

REQUEST FOR PROPOSALS

FEASIBILITY STUDY FOR THE

GAS-TO-MARKET SYSTEM PROJECT

Submission Deadline: **4:00 p.m.**

LOCAL TIME

January 22, 2010

Submission Place: MR. DUDLEY ACHU SAMA
PRINCIPAL TECHNICAL ADVISER
MINISTRY OF ENERGY AND WATER RESOURCES (MINEE)
BP 308, YAOUNDE, CAMEROON

Phone: (237) 2223-5608

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

REQUEST FOR PROPOSALS

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Section 1: INTRODUCTION

The U.S. Trade and Development Agency (USTDA) has provided a grant in the amount of US\$615,000 to the Ministry of Energy and Water Resources (Ministère de l'Énergie et de l'Eau) or MINEE (the "Grantee") to fund the cost of goods and services required for a feasibility study on the proposed Gas-to-Market System Project ("Project") in Cameroon in accordance with a grant agreement dated Sept 14, 2009 (the "Grant Agreement") 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

Cameroon possesses significant natural gas reserves, but it currently is not utilizing them. Rather, almost 90% of the gas in the current offshore oilfield is being flared. Not only is this environmentally undesirable, it wastes the opportunity to commercialize an indigenous energy resource and use it to replace biomass and fuel oil as energy sources. The gas to market system, when implemented, will consist of an offshore gathering pipeline system, gas processing plants and an industrial pipeline distribution system. USTDA's assistance will provide MINEE with a solid foundation for putting this project out for tender and help MINEE evaluate this system in the comparison to other concepts for commercializing the country's gas reserves.

A background Definitional Mission is provided for reference in Annex 2.

1.2 OBJECTIVE

The purpose of this Feasibility Study is to develop a conceptual design that analyzes and defines requirements for a gas-to-market system. The Feasibility Study will also provide order of magnitude budgets, timetables and other requirements including technical portions of RFPs for MINEE's use as they advance the project towards implementation.

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\$615,000. **The USTDA grant of \$US615,000 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\$615,000 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 called the Gas-to-Market System.

2.2 DEFINITIONS

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

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

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

2.3 DEFINITIONAL MISSION REPORT

USTDA sponsored a Definitional Mission to address technical, financial, sociopolitical, environmental and other aspects of the proposed project. A copy of the report is 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\$615,000.

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. DUDLEY ACHU SAMA
PRINCIPAL TECHNICAL ADVISER
MINISTRY OF ENERGY AND WATER RESOURCES (MINEE)
BP 308, YAOUNDE, CAMEROON

Phone: (237) 2223-5608

An Original and eight (8) copies of your proposal must be received at the above address no later than 4:00 p.m., on January 22, 2010.

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

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

2.14 PACKAGING

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

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

2.15 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.

2.16 EFFECTIVE PERIOD OF PROPOSAL

The proposal shall be binding upon the Offeror for SIXTY (60) 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.

2.17 EXCEPTIONS

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

2.18 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.

2.19 RIGHT TO REJECT PROPOSALS

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

2.20 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.

2.21 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 and, in all cases, the Grantee will be the judge as to whether a proposal has or has not satisfactorily met the requirements of this RFP.

2.22 COMPLETE SERVICES

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

2.23 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\$615,000, which is a fixed amount.

Offerors shall submit one (1) original and eight (8) 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,
- Company Information,
- 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 COMPANY INFORMATION

For convenience, the information required in this Section 3.2 may be submitted in the form attached in Annex 6 hereto.

3.2.1 Company Profile

Provide the information listed below relative to the Offeror's firm. If the Offeror is proposing to subcontract some of the proposed work to another firm(s), the information below must be provided for each subcontractor.

1. Name of firm and business address (street address only), including telephone and fax numbers.
2. Year established (include predecessor companies and year(s) established, if appropriate).
3. Type of ownership (e.g. public, private or closely held).
4. If private or closely held company, provide list of shareholders and the percentage of their ownership.
5. List of directors and principal officers (President, Chief Executive Officer, Vice-President(s), Secretary and Treasurer; provide full names including first, middle and last). Please place an asterisk (*) next to the names of those principal officers who will be involved in the Feasibility Study.
6. If Offeror is a subsidiary, indicate if Offeror is a wholly-owned or partially-owned subsidiary. Provide the information requested in items 1 through 5 above for the Offeror's parent(s).
7. Project Manager's name, address, telephone number, e-mail address and fax number.

3.2.2 Offeror's Authorized Negotiator

Provide 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.

3.2.3 Negotiation Prerequisites

1. Discuss any current or anticipated commitments which may impact the ability of the Offeror or its subcontractors to complete the Feasibility Study as proposed and reflect such impact within the project schedule.
2. Identify any specific information which is needed from the Grantee before commencing contract negotiations.

3.2.4 Offeror's Representations

If any of the following representations cannot be made, or if there are exceptions, the Offeror must provide an explanation.

1. Offeror is a corporation [*insert applicable type of entity if not a corporation*] duly organized, validly existing and in good standing under the laws of the State of _____. The Offeror 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 Feasibility Study. The Offeror 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. The Offeror has included, with this proposal, a certified copy of its Articles of Incorporation, and a certificate of good standing issued within one month of the date of its proposal by the State of _____.
2. Neither the Offeror nor any of its principal officers have, within the three-year period preceding this RFP, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.
3. Neither the Offeror, 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.
4. There are no federal or state tax liens pending against the assets, property or business of the Offeror. The Offeror, has not, within the three-year period preceding this RFP, been notified of any delinquent federal or state taxes in an amount that exceeds \$3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.
5. The Offeror 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 Offeror has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.

The selected Offeror shall notify the Grantee and USTDA if any of the representations included in its proposal are no longer true and correct at the time of its entry into a contract with the Grantee. USTDA retains the right to request an updated certificate of good standing from the selected Offeror.

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 or larger in scope than 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:

- 1) The Firm, 30%: Demonstrated experience and ability in developing the technical operation of gas delivery systems. Offerors shall demonstrate relevant experience through project-specific examples that clearly identify the Offeror's roles and responsibilities. The Grantee will allocate points based on the quality and relevance of demonstrated experience.
- 2) The Proposal, 40%: Approach, methodology, and strategy for completing the Terms of Reference (in Annex V below) within the proposed timeline. In particular, Offerors shall note their approach, methodology and strategy for developing the economic and financial analyses that are required under Terms of Reference Tasks III and IV of the Project.
- 3) Personnel, 30%: The Grantee anticipates the following optimal skill sets for the completion of the Technical Assistance: (a) a Project Manager with experience in the technical design and planning of gas delivery systems and familiar with the latest off-shore production and natural gas processing technologies; (b) an Energy Economist with experience in the analysis of monetization options for gas and electric power – industrial and domestic use and understand deregulation/unbundling issues and supply contracts/terms to advise on commercial issues in managing the infrastructure; (c) a Gas Market and Finance Specialist with experience in business planning, project financing and commercial operation of similar gas facilities; (d) a Gas Operations Engineer with experience in operations as similar gas facilities and transmission systems.

In descending order of importance, the Grantee will allocate points according to each individual's: (i) demonstrated experience participating in similar projects (including project-specific examples that clearly identify the individual's roles and responsibilities); (ii) overall professional experience; (iii) demonstrated experience with client types (public and private sector client experience sought); and (iv) relevant education and highest degree earned.

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. DUDLEY ACHU SAMA
PRINCIPAL TECHNICAL ADVISER
MINISTRY OF ENERGY AND WATER RESOURCES (MINEE)
BP 308, YAOUNDE, CAMEROON
Phone and Fax: (237) 2223-5608

INSERT: 2009-11030A GAS-TO-MARKET SYSTEM PROJECT

POC: John Kusnierek, USTDA, 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901, Tel: (703) 875-4357, Fax: (703) 875-4009. Gas-to-Market System Project. 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 develop a conceptual design that analyzes and defines requirements for a gas-to-market system in Cameroon.

BRIEF PROJECT BACKGROUND AND DESCRIPTION OF GRANTEE

Cameroon possesses significant natural gas reserves, but it currently is not utilizing them. Rather, almost 90% of the gas in the current offshore oilfield is being flared. Not only is this environmentally undesirable, it wastes the opportunity to commercialize an indigenous energy resource and use it to replace biomass and fuel oil as energy sources. The gas to market system, when implemented, will consist of an offshore gathering pipeline system, gas processing plants and an industrial pipeline distribution system. USTDA's assistance will provide Cameroon's Ministry of Energy and Water Resources (Ministère de l'Énergie et de l'Eau) or MINEE with a solid foundation for putting this project out for tender and help MINEE evaluate this system in the comparison to other concepts for commercializing the country's gas reserves.

BRIEF DESCRIPTION OF STUDY COMPONENTS

The U.S. firm selected will be paid in U.S. dollars from a \$615,000 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 a background definitional mission/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/USTDA/FedBizOpps/RFP/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 4:00 PM LOCAL TIME, JANUARY 22, 2010 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

CAMEROON: GAS TO MARKET SYSTEM FEASIBILITY STUDY

EXECUTIVE SUMMARY

There have been significant gas discoveries in the shallow offshore Block 7 by the EurOil Consortium, who are the lease owners and operators of the block. In addition, almost 90% of the associated gas in the current producing oilfields is being flared to dispose of it. It is known that most hydrocarbons in the Cameroon basins are gas, so most future discoveries are likely to produce natural gas.

