to access to more reliable electricity.
- (2) **Technology Transfer and Productivity Enhancement:** The Contractor shall identify the anticipated advancements in technologies that would be mobilized through this Project, especially any technologies which would be new to the Nigerian market. The Contractor shall also identify anticipated impacts due to the Project, which may include changes in productivity or production costs.
- (3) **Human Capacity Building:** The Contractor shall identify the anticipated number and types of local jobs that will be impacted as a result of the Project, including any 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 for the Project.
- (4) **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.

- (5) Environment: The Contractor shall estimate the potential positive and negative environmental impacts of the Project.
- (6) 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, etc.

Task 8 Deliverable: The Contractor shall prepare a report including all work performed under Task 8, 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 8 Deliverable shall be included in the Final Report.

Task 9: Legal, Regulatory, and Institutional Review

The Contractor shall outline the current regulatory environment and requirements in Nigeria for gas-fired power plants. The Contractor shall identify any pending or proposed policy and/or legislative actions that could either act as potential barriers to the implementation of the Project or would be necessary for implementation of the Project. The Contractor's analysis shall also include all permitting requirements, regulations regarding participation by foreign entities, regulations that impact environmental requirements, and any other regulatory issues that may have a significant impact on the Project, as well as reporting on the quality of service and supply standards required by the regulators.

The Contractor's analysis shall include all pertinent documents that deal with import taxes, duties and fees, corporate and personal income taxes, and property and other taxes related to the implementation of the Project.

The Contractor shall describe international standards for the gas-fired power projects and assess any disparities between the international standards and Nigeria's current regulatory environment. The Contractor shall determine if the disparities may become impediments to the Project and provide the Grantee with a roadmap outlining ways that these disparities could be mitigated.

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 within the Nigeria. The report shall also describe ways that the Grantee can avoid or overcome any legal and/or regulatory barriers that the Project may face.

Task 9 Deliverable: The Contractor shall prepare a report including all work performed under Task 9, including, but not limited to the Contractor's regulatory report for the Project. The Task 9 Deliverable shall be included in the Final Report.

Task 10: Tender Documents Preparation

With the Grantee's input, the Contractor shall prepare tender documents for the EPC contract, O&M contract, and, if required, gas supply and fuel supply agreements. The Contractor shall also provide the Grantee with key terms from relevant Nigerian power purchase agreements (PPA) which could be utilized for the Project's PPA. The Contractor shall also recommend a procurement strategy for the acquisition of the gas supply infrastructure, and the power plant and associated infrastructure, indicating key activities, estimated time schedules (with and without tendering) and associated costs, highlighting key milestones such as contract signature, site mobilization, factory tests, shipment, commissioning and commercial operations. The Contractor shall perform market research on potential EPC contractors, to assess their ability to deliver on the proposed project. The Contractor shall rank the EPC contractors for the Grantee based on the potential EPC contractors' past projects, staff strength, financial strength and construction projects in the region.

The Contractor shall prepare the tender documents. The documents shall include, but not be limited to:

- Project background and information;
- Technical specifications, including basic engineering, drawing, and performance model simulation results; and
- Draft contract clauses which include all appropriate commercial terms for Project execution, including terms for performance guarantees and framework arrangements.

Task 10 Deliverable: The Contractor shall prepare a report including all work performed under Task 10, including, but not limited to the tender documents for the Project. The Task 10 Deliverable shall be included in the Final Report.

Task 11: Project Implementation Plan

The Contractor shall provide the Grantee with a description of the Contractor's recommendations for the Project's implementation strategy which may include:

- A recommended schedule for Project implementation, including recommendations for phasing, milestones, and investments required;
- An outline of all the steps the Grantee will need to take subsequent to the Study's completion and prior to project implementation, such as:
 - Licensing, permitting, and other relevant legal and regulatory requirements, including, but not limited to, the requirements to obtain a generation license from NERC;
 - Financial arrangements;
 - Procurements of goods and services;
 - Systems integration;
 - Operations and maintenance; and

- Short- and long-term training requirements.
- An assessment of how the implementation of the Project will impact the Grantee's operations;
- Annual budget requirement for the Project;
- Technical and training needs to implement the Project; and
- Any relevant changes to the Grantee's corporate structure that could bolster the implementation of the Project.

Task 11 Deliverable: The Contractor shall prepare a report including all work performed under Task 11, including, but not limited to the implementation plan for the Project. The Task 11 Deliverable shall be included in the Final Report.

Task 12 Final Report Preparation and Presentation

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 shall include:

- Adobe Acrobat readable copies of all documents
- Source files for all drawings and documents
- Source files for any analytical tools used to complete the Terms of Reference

ANNEX 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*]

Activity Type [<i>To be completed by USTDA</i>]	Feasibility Study	Technical Assistance	Other (specify)
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Activity Title [*To be completed by USTDA*]

Full Legal Name of U.S. Firm

Business Address (street address only)

Telephone		Fax		Website	
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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
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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: .
 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: .
 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 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 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			
Organization		Date	



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]	
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Activity Title [To be completed by USTDA]	
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Full Legal Name of U.S. Firm	
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Full Legal Name of Shareholder	
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Business Address of Shareholder (street address only)	
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Telephone number		Fax Number	
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Year Established (include any predecessor company(s) and year(s) established, if appropriate). Please attach additional pages as necessary.	
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Country of Shareholder’s Principal Place of Business	
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Please provide a list of directors and principal officers as detailed in Attachment A. Attached?	Yes
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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.	
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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.	
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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*]

Activity Title [*To be completed by USTDA*]

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 <i>[check one]</i>	<input type="checkbox"/> Corporation	<input type="checkbox"/> LLC	<input type="checkbox"/> Partnership	<input type="checkbox"/> Sole Proprietor	<input type="checkbox"/> Other
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duly organized, validly existing and in good standing under the laws of: .

2. 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.

3. Neither the subcontractor nor any of its 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.

4. Neither the subcontractor, nor any of its principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 2 above.

5. 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.

6. 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.

7. 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	<input type="text"/>	Signature	<input type="text"/>
Title	<input type="text"/>		
Organization	<input type="text"/>	Date	<input type="text"/>