The Gas to Market system will conceptually consist of three components: (1) an offshore gathering pipeline system; (2) gas processing plant(s); and (3) industrial (medium-pressure) pipeline distribution system(s). The objective of this system is to take natural gas from its point of production at offshore oil and gas wells, to process it for industrial use, and to transport it as an energy fuel to the consumer.

This gas system might also include gas storage in underground, depleted reservoirs. This would help to manage short-term supply / demand operational imbalances and to provide a strategic reserve.

The Gathering System will collect produced gas from offshore installations. This will achieve two strategic objectives. First, exploration companies will find their development risk greatly reduced by having a ready path to market for any potential gas finds. Second, currently producing fields will have a means to monetize the associated gas that is now being flared off. A tactical benefit is that the latest finds by the EurOil Consortium in Block 7 are having trouble raising capital for exploration drilling, in large part because the path to market for the gas is not currently available. In fact, they are thinking of re-injecting any produced gas into nearby oil discoveries, for temporary storage while waiting for a market.

Note that internationally the flaring of associated gas offshore is usually forbidden for environmental and economic reasons. Also, many countries' National Oil Companies will take the international operator's gas at the platform. This Gathering System would therefore help make Cameroon more competitive in the exploration industry.

A Processing Plant onshore will – as necessary – separate the heavier gas from the methane, for processing at the SONARA refinery located at the town of Limbé. There is no shortage of capacity at SONARA: it is currently being expanded and there will be a further Phase II expansion in the 2011 timeframe. In fact, a majority of SONARA feedstock is currently being imported.

The Distribution System will transport the methane to industrial consumers. In particular, the Limbé electrical plant is planned for conversion to gas, a separate greenfield 350MW power plant is in planning, and an MOU for the building of a fertilizer plant has just been signed. In general, this Distribution System would serve industrial expansion well, particularly for industries that are thermal energy-intensive like cement, ceramics and metals. The first line would therefore stretch from the SONARA plant to around Douala.

The methane pipeline is also potentially a route for export for gas to neighboring foreign markets. However, it is our opinion that in the short-medium term all produced gas will be consumed within Cameroon if it can be delivered efficiently.

This potential project has the support of the MINEE and is valuable to a number of national development objectives. However, it does have competition from two alternative gas-to-market schemes:

1. GdF-Suez of France is beginning a Feasibility Study for an offshore floating LNG facility, that would gather offshore produced gas, process it and provide an export route. Our opinion is that this is both an extremely risky project (technically and from an environmental point of view) and also not in the interests of the Cameroon economy, which is better served by utilizing the gas domestically.
2. The National Oil Company SNH is currently forming a Cameroon Gas Association, whose objective is to develop an offshore Gas Hub for marketing gas, via a partnership with the major international producers. The GCA has only just been created, and so any plans can only be very preliminary. Furthermore, this initiative only considers the Gathering System, and in our opinion we should conceive a complete gas-to-market strategy.

This project also has an institutional component. The overall gas-to-market system would need an independent commercial operator, and ideally an open-access policy including a transparent tariff and regulator. Realistically, the owner of this system, as with most energy infrastructure, would initially be the Government of Cameroon. However, we encourage this Feasibility Study to explore means for improving the independence and open access of this infrastructure, and to encourage private sector business and operational participation.

We see this potential project as just the first step in a stated policy of developing a natural gas grid for Cameroon. This would include upstream gathering systems, long-distance transmission lines and eventually low-pressure domestic distribution. One option, developed in speaking with MINEE and other stakeholders, would be this evolution that tackles high-volume and high-priority demand first:

- A transmission line from Douala to Yaoundé
- An extension to the coastal industrial distribution line
- A transmission line from Yaoundé to remoter areas north

Because the need for such systems is widely accepted and is long-standing, and yet very little action has been taken to date, we recommend a Feasibility Study to address the relevant technical, commercial, institutional and financing issues directly. The FS should help to form the basis of a systematic program of development that the MINEE can

promote within the industry. Our budget estimate for this FS, detailed below, is for \$610,694.

Technical Terms

This project aims to study a complete *Gas to Market* system that will conceptually consist of three *components*: (1) an offshore gathering pipeline system; (2) gas processing plant(s); and (3) industrial (medium-pressure) pipeline distribution system(s).

A large, integrated systems procurement of this kind is rarely committed in a single, turnkey lump-sum contract. It usually follows this sequence:

- A Conceptual Design Study – or “pre-FEED” study (see next) – that analyzes and defines requirements and lays out the system components at a high level. It also provides order-of-magnitude budgets, timetables and other requirements. In other industries, this might be called a Feasibility Study. Perhaps 10,000 man-hours may go into such a study.
- A Front-End Engineering Design – FEED – which defines the engineering of the system. This is a detailed and expensive engineering study that defines the budget and plan. Maybe 50,000 man-hours would go into such a study.
- Engineering, Procurement and Construction – EPC – that builds the system. This is also often called Engineer, Procure, Install and Commission (EPIC).
- Commissioning and Start-Up, which tests each component of the system in a carefully designed sequence (defined in the FEED) and confirms that the delivered system is working as defined and is ready for acceptance by the end-user.
- Operations Support, during which the system may optionally be partially operated by the supplier and gradually turned over to the end-user during hands-on training.

We comment that the definition of Conceptual Design, pre-FEED and FEED studies vary widely between contractors. Some pre-FEED studies are extremely superficial; others are virtually a complete engineering design.

The Feasibility Study that we recommend is equivalent to a preliminary pre-FEED, with added components to cover finance, business and regulatory issues.

A complete Engineering, Procurement and Construction (EPC) contract will usually commit to all of the above stages (unless earlier work has already been done) with checkpoints in the project plan where the customer formally agrees to proceed to the next stage. In this way the supplier is able to adjust the budget and timetable (within limits) according to more detailed engineering analysis, and also the customer can limit the supply if performance is unsatisfactory or the budget has grown too large.

It is most probable that the entire contract for the supply of such infrastructure would be placed with just one EPC Contractor Company. However, from then on the EPC may source parts, materials, raw steel, etc. from wherever it is most convenient. They will also tend to use their own engineers, but probably look for local technicians and laborers. It is hard to estimate sources of supply in advance at this level. It will also depend on the EPC Company: some firms manufacture the majority of their own components at U.S. factories while even slightly smaller ones will buy and outsource nearly everything. However, it is fair to estimate that a U.S. EPC company will source at least 50% of its supplies from the U.S. and up to about 80%.

The Ministry of Energy and Water Resources of Cameroon is the Ministère de l'énergie et des eaux in French, abbreviated to MINEE.

Flow rates and volumes in the Oil Industry are still not universally metric. Common units of measurement include:

- BOPD – Barrels of Oil Per Day
- MSCFD – Thousands of Standard Cubic Feet (of gas) per Day
- MMSCFD – Millions of Standard Cubic Feet (of gas) per Day
- TCF – Trillions of Cubic Feet (of gas)
- BCM – Billions of Cubic Meters (of gas)
- MMBTU – Millions of British Thermal Units (of gas energy)

BACKGROUND TO THE CAMEROON GAS SECTOR

Summary

We focus on this industry because it appears to have so much potential, and yet has not been exploited for a long time.

There is a definite market for gas. This is made up of identified power generation potential; conversion of industrial users and export via pipeline or LNG. There is also a light industrial and domestic market that has not even been explored.

There is significant waste of current production (about 110 MMSCFD) through flaring. There is an identified, but undeveloped resource of around another 340 MMSCFD. Overall reserves are at least 5.5 TCF.

The main issue appears to be moving forward with a mid-stream gas transportation and processing route to market. Many factors have held this up, including difficulties in identifying equity participation and confusion in institutional roles and among stakeholders.

Technical proposals are in place, but a coherent business plan and strategy (including timetable and priorities) seems to be missing.

Stakeholders

Several governmental institutions dominate the Cameroon Energy Industry.

Under the government, cabinet office, the Ministry of Energy and Water Resources (MINEE) controls several important players:

- The SONARA refinery, the only one in Cameroon that produces the majority of domestic petroleum products
- The Bulk Storage (Petroleum Depot) Company SCDP
- The electric power plants, that are currently mostly hydro-electric, oil or coal fired, but could burn natural gas
- MINEE is also the regulator for private oil and gas companies

There is a separate group of organizations that report directly to the President of the Republic:

- The SNH, which is Cameroon's NOC. SNH both explores and produces oil and gas on its own account, and is also the upstream partner for foreign oil companies operating in Cameroon.
- TRADEX, which is the marketer and negotiates prices and tariffs for oil and gas domestically. It is a 50-50 joint venture between SNH and Addax Petroleum of Canada.

The Ministry of Industry controls mining and minerals activity. They are therefore responsible for regulating exploration activities.

A final important stakeholder, the petroleum price stabilization fund, CSPH, reports to the Ministry of Trade. Ideally, this agency provides the financial side of petroleum supply security by providing hedging services and other financial insurance on the price of domestic petroleum products.

SNH stands apart in that it has a degree of independence from the government in its operations making it slightly more commercial in operations. At the same time, it is not regulated to the same extent as private oil and gas companies. It also has a Board that reports only to the President, making oversight very difficult in general.

There is a real risk that CSPH can, in a crisis, fix or subsidize petroleum prices in Cameroon. However, TRADEX has historically been able to respect negotiated tariffs with independent producers successfully.

SCDP is responsible for transportation of petroleum in Cameroon, but is actually dependent on the Ministry of Transportation for port facilities, rail engines and other transport facilities. This separation of transportation from storage is not efficient and leads to tensions. There is no domestic pipeline transportation infrastructure.

Domestic Production

Cameroon is the fifth-largest oil producer in sub-Saharan Africa and produces about 100,000 BOPD total. The major producers are still Total, Shell and Perenco of France. ExxonMobil and Chevron produce oil in neighboring Chad and send it via a private crude oil pipeline to SONARA for refining.

Most petroleum deposits in Cameroon are natural gas. Even the produced lighter oil contains substantial associated gas. Domestic reserves are estimated at 5.5 TCF in gas reservoirs, with about 3.5 BCF associated gas, and some 20 TCF probable additional reserves. By contrast, some fields produce only very heavy oil that currently needs to be exported for processing, pending an upgrade to the SONARA refinery.

This is a serious business impediment offshore, where there is no infrastructure to take the gas to market. Producers therefore either re-inject the gas into the reservoir - if this is mechanically feasible - or they simply flare it to the atmosphere. An estimated 1.5 BCM was flared in 2007, which represents a wasted supply of about 110 MMSCFD gas (quite apart from the obvious environmental impact). This is enough to power two 300 MW generating plants.

Nevertheless, there are currently no gas-fired generation plants and it would take substantial planning to build two such plants of such size. There are plans to take the power plant at Limbé and convert it from oil to gas, however, and this strategy may be used for a number of other facilities.

The lack of gas infrastructure offshore is an active deterrent to exploration, since all recent license agreements forbid flaring of gas. If an oil company is "unfortunate"

enough to find a gas field, it is obliged to do something with it. Most E&P companies are not in the business of transporting and marketing gas.

Cameroon is nevertheless beginning to plan a way forward to exploiting its gas resources. We give four examples below. The first is an example of how the gas market has already grown by conversion from traditional fuels. The second and third are the competitive projects to this one that are cited above. The last one describes the situation of a new exploration company that has just found gas.

Case Study - Bramlin (Victoria Oil) Onshore Gas Development

Bramlin recently commercialized the Logbaba onshore gas field situated next to Douala, the industrial centre of Cameroon. This development has all the advantages of being onshore, right next to the market, and technically straightforward. Bramlin is a U.K. - based E&P company, that has negotiated a take-or-pay long-term gas sales agreement with TRADEX.

Incidentally, the Logbaba field was overlooked by Elf (now Total) in the 1950's. Many more such overlooked gas reservoirs are likely to be found using modern technology.

The Douala "energy mix" is currently: fuel oil (37%), diesel (21%), waste oil (16%), LPG (8%) and others (e.g. Kerosene 18%). TRADEX rapidly assessed a Douala potential gas market of 6.6 MMCFD in 2010 rising to 15.8 MMCFD in year 5. This includes incentives to industrial consumers to convert to use natural gas. The Bramlin contract is only for 5 MMCFD.

Importantly, the gas supply contract is priced at \$9 /MMBTU (take or pay for 5 MMCFD) which is a good international price for industrial natural gas.

Case Study – Gaz de France LNG Export Terminal

Superficially, the volumes of gas even currently being produced appear too great for domestic consumption. Our flared gas estimate alone, at 110 MMSCFD, appears far too great for the domestic market. We would argue that:

- Limbé power plant alone would consume about 60 MMCFD
- There is a 10 MMCFD shortfall already for gas supply to Douala by 2015. One can assess another 10 MMCFD for Yaoundé and other industrial towns
- The remaining 30 MMCFD represents one small power plant or high-energy industrial plant (cement, ceramics, smelting, etc.)

Nevertheless, Gaz de France is currently executing a Feasibility Study together with SNH for an LNG facility that would allow export of any produced gas. There is sufficient interest in this that GdF is considering a JV with SNH for all LNG exports (rather like TRADEX for domestic marketing)

An issue with LNG is the minimum volume required to operate the liquefaction trains. About 2.5 MMTA is the practical minimum for a single train (advanced processes can liquefy 4.2 MMTA per train). This is approximately 200 MMCFD. Therefore, for this

project to be feasible, almost more than the entire current domestic production would need to be exported as LNG.

Of course, with some 5.5 TCF in reserves, Cameroon should explore export strategies. It is just uncertain whether this is a current priority over domestic industrial development.

Case Study - SNH Proposed Gas Hub

SNH itself has recognized the difficulty in monetizing its offshore produced gas. It has floated a phased program to develop all the main discovered offshore gas fields.

1. Phase I is to exploit the Kita, Edem and Ekoundou Fields for free gas production
2. Phase II is to exploit all gas in these fields (including associated gas from oil production) and expansion to include smaller, northern fields
3. Phase III is to exploit all economic resources

Kita and Edem are operated by Pecten, a Shell Company, and Ekoundou by Total. An issue with this scheme is that Shell (or Total) itself is not directly interested in its development. SNH is seeking participation from the gas community at large, including many competitors of Shell, through the Cameroon Gas Association initiative. It will be hard to encourage collaboration among players like Total and Perenco when a great deal of benefit will go to Shell - who are financially quite able to complete this project on their own. The outline of the plan is as follows:

Phase I would involve refurbishment and additional wells at Kita. A 100 MMSCFD capacity, 18-inch, about 10-km pipeline would connect it to an onshore Gas Processing Plant near Limbé. This plant would be sized for about 100 MMCFD gas and 1,000 BPD condensate production. The pipeline would be in at most 100 m of water depth.

Phase II involves no new mid-stream facilities. However, it would tie-in new wells at the Edem Field, a refurbishment of the Ekoundou Field, and new upstream field development at the Afaga and Jibari Fields.

A complete, final system would require expanding the capacity of the first pipeline to 314 MMCFD, and adding another 260 MMCFD line to the Kribi Fields in the south. The Gas Processing Plant would need to be expanded to 314 MMCFD gas, 3,000 BPD condensate. Kribi is operated by Perenco of France.

Note how this final goal of 314 MMCFD gas production is quite sensible. It would allow all of: LNG exports (one train); Limbé and one other 300 MW power plant; and Douala and Younde industrial customers. The only issue is the correct timing and prioritizing of these objectives.

Case Study - EurOil New Discoveries

As an example of how gas infrastructure is critical to new, independent oil and gas exploration, EurOil have recently made a discovery in Block 7 of the Etinde Permit. Well

IE and well ID found oil, while the IF well found high-pressure gas. Further exploration has identified even greater resources of both oil and gas.

The issue is now that the permit does not allow any flaring of associated gas, and obliges development of the IF project. This development is also shallow, at most 70 m of water, but EurOil is not a gas facilities developer. Much of the financing of the field development is therefore held up by the difficulty of monetizing the gas find.

PROJECT DESCRIPTION

A complete gas-to-market infrastructure is a considerable investment and can best be divided into three components:

1. A gathering system of wet gas pipelines offshore that collect gas from the producing fields. There will also be much shorter gathering systems for a few smaller onshore fields.
2. The gathering system will connect to a Gas Processing Plant, whose function is to separate the industrial dry methane from heavier gases (to use for LPG, for example) and condensates (for refining into petroleum products). These separated products will be used by the SONARA refinery.
3. A transmission system that will deliver industrial methane to consumers at Douala, Yaoundé and other centers. This transmission system will also be used for export; either directly by pipeline to neighbors like Equatorial Guinea, or to LNG plants for export by sea.

The proposed SNH Gas Hub project is a good example of such a scheme. However, it does not take account of the final delivery to the consumer, nor any of the smaller onshore fields. It also tends to mix upstream field development with the construction of the midstream transportation infrastructure.

This gas-to-market system touches many stakeholders and therefore needs to be planned and timed according to their needs:

- Upstream production and development needs to be coordinated with the construction of the gathering systems. Not only the needs of the international majors and SNH should be considered, but also the smaller, newer E&P companies.
- The GPP and other hub facilities need to be sized with a production and consumption plan that has been developed with all stakeholders in mind.
- The transmission system needs to be constructed and sized in coordination with a long-term marketing plan, together with TRADEX, so that it is ready for expanded industrial demand.
- The entire system needs to be sized together with an electric power generation strategy and program
- Once all these industrial development uses for the gas are satisfied, facilities for export of the surplus should be planned.

An institutional issue that will have to be addressed is that "unbundled" energy markets tend to be more efficient than closed ones. There are distinct advantages to approaching this development as an open-access system, with separate production, transportation, shipping and marketing functions. This is one reason why linking the Gas Hub concept of SNH to specific operators – and specifically to SNH, which is an E&P Company – is likely to be commercially inefficient. The MINEE should consider the

development of an independent transporter, to complement production (SNH), marketing (TRADEX) and shipping (SONARA, Limbé and other consumers).

Project Estimates

The estimates for revenues from the SNH for its own Gas Hub concept are approximately as follows:

- Phase I would involve 100 MMSCFD gas and 1,000 BPD condensate production. At \$3 per cubic foot gas and \$30 per barrel oil this is conservatively worth \$330,000 per day, \$120M per year.
- A complete, final system would yield 314 MMCFD gas / 3,000 BPD condensate or approximately \$380M per year.

Gas flow could be as high as 100 MMSCFD from the EurOil block 7 discoveries alone. Therefore, the value of this stream is approximately the same as SNH Phase I.

Neither SNH nor EurOil provide any hard cost estimates for the necessary facilities. However, we can use estimates from Sonagas, Equatorial Guinea's state gas company, who will partner with Eon Ruhrgas, the German utility, to create a similar facility. Recent estimates for that project were in the \$500m - \$750M range. This does not include onshore transmission lines. However, neither does the SNH Phase I project.

As a working estimate, we proceed with the assumption that the complete, final system including onshore transmission will cost in the several \$1Bn range.

Objectives

MINEE has stated its objectives to be:

- Avoid wasting (and the associated pollution) by flaring of gas produced in Cameroon;
- Deliver dry gas for power generation within Cameroon;
- Providing natural gas to new industries to help the economic development of Cameroon; and
- Ensure that infrastructure is in place to coincide with new gas finds following recent exploration activity.

The use of about 314 MMCFD gas supply would allow all of:

- LNG exports (one train);
- Limbé and one other 300 MW power plant; and
- Douala and Younde industrial customers.

This would be the platform for the development of a full-scale gas industry including light industrial and domestic use, conversion of all "dirty" thermal power stations to use natural gas, and exports via pipeline to neighboring countries.

USTDA Support

A concern is that despite several plans being present and the needs being evident since at least around 2000, there has been very little concrete progress towards these objectives. There may be several reasons for this, including a fragmented set of roles and responsibilities, institutional confusion, a lack perhaps of private sector involvement and a sound comprehensive business / finance / technical plan.

We see USTDA being able to contribute to the latter issue by supporting a Feasibility Study into the development of a comprehensive Gas-to-Market system in Cameroon. A suitable sponsor would be the MINEE, which is responsible for such strategic planning initiatives. It also directly controls most of the downstream end-users of this system. Major objectives of this Feasibility Study should include:

- A study of requirements from the point of view of overall benefit to the economy of Cameroon and the gas industry in particular.
- A clear phased business plan, identifying not only the final state in, say, five years but also priority projects to begin the process soon. This timetable must be aligned both with a long-term goal in view, and with immediate priorities for exploiting gas resources soon for economic development.
- A technical review that provides input to the economics of the business plan by (a) providing infrastructure cost estimates and alternatives; and (b) providing properly risked timetables for development
- Organizational options that examine strategies to unbundled the market to encourage and optimize the participation of private industry and investors.
- Financing options aligned with the business plan that allow the necessary capital to be available to support these developments.

PROJECT SPONSOR'S CAPABILITIES AND COMMITMENT

The Ministry of Energy and Water Resources (MINEE) is one of the two main stakeholders in the gas industry in Cameroon. The other, the National Hydrocarbons Company (SNH), focuses on the upstream production of gas – and also the marketing of gas via the TRADEX joint venture. We recommend MINEE as the appropriate Project Sponsor for several reasons:

- They are already responsible for several gas-to-market issues via its Storage Company subsidiary, SCDP
- The SONARA refinery that processes petroleum liquids is a subsidiary of MINEE. This experience makes operating a Gas Processing Plant easier, and SONARA would in any case be the logical customer for condensate.
- The power plants that would represent early major customers for the gas are controlled by MINEE
- Perhaps most importantly, MINEE is responsible for the overall strategic direction of the energy industry – including gas – in the republic.

Nevertheless, SNH is most definitely an important stakeholder and should be involved as much as possible. MINEE have committed to ensuring the collaboration of SNH in this FS and the overall project.

There are several separate plans on the table, as a first step towards giving impetus to a gas market. SNH is actively promoting the offshore Gas Hub concept, primarily aimed at bringing offshore production onshore, and we recommend their involvement in this FS. MINEE is already examining the conversion of the Limbé power plant to burn gas. TRADEX is already developing an industrial gas market in Douala, including incentives to convert from oil, wood or coal. What is missing is an integrated vision of how to put these schemes together.

At meetings with the MINEE during the DM Visit, and since, MINEE has expressed interest in a Feasibility Study that is crafted to assist in the planning, financing, technical analysis and operations planning for this project.

An FS is particularly important since a variety of specialized skills are required in this study. While MINEE has excellent economists and business experts, and SNH has excellent upstream engineers, this FS requires a blend of gas market expertise, gas facilities engineering, operations engineering and finance.

The MINEE, as part of the government, effectively has the financing ability of a sovereign nation.

Capacity to Service Debt

With respect to the Gas Hub Project, Phase 1 alone, 100 MMSCFD gas and 1,000 BPD condensate production, at \$3 per cubic foot gas and \$30 per barrel oil this is conservatively worth \$330,000 per day, \$120M per year. With our estimate of about

\$500M for the Phase 1 infrastructure cost, this leaves substantial cash flow to service straight debt financing. Similar very high-level estimates make it very likely that, subject of course to detailed review, most of this system can be financed entirely from revenues from gas sales.

Some risks in this area, however:

- Gas prices are volatile, and even in the US have ranged between \$3 and \$12 per cubic foot over the last few years. This will be all the worse if there is local Cameroonian regulation or subsidy of the gas price (via CSPH for example).
- In general, there may be a low operational efficiency estimate because MINEE / SNH tends to over-staff its operations in pursuit of a full-employment policy.
- The operational efficiency will also suffer if maintenance is not carried out regularly. Even a few days of downtime on this system will lead to serious losses of revenues.

Project Sponsor's Commitment

When we visited MINEE headquarters we met the entire ministry team. Interest in this Feasibility Study was confirmed by:

Mr. Jean-Bernard Sindeu
The Minister
Ministry of Energy and Water Resources
Yaoundé, Cameroon
Tel: 22 22 34 00

IMPLEMENTATION FINANCING

Advice regarding the financing of the project should be part of the Feasibility Study provided by USTDA. However, we are sure that there are several options open, as follows:

SNH Concept

SNH are already inviting investment proposals in their "Gas Hub".

The financial side of this project is still vague, but it involves equity participation from the major upstream stakeholders. These include Total, Shell, Perenco of France and EurOil of the U.K. An advantage of this arrangement is institutional – the vehicle for this participation, the Cameroon Gas Association, will be a private company limited by shares and therefore fully commercial in its operation.

Equity Participation

It is unfortunate that the two of the main upstream operators, Perenco and EurOil, are definitely not gas marketing companies. Effectively, Total and Shell are the only potential equity participants, but they tend to prefer not to collaborate in joint venture projects that they do not control. Perhaps a better option is among companies involved in power generation or industrial production at the downstream end.

It is possible that EurOil may sell its share in Block 7 to a super-major like Total or Shell, but that is not a strategy to rely on. There are a number of local Cameroonian energy suppliers who may like to take an equity stake in this project. We met the representative of the GPC (Petroleum Marketers Association) during the DM visit. Although the members of this association are currently strictly involved in petroleum product marketing, they may be interested in the new gas market. However, with revenues in the \$400M per year range, they may not have significant cash on hand for a significant stake.

US Engineering Companies, who would be very pleased to execute this project, rarely provide equity participation or financing of their own. This, unfortunately, is in contrast with many Far-Eastern contractors who often do provide this flexibility.

Debt Financing

It is our opinion that even with the cash flow from production that has been roughly estimated, debt financing should be easy to secure with a few extra requirements. The most notable requirement is the ability of MINEE's chosen contractor to deliver this project on budget, and the ability of MINEE to operate the facility to plan.

Ex-Im Bank

This project would very likely qualify for Ex-Im Bank financing, providing the supplier of the system is US-based and the materials and services are sourced in the US. We spoke informally with:

Patrick Crilley,

Director and Manager, South Texas
Ex-Im Bank Southwest Regional Office
1880 South Dairy Ashford II, Suite 405
Houston, TX 77077
(281) 721-0470
(281) 679-0156 FAX

This project was described in the broadest terms and a conceptual loan for \$500M to MINEE was discussed. The feedback was as follows:

- Subject to review, an application for a loan to an agency of a Sovereign Nation, for supplies from an "A"-rated US supplier, is welcome.
- Nevertheless, Cameroon is rated as having an exposure level of 6 (out of a worst case of 7). The exposure fee would be around 8% - 9% for a direct loan on 5-year terms, but 15% - 17% for 10-year terms. Most loans are in fact on greater than 7-year terms.
- Up to 85% of the project budget could be financed by Ex-Im. The remaining 15% must be paid directly from MINEE to the supplier. This can itself be financed, but it must be paid in cash to the US firm.
- These interest rates are for "Sovereign Debt" – in other words, loans guaranteed by the Government of Cameroon. In practice, the Ministry will have to co-sign the loan agreement. Other rates for conventional borrowers are very high.
- The Ex-Im bank has certain policies relating to Foreign Content, Impact on Labor, Development Impact and so on – especially for loans of this size – but these are similar to the USTDA's.
- However, subject to guidelines, Ex-Im Bank can support up to 30% of the value of the US exports for locally originated and/or manufactured goods and services. This will be attractive to MINEE since it allows the use of local labor and helps provide technology transfer

With cash flow to service loans from operations alone estimated above at \$120M per year this loan could be serviced on these terms, even at 17% interest.

The major issues seem to be:

- Securing 15% of the project cost (around \$75M) in cash for the direct payment to the US supplier. This would have to come either from the government General Fund, which is unlikely, or a second commercial bank loan.
- Ensuring that payments are consistently met purely from cash flow, in the potentially difficult operating environment described above.
- Depending on the gas price regime, securing hedges or other insurance against the price of gas, which is the primary source of revenue in this project

Other Potential Lenders

Ex-Im Bank is perhaps the preferred source of direct loans, since it is fairly rapid, transparent and systematic in its policies. Other potential sources of funding include:

Packages assembled as part of the US supply contract from a variety of public, private and multi-lateral sources. There are several specialized US financing houses that assemble African loan packages.

The African Development Bank (AFDB), which emphasizes transportation and energy infrastructure projects. It must be said that although its financial standing has been restored, from near collapse, its operational credibility remains a work-in-progress. There are long delays in its decision-making and it remains a relatively small (about 6%) source of development finance for Africa.

The World Bank, as part of their Energy and Transportation development programs. The World Bank actually provides four times the financing in Africa that AFDB does. However, it often has strong political and economic requirements attached to its loans, which Ex-Im does not, and the decision-making process can be accordingly quite slow. In exchange, the commercial terms can be very attractive.

The Overseas Private Investment Corporation (OPIC) tends to focus on risk reduction in investment in Cameroon, but may nevertheless be available as a source of direct funding.

Unfortunately, a long history of mismanagement of debt in Cameroon has made conventional sources of capital expensive. Furthermore, the need to maintain currency levels and balance budgets has made the base rate and interest on bonds much higher than usual in the U.S. Private local and international merchant banks (Citibank, Standard Chartered, Barclays, etc.) can provide funding, but the Cameroonian base rate is very high – over 35%. For this reason even the government tends to borrow funds from offshore. The S&P Rating for Cameroon, which directly affects its ability to raise capital via bond issues, is currently B/B. We are therefore not optimistic about this project being financed by conventional instruments.

U.S. EXPORT POTENTIAL

US firms are uniquely specialized in these technologies from experience in the upstream Gulf of Mexico and also in the deregulated domestic gas market. The US domestic gas network is extremely heterogeneous and flexible with inventive and secure mechanisms for monetizing produced gas. Our estimates above are for:

1. An offshore Phase 1 gathering system and Gas Processing Plant – about \$500M;
2. Upgrades to the offshore gathering system – about \$250M;
3. Onshore transportation pipelines – about \$500M
4. Onshore distribution infrastructure (light industrial / domestic) – as yet undefined.

Qualified US supply firms include major Houston-based specialist EPC (Engineer, Procure, Construct) contractors like:

- Bechtel;
- Fluor;
- Halliburton / KBR;
- Mustang Engineering;
- NM Wood Group / JP Kenny;
- Parsons Engineering;
- Pegasus International;
- Willbros Group;

We restrict this list to the larger ones simply because they will need the qualifications and capacity to qualify for international financing requirements. There are also specialized US financing firms that cover African infrastructure development projects.

We have spoken with at least the following contacts regarding this project, all of which expressed interest:

Parsons – INTECSEA
James G Osborn, Jr.
Sr. VP Business Development
(281) 987 0800

Fluor Offshore Solutions
Joshua Loomes
Facilities Engineering
(281) 263 3513

Wood Group Production Facilities
Bill Cochrane
Director, Field Operations Development
(281) 647 8300

Bechtel Offshore Facilities
Raymond A. Bailey
Project Procurement Manager
(281) 249 1572

M&T Bank
Benjamin Akuete
VP International Finance, Africa
(410) 244 4077

In discussions, the main issues include:

- Some firms are interested and qualified for some part of the supply, but not all. For instance, some companies are prepared to construct the plant facilities, but not the offshore systems. Very few are prepared to deliver financing and operations support.
- SNH has stated the objective of completing the Gas Hub project by 2011. None of the contacts interviewed thought this would take less than 3 years.
- As a note, the offshore wet gas pipelines are all in relatively shallow water. This means that there are unlikely to be serious flow assurance problems due to extreme temperatures and pressures. However, if some of the temperatures are indeed very low, and pressures high, then costs and complexity may escalate significantly.
- There was a concern about developing the offshore pipeline in isolation from the Field Development. Certain systems – notably the offtake and automation & control systems – should in fact be very tightly integrated. This makes SNH participation even more important.
- There is some concern that working for a state-owned agency like MINEE may slow the project, and therefore cash flow, considerably.

We have commented above that any of these EPC contractors may source parts, materials, raw steel, etc. from wherever it is most convenient. They will also tend to use their own engineers, but probably look for local technicians and laborers. However, in general for a project of this kind U.S. supplies are highly competitive for:

- Engineering design and implementation services
- Raw construction materials – steel pipe, fasteners, etc
- Construction machinery – pipe-laying boats, earth-moving equipment, etc
- Flow control devices – valves, pressure regulators, etc
- Fluid compression devices – pumps, turbines and compressors
- Associated Automation and Control systems: SCADA Batch Scheduling, Safety Systems, including Leak Detection, Operational Applications and Terminal Automation.

These supplies would constitute up to about 80% of the total project value.

Nevertheless, on-site manual and semi-skilled labor will probably be sourced either locally or from overseas. Similarly, less specialized construction material (cement, steel bars, etc) will probably be imported.

FOREIGN COMPETITION AND MARKET ENTRY ISSUES

There are a number of qualified foreign competitors, experienced in offshore technology in the North Sea and South China Sea and also in plant construction and laying pipelines in difficult terrain. The largest ones include:

- Technip (Italy)
- Saipem (Italy)
- Beicip/Franlab (France)
- Alstom (France)
- Foster-Wheeler (U.K.)
- Aker-Kvaerner (Norway)

These firms will be highly competitive technically. We can expect a number of Far Eastern firms to be very competitive economically, though perhaps less competitive technically:

- Mitsui (Japan)
- Mitsubishi (Japan)
- Samsung (S. Korea)
- Hyundai (S. Korea)
- CNEEC (China)

Historically, French companies have distinct built-in advantages to exporting goods and services to Cameroon. Apart from a language, legal and commercial environment very similar to their domestic market, they also maintain valuable political and business connections to this day. USTDA support will help to ensure a procurement process that is less slanted towards traditional French suppliers.

Past procurement tendencies have tended to favor low price over quality and efficiency. This does disadvantage US Firms, who emphasize price-performance instead. In this respect, USTDA Feasibility Study would definitely help to screen out technically inferior proposals and plans.

This is particularly true in an environment at MINEE where staff are unfamiliar with Facilities Engineering in general, and gas technology in particular.

A second disadvantage in this project is that it is being solicited as a combined Financing – EPC – Operations Support package. There is the risk that simply being able to provide financing will dominate the selection. In this respect, most foreign contractors have a distinct advantage in being able to provide complete packages. US Firms tend, by contrast, to focus on the technical and engineering aspects and expect the customer to handle its own financing.

DEVELOPMENTAL IMPACT

We see substantial Developmental Impact in the following categories:

Infrastructure - There is clearly a need in Cameroon to provide the facilities to utilize gas production. This project is the first step towards a complete natural gas infrastructure. Positive environmental impacts include the ability to actually deliver on a commitment to avoid flaring associated gas at the wells, avoid burning wood as a fuel, and to reduce the domestic consumption of LPG / fuel oil.

Human Capacity Building – will arise both during the construction and commissioning phase, and during operations. Up to 30% local content is allowed, for example, under Ex-Im Bank financing rules, and this will likely take the form of using local construction and facilities firms. During commissioning of the system, local staff will be trained in its operation and maintenance. During operations, we see no reason why there should not be a gradual evolution towards 100% Cameroonian operation.

The USTDA FS itself will help by providing a Technical Orientation Visit for MINEE staff to visit similar facilities in the US.

We anticipate around 100 full-time engineering positions being required for the operation of the system, in addition to some expansion to MINEE's overall administrative structure. We also see potential expansion in the local Cameroonian facilities maintenance industry, to support the operation of the pipeline and plant.

Technology Transfer and Productivity Improvements – will, similarly, arise during commissioning of the system and operations. It is important for any supply to train and support, at least initially, the operation of the Hub.

Market Oriented Reforms – may arise in two ways. The first is if MINEE uses this project as a first step towards deregulating the gas industry to allow multiple access, and a separate transportation function. As it is currently conceived, the MINEE and the government will be the only stakeholder in the project. However, this may evolve:

- If equity participation in this project can be found, then the Gas Hub will have to be separately owned;
- If the operators can negotiate ownership of some share of the produced gas, there will be multiple marketers beyond TRADEX; and
- If more customers for the gas than the government-owned power stations and TRADEX can be found, there will be multiple shippers.

Other – Financial revenue enhancements are clear, since this infrastructure is the only way to monetize about 314 MMCFD gas / 3,000 BPD condensate or approximately \$380M per year – for the first phase, alone. It is also the only way to monetize the gas from all the other exploration activity in Cameroon.

IMPACT ON THE ENVIRONMENT

The only impact on the environment that we foresee from this project is entirely beneficial. It will allow the government of Cameroon to the ability to actually deliver on a commitment to avoid flaring associated gas at the production wells, to reduce the amount of wood burned as fuel, and to reduce the domestic consumption of fuel oil.

It will also allow power stations that currently burn oil to use much cleaner natural gas instead. In particular, the Limbé power plant is currently being studied for the feasibility of conversion to use natural gas.

It will also be the mission of the USTDA advisor under the FS to ensure that conditions of performance for the delivery of this project meet US and international standards for the protection of the environment. The construction and operation of any pipeline carrying toxic and inflammable natural gas is always a potential hazard to the environment. For this reason, one of the tasks of the FS is to ensure that the design, construction and operation of the system have minimal negative environmental impact.

MINEE, as the future operator of these gas facilities, should be made aware of the requirements of avoiding emissions of methane as a potential greenhouse gas. In this respect, we recommend membership of the US Environmental Protection Agency's international Gas Star program that provides support for minimizing these emissions.

IMPACT ON U.S. LABOR

We have reviewed the "Impact on U.S. Labor Statement" as contained in the Foreign Operations, Export Financing and Related Programs Appropriations legislation. That Statement details certain prohibitions on U.S. foreign assistance in cases in which the project to be funded, or the subsequent foreign country operation after the project is completed, would have a negative impact on U.S. labor.

Having examined the requirements of the U.S. legislation, we find that this project does not violate the provisions of the appropriations legislation.

The FS is primarily an infrastructure-building project that will strengthen the economy and ensure a level playing field for proposals for supply of this project. It will most likely stimulate additional U.S. investment and the increased competitive participation of U.S. companies, including the export of oil and gas related goods, services and technology to Cameroon. This will create future jobs for U.S. labor.

The project provides a future opportunity for U.S. engineering services, equipment and technology providers to expand their respective areas of business in Cameroon. However, it does not offer any financial incentive to a U.S. business enterprise currently located in the United States for the purpose of inducing that enterprise to relocate outside the United States with the effect of reducing the number of employees of such business enterprise in the United States because U.S. production is being replaced by such enterprise outside the United States.

The project does not assist in establishing or developing any export processing zone or designated area in which the tax, tariff, labor, environment, and safety laws of Cameroon do not apply, in part or in whole, to activities carried out within that zone or area.

The project does not provide assistance that contributes to the violation of internationally recognized workers rights.

The project does not provide direct assistance for establishing or expanding production of any commodity for export from Cameroon that is likely to be in surplus on world markets at the time the project becomes operative. The essence of the project is infrastructure building to allow Cameroon to monetize its gas reserves. The project will not cause substantial injury to US producers of the same, similar, or competing commodity. The project will provide a market for U.S. supply that heretofore was not available.

This FS will not lead to an export of existing U.S. labor overseas, but instead will add jobs to the U.S. economy. It will increase the opportunities for US labor and exports for various U.S. equipment, technology and services providers.

QUALIFICATIONS

This Feasibility Study is to provide support to the MINEE in the planning and acquisition of supplies and services for the Gas Infrastructure Project. The contractor must provide reviews of:

- Any current Conceptual Design Studies and Proposals for this project;
- Any current Front-End Engineering & Design (FEED) studies for this project;
- Budget estimates and financing options;
- Timetables; and
- The business plan for the operation of the facilities, including pricing and market issues and risks.

The contractor will also be responsible for:

- A Business Plan for the development and operation of the Gas Infrastructure in the short-medium term (3 – 5 years);
- Delivery of a Technical Orientation Visit to the US, to see similar implementations commissioned by US contractors and operated by US gas companies; and
- Advising the MINEE on well-qualified US sources of supply.

The Gas Infrastructure project involves: gathering system(s); an onshore gas processing plant; and onshore dry gas transmission pipelines.

Delivery of this FS will therefore require a team with expertise in:

- The requirements analysis, technical design and planning of similar projects;
- The financing and commercial management of similar systems; and
- The technical operation of gas delivery systems.

1. Gas Facilities Engineer

Experience in gas facilities requirements analysis, technical design and planning, in offshore production environments, processing plants and onshore transmission pipelines.

Will have work experience at Engineering Design Firms, or EPC contractors.

Will have sufficient experience (at least 15 years) to review and criticize Conceptual Designs and FEED studies from multiple sources. He will also need the experience to be able to provide estimates of costs, timetables and technical factors necessary for planning an infrastructure development.

2. Energy Economist

Experience in the analysis of monetization options for gas and electric power – industrial and domestic use.

Will have work experience at an energy company, investor / merchant bank, public institutes, or research firms.

Will have sufficient experience (at least 15 years) to review and recommend pricing regimes, strategies and options for the promotion of gas relative to other sources of energy in Cameroon. Should understand deregulation / unbundling issues and supply contracts / terms to be able to advise on commercial issues in managing the infrastructure.

3. Gas Market and Finance Specialist

Experience in business planning, project financing and commercial operation of similar gas facilities. This includes offshore production, processing and transmission businesses.

Will have work experience at an EPC contractor, merchant bank, energy investor, and/or gas company. It is important to have worked at a gas company at some stage, to understand operational issues.

Will have sufficient experience (at least 15 years) to review and criticize Business Plans and Financing Packages from multiple sources. Should also be able to advise on alternative sources of funding or packages; and alternative commercialization strategies. Should understand deregulation / unbundling issues to be able to advise on institutional issues in managing the infrastructure.

4. Gas Operations Engineer

Experience in operations at similar gas facilities. This includes offshore production, processing and transmission systems.

It is important to have worked at a gas company at some stage, to understand operational issues.

Will have sufficient experience (at least 15 years) to review and develop Commissioning, Start-Up and Operations plans. Should also be able to advise on best practices, including Health, Safety and Environmental. Will have sufficient contacts in the industry to be able to plan and organize a Technical Orientation Visit to the US, to see similar implementations commissioned by US contractors and operated by US gas companies.

It is not necessary for the team to consist of exactly four individuals. One individual may cover two roles (Facilities and Operations Engineering, for example). Alternatively, one role may require two individuals (Gas Market Specialist plus a Project Finance Specialist, for example).

JUSTIFICATION

USTDA involvement, in the form of Feasibility Study to this procurement, achieves these specific objectives:

It promotes trade, by providing world-class detailed technical advice to MINEE on the selection of options for the procurement of supplies and services related to this project. Several concepts are already outstanding, and given a certain lack of coordination and of experience procuring similar facilities, there is a risk of making poor decisions. MINEE needs exposure to best practices and technology in the US and the rest of the world.

MINEE past procurement tendencies have tended to favor low price over quality and efficiency. We also note certain built-in advantages for French suppliers in the business environment. This FS should help to emphasize price-performance instead. The FS would definitely help to screen out lower-priced technically inferior proposals and plans. This is particularly true since MINEE staff is unfamiliar with Facilities Engineering in general, and gas technology in particular.

It additionally adds value to overall project by accelerating the timetable of this procurement. Gas is already being flared in very large volumes, and there will shortly be a significant demand for gas at power stations. If the selection process can be shortened in any way, and a reliable supplier can be selected, then this will shorten the time to start-up.

Because this procurement is being solicited as a combined Financing – EPC – Operations Support package, there is the risk that simply being able to provide financing will dominate the selection. The FS should emphasize the alternative financing options available and the importance of a quality technical deliverable as well.

It specifically promotes trade with the US via advice on well-qualified US sources of supply and via a Technical Orientation Visit to the US.

If a qualified US contractor is selected as a result of this FS then the value to trade capacity is likely to be in excess of \$1Bn. Even if a US contractor is not selected, then USTDA will at least have contributed to the supply of a quality system for the delivery of at least 314 MMCFD gas / 3,000 BPD condensate or approximately \$380M per year – for the first phase, alone – to the Cameroonian economy.

Generally, U.S. Government policy priorities are achieved as described above in all areas of: Infrastructure (including positive environmental impacts); Human Capacity Building (including job creation); Technology Transfer and Productivity Improvements; and potential Market-Oriented Reforms.

ANNEX 3



**U.S. TRADE AND DEVELOPMENT AGENCY
Arlington, VA 22209-2131**

NATIONALITY, SOURCE, AND ORIGIN REQUIREMENTS

The purpose of USTDA's nationality, source, and origin requirements is to assure 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, each of the following provisions shall apply to the delivery of goods and services funded by USTDA under this Grant Agreement: (a) for professional services, the Contractor must be either a U.S. firm or U.S. individual; (b) the Contractor may use U.S. subcontractors without limitation, but the use of subcontractors from host country may not exceed twenty percent (20%) of the USTDA Grant amount and may only be used for specific services from the Terms of Reference identified in the subcontract; (c) employees of U.S. Contractor or U.S. subcontractor firms responsible for professional services shall be U.S. citizens or non-U.S. citizens lawfully admitted for permanent residence in the U.S.; (d) goods purchased for implementation 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 (e) 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 standards of eligibility upon request.

NATIONALITY:

1) Rule

Except as USTDA may otherwise agree, the Contractor for USTDA funded activities must be either a U.S. firm or a U.S. individual. Prime contractors may utilize U.S.

subcontractors without limitation, but the use of host country subcontractors is limited to 20% of the USTDA grant amount.

2) Application

Accordingly, only a U.S. firm or U.S. individual may submit proposals on USTDA funded activities. Although those proposals may include subcontracting arrangements with host country firms or individuals for up to 20% of the USTDA grant amount, they may not include subcontracts with third country entities. U.S. firms submitting proposals must ensure that the professional services funded by the USTDA grant, to the extent not subcontracted to host country entities, are supplied by employees of the firm or employees of U.S. subcontractor firms who are U.S. individuals.

Interested U.S. firms and consultants who submit proposals must meet USTDA nationality requirements as of the due date for the submission of proposals and, if selected, must continue to meet such requirements throughout the duration of the USTDA-financed activity. These nationality provisions apply to whatever portion of the Terms of Reference is funded with the USTDA grant.

3) Definitions

A "U.S. individual" is (a) a U.S. citizen, or (b) a non-U.S. citizen lawfully admitted for permanent residence in the U.S. (a green card holder).

A "U.S. firm" is a privately owned firm which 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. individuals, 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, organized in the U.S. with its principal place of business in the U.S., may also qualify as a "U.S. firm" as would a joint venture organized or incorporated in the United States consisting entirely of U.S. firms and/or U.S. individuals.

A nonprofit organization, such as an educational institution, foundation, or association may also qualify as a "U.S. firm" if it is incorporated in the United States and managed by a governing body, a majority of whose members are U.S. individuals.

SOURCE AND ORIGIN:

1) Rule

In addition to the nationality requirement stated above, any goods (e.g., equipment and materials) and services related to their shipment (e.g., international transportation and insurance) funded under the USTDA Grant Agreement must have their source and origin in the United States, unless USTDA otherwise agrees. However, necessary purchases of goods and project support services which are unavailable from a U.S. source (e.g., local food, housing and transportation) are eligible without specific USTDA approval.

2) Application

Accordingly, the prime contractor must be able to demonstrate that all goods and services purchased in the host country to carry out the Terms of Reference for a USTDA Grant Agreement that were not of U.S. source and origin were unavailable in the United States.

3) Definitions

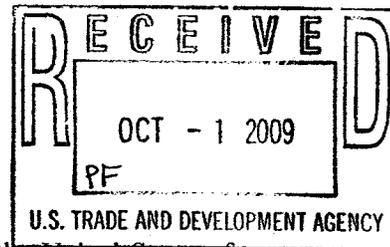
“Source” means the country from which shipment is made.

“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.

ANNEX 4

GRANT AGREEMENT



This Grant Agreement is entered into between the Government of the United States of America, acting through the U.S. Trade and Development Agency ("USTDA") and the Government of the Republic of Cameroon acting through the Ministry of Energy and Water Resources (Ministère de l'Énergie et de l'Eau) or MINEE ("Grantee"). USTDA agrees to provide the Grantee under the terms of this Agreement US\$615,000 ("USTDA Grant") to fund the cost of goods and services required for a feasibility study ("Study") on the proposed **Gas-to-Market System Project** ("Project") in Cameroon ("Host Country").

PDF:

PM
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1. USTDA Funding

The funding 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 made a part of 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. The parties to this Grant Agreement and the Contractor shall observe these standards, which include not accepting payment of money or anything of value, directly or indirectly, from any person for the purpose of illegally or improperly inducing anyone to take any action favorable to any party in connection with the Study.

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.

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5. USTDA as Financier

(A) USTDA Approval of 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 Approval of Contractor Selection

The Grantee shall notify USTDA at the address of record set forth in Article 17 below upon selection of the Contractor to perform the Study. Upon approval of this selection by USTDA, the Grantee and the Contractor shall then enter into a contract for performance of the Study. The Grantee shall notify in writing the U.S. firms that submitted unsuccessful proposals to perform the Study that they were not selected.

(C) USTDA Approval of Contract Between Grantee and Contractor

The Grantee and the Contractor shall enter into a contract for performance of the Study. This contract, and any amendments thereto, including assignments and changes in the Terms of Reference, must be approved by USTDA in writing. To expedite this approval, the Grantee (or the Contractor on the Grantee's behalf) shall transmit to USTDA, at the address set forth in Article 17 below, a photocopy of an English language version of the signed contract or a final negotiated draft version of the contract.

(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 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 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 subcontract thereunder must be consistent with this Grant Agreement. In the event of any inconsistency between the Grant Agreement and any contract or subcontract funded by the Grant Agreement, the Grant Agreement shall be controlling.

6. Disbursement Procedures

(A) USTDA Approval of Contract Required

USTDA will make disbursements of 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 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.

8. Study Schedule

(A) Study Completion Date

The completion date for the Study, which is December 31, 2011 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, (a) 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 (b) all funds made available under the Grant Agreement must be disbursed within four (4) years from the Effective Date of the Grant Agreement.



9. USTDA Mandatory Clauses

All contracts funded under this Grant Agreement shall include the USTDA mandatory 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 clauses, except for clauses B(1), G, H, I, and J.

10. Use of U.S. Carriers

(A) 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.

(B) 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.

11. Nationality, Source and Origin

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and services funded by USTDA under the Grant Agreement: (a) for professional services, the Contractor must be either a U.S. firm or U.S. individual; (b) the Contractor may use U.S. subcontractors without limitation, but the use of subcontractors from Host Country may not exceed twenty percent (20%) of the USTDA Grant amount and may only be used for specific services from the Terms of Reference identified in the subcontract; (c) employees of U.S. Contractor or U.S. subcontractor firms responsible for professional services shall be U.S. citizens or non-U.S. citizens lawfully admitted for permanent residence in the U.S.; (d) 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 (e) 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 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. Neither the Grantee nor the Contractor will seek reimbursement from USTDA for such taxes, tariffs, duties, fees or other levies.

13. Cooperation Between Parties and Follow-Up

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 (as defined in Clause I of Annex II), the Grantee agrees to respond to any reasonable inquiries from USTDA about the status of the Project.

14. 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 the Grant Agreement. The parties may also use jointly agreed upon implementation letters to confirm and record their mutual understanding of matters covered by the Grant Agreement.

15. Recordkeeping and Audit

The Grantee agrees to maintain books, records, and other documents relating to the Study and the Grant Agreement adequate to demonstrate implementation of its responsibilities under the 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.

16. Representation of Parties

For all purposes relevant to the 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 the Minister of Energy and Water Resources. The parties hereto may, by written notice, designate additional representatives for all purposes under the Grant Agreement.

17. 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 a wire or electronic medium which produces a tangible record of the transmission, such as a telegram, cable or facsimile, and will be deemed duly given or sent when delivered to such party at the following:



To: Mr. Dudley Achu Sama
Principal Technical Advisor and Executive Engineer
Ministry of Energy and Water Resources (Ministère de l'Energie et de l'Eau or
MINEE)
P.O Box 308
Yaounde, Cameroon

Phone: (237) 2223-5608
Fax: (237) 2223-5608 or (237) 2222-6177
Email: dsama2@yahoo.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

All such communications shall be in English, unless the parties otherwise agree in writing. In addition, the Grantee shall provide the Commercial 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 9/10 1001
Activity No.: 2009-11030A
Reservation No.: 2009110044
Grant No.: GH2009110013

18. Termination Clause

Either party may terminate the Grant Agreement by giving the other party thirty (30) days advance written notice. 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 which they are committed to make pursuant to noncancellable commitments entered into with third parties prior to the written notice of termination.



19. 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.

20. 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.

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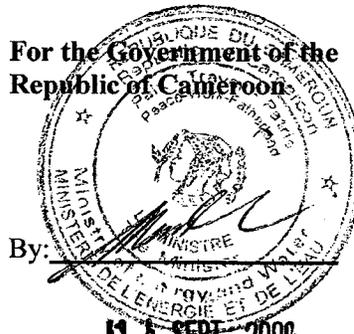
IN WITNESS WHEREOF, the Government of the United States of America and the Government of the Republic of Cameroon each acting through its duly authorized representative, have caused this Agreement to be signed in the English language in their names and delivered as of the day and year written below.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

For the Government of the United States of America

By: 

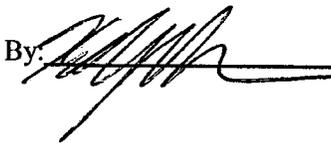
Date: 09-14-09

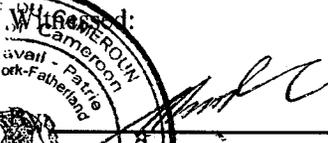
For the Government of the Republic of Cameroon

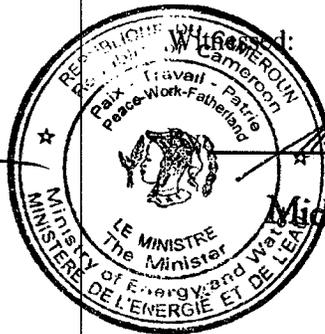
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Michael NGAKO TOMDIO

Annex I -- Terms of Reference

Annex II -- USTDA Mandatory Clauses

Annex I

Terms of Reference

Background

The Ministry of Energy and Water Resources (MINEE) of Cameroon (the Grantee) is responsible for strategic planning of the energy industry in the Republic of Cameroon. It controls several key government owned companies in the energy sector:

- The National Oil Refining Company, (Société Nationale de Raffinage, or SONARA), which produces the majority of domestic petroleum products
- The Petroleum Bulk Storage (Petroleum Depot) Company, (Société Camerounaise de Dépôts Pétroliers or SCDP)
- The electric power plants, that are currently mostly hydro-electric or oil, and eventually could burn natural gas

MINEE is also the regulator for private oil and gas companies operating in the downstream petroleum sector.

Other important stakeholders are the Ministère De L'Industrie, Des Mines Et Du Développement Technologique (Ministry of Industry and Development Technology or MINIMIDT) the Cameroon National Hydrocarbons Company, (Société National des Hydrocarbures or SNH). SNH is responsible for commercial upstream oil and gas exploration and production and is a partner to overseas oil companies that operate in Cameroon.

MINEE and MINIMIDT are, in particular, concerned with improving supplies of gas onshore and developing the infrastructure for a domestic natural gas market and is planning a comprehensive Gas Infrastructure Project. The objective of this Gas Infrastructure Project is to take gas from its point of production at offshore oil and gas wells, to process it to yield industrial fuel gas, and transport it to industrial end-users of natural gas.

Preliminary studies suggest that this infrastructure includes: shallow offshore gathering system(s) to take gas from platforms and move it onshore; an onshore gas processing plant; and onshore dry gas transmission pipelines. Relevant operational systems will also be involved, including Supervisory Control and Data Acquisition ("SCADA"); Systems Modeling and Optimization; Leak and Fault Detection; and Process Automation.

This Feasibility Study (FS) is to support MINEE and MINIMIDT in the technical planning and procurement of supplies and services for their Gas Infrastructure Project. The objective of this FS is to provide detailed advice on the conceptual technical design of the system, tendering and procurement of necessary equipment and services, the business plan for its operation, the engineering and operations plan, the means of

financing this project and an implementation plan. An important consideration is the evaluation and promotion of natural gas in Cameroon's industry.

The Contractor can expect the collaboration of SNH, as an important stakeholder, in this FS.

The Contractor should expect to work in the bilingual English-French environment of the Republic of Cameroon. The Contractor shall deliver all reports and other written materials to the Grantee in English. However, the Contractor may similarly receive materials in French or English and may need to converse with Grantee staff in either language.

Objective of the Feasibility Study

The Grantee has the intention of procuring the infrastructure (the "Procurement") necessary to take gas from its point of production at offshore oil and gas wells, to process it to yield industrial fuel gas, and transport it to industrial end-users of natural gas (the "Gas-to-Market System", or "System"). The Grantee also has the intention of operating these facilities, both technically and commercially, and may need to finance its purchase. At this stage, there are only preliminary plans covering the actual design of the System, execution of this procurement, operation of the facilities, and potential funding mechanisms. The purpose of this Feasibility Study is to provide a sufficient level of technical and economic analysis and advice to the Grantee to reach the point of initiating a procurement tendering process and to apply for financing for the installation of the System. However, the Contractor will not be expected to participate in the actual publication of the RFP or the vendor selection process.

Task I: Technical Conceptual Design

The first task has the objective of advising the Grantee on engineering alternatives that are available towards the Grantee's goal of developing the Gas-to-Market System. This preliminary Conceptual Design is only intended as a basis for proceeding with the objective of the Feasibility Study stated above, by providing general engineering design options, high-level budgetary costs, and broad timetables. It is not intended to go into the level of detail required of a Preliminary Front-End Engineering Design, often referred to as a "pre-FEED," that is appropriate to an engineering supply contract.

The Contractor shall conduct a visit for data collection at the beginning of this task, during which the Contractor shall make sure to discuss the Grantee's proposed Gas-to-Market System, as well as existing proposals including SNH's Conceptual Design and the Gaz de France ("GdF") proposal, at the Grantee's offices at Yaoundé. The Grantee shall ensure that all major stakeholders are available for meetings. During the data collection, the Contractor shall also visit relevant field locations as agreed upon with the Grantee to assess facilities and the terrain as necessary to prepare an informed preliminary Conceptual Design.

The Contractor shall provide a review for the Grantee of any existing conceptual design studies and project proposals for the System. In particular, the Contractor shall review proposed budgets, timetables, and technical options. The Grantee shall make this information available to the Contractor under a confidentiality agreement provided that nothing contained in the confidentiality agreement shall preclude the Contractor from performing all of its obligations under the Contract, including, but not limited to, the delivery to USTDA of a substantive and comprehensive final report of all the work performed under these Terms of Reference in accordance with Task XIII hereof.

The Contractor shall prepare a review of the conceptual design prepared by SNH. This design covers the infrastructure necessary to take gas from its point of production at offshore oil and gas wells, and to process it onshore at a Gas Processing Plant ("GPP") to yield industrial grade fuel gas. The Grantee shall make this conceptual design available to the Contractor.

The Contractor shall also specifically review the proposals by GdF and SNH that design the infrastructure necessary to take gas from its point of production at offshore oil and gas wells, to transport it to an offshore export terminal, and then to convert it to Liquefied Natural Gas ("LNG") for transportation by sea. The Contractor is only expected to review these proposals to the extent that they relate to the transportation of gas, and is not expected to review the LNG facilities themselves. These proposals are only relevant as they relate to the Grantee's proposed System. The Grantee shall make these proposals available to the Contractor.

Independently of any previous work, the Contractor and the Grantee shall agree upon a preliminary Conceptual Design of the System. This design will form the basis of the rest of the study. The Conceptual Design shall examine the major components of the System, including but not limited to:

1. Offshore gathering pipelines, to take gas from its point of production at offshore oil and gas platforms to a terminal onshore.
2. At least one GPP.
3. A system of onshore transportation pipelines to reach industrial users of natural gas.

The Contractor shall, in this Conceptual Design, identify useful engineering design alternatives including:

1. Alternative offshore oil and gas fields and wells from which gas should be gathered
2. Routes and design specifications for the offshore gathering pipelines
3. Alternative locations for the onshore GPP
4. Routes and design specifications for the onshore transportation pipelines
5. Options relating to the sizing of facilities including throughput capacity, storage capacity, expandability, etc.

The Contractor shall, as part of the Conceptual Design, include technical specifications for supporting operational systems, including:

1. SCADA
2. Safety systems, including leak detection
3. Operations software applications, including inventory management and measurement

The Contractor shall provide estimated timetables for the construction of facilities using this design basis. The Contractor shall describe the impact of any of the engineering design alternatives that are identified on project plans and timetable. In addition, the Contractor shall examine viable alternatives for phasing the construction of facilities over time.

The Contractor shall provide budgetary estimates for the construction of facilities related to this design basis. The Contractor shall also provide the impact of any of the engineering design or project planning alternatives that are identified in the budget.

The Contractor shall share this Conceptual Design with the major stakeholders in the Gas-to-Market System, who will be identified by the Grantee but will include at least:

- SNH, which is responsible for upstream production of oil and gas
- Private oil and gas companies active offshore Cameroon
- Tradex, which is the marketer and negotiates prices and tariffs for oil and gas domestically. It is a 50-50 joint venture between SNH and Addax Petroleum Ltd. of Canada
- SONARA, which is the potential offtaker of gas & condensate to improve its crude oil refining yields and in-plant cogeneration needs
- Major electric power plants that may be converted to utilize natural gas, at a minimum the one at Limbé, which is currently actively examining this option and any other power plants identified by the Grantee

The Contractor shall meet Grantee at the Grantee's offices at Yaoundé at the end of this task to present and to discuss its findings. These presentations shall also be made to all major stakeholders, and the Grantee shall ensure that all major stakeholders are available.

Task I Deliverable: The Contractor shall prepare and present a report of the work performed under Task I, including but not limited to a discussion of any proposals currently held by the Grantee, an agreed preliminary Conceptual Design, and a summary of design options that are relevant to the Grantee's plans for the System. This Conceptual Design will include a preliminary budget. It shall also contain any other details pertinent

to technology selection. The Task I Deliverable shall be included in the Final Report. The Task I Deliverable shall also be used as material for Tasks VI and VII below.

Task II: Operational Analysis

The Grantee intends, once the Gas-to-Market System has been successfully installed and commissioned, to operate it independently, either through one of its own current operational subsidiaries or through a new entity. Task II has the objective of advising the Grantee on engineering best practices, procedures and tools ("Operations Plan") used in operating a System of this nature, as defined technically in Task I above. This is only intended as a preliminary Operations Plan for proceeding with the objective of the Feasibility Study stated above. It is not expected to go into the level of detail required of a detailed operations plan that is appropriate to an engineering supply contract.

The Contractor shall conduct a visit to the Grantee at the Grantee's offices at Yaoundé for data collection and to discuss the Grantee's preliminary operations plans and the relevant operations plans of major stakeholders. The Grantee shall ensure that all major stakeholders are available during this week for meetings. During the data collection, the Contractor shall make sure to visit relevant locations to assess facilities as necessary to prepare an informed preliminary Operations Plan.

The Contractor shall provide a review of any existing conceptual operations plans of the Grantee for the System. In particular, the Contractor shall review the proposed operations plans related to the SNH conceptual design and to the GdF proposal cited above in Task I. The Contractor shall clearly identify any potential shortfalls or weaknesses in these current plans.

Independently of any previous work, the Contractor and the Grantee shall agree upon a preliminary operations plan. The Contractor is not expected to prepare a complete plan, since many key engineering and human factors will be unknown at this stage. This template will form the basis of a specification that any final Operations Plan must meet. The Operations Plan shall examine the operations of all the major components of the System, including but not limited to:

1. Offshore and onshore gas pipelines.
2. GPPs
3. Delivery and receipt terminals for gas

The Contractor shall in particular examine issues related to the safe and efficient testing and start-up of any newly installed engineering facilities that may be received from an engineering contractor following the construction of the System.

The Contractor shall report in writing on the implementation of processes and procedures for health, safety and environmental protection that are internationally accepted, and relevant to the transportation of toxic and inflammable natural gas.



The Contractor shall also report on the state of the art in the use of operational systems, SCADA; systems modeling and optimization; leak and fault detection; and process automation. Their utilization within a comprehensive Operations Plan, and in particular as part of a safety and environmental protection program, shall be explained clearly to the Grantee in the report.

The Contractor shall review the connections between the Operations Plan of the Gas-to-Market System and the operations plans of major stakeholders, including at a minimum:

- SNH, which operates upstream oil and gas platforms
- MINEE
- MINIMIDT
- The Ministère des Postes et des Télécommunications (Ministry of Post and Telecommunications or MINPTT), which licenses indirect telecommunications and telecommunications infrastructure
- The Ministère de l'Environnement et de la Protection de la Nature (Ministry of Environment and Protection of Nature or MINEP), which has an interest in environmental management
- The Ministère des Finances (Ministry of Finance or MINFI), which manages macro-economic issues related to revenues for the gas industry
- Major power producers licensed to operate power plants that may be converted to operate gas turbines including AES SONEL and its affiliate Kribi Power Development Company (KPDC)

The Contractor shall visit the Grantee at the end of this task to present and to discuss its findings. These presentations will be made to all major stakeholders, and the Grantee shall ensure that all major stakeholders are available. At the end of these presentations, the technical operational basis for proceeding with the FS will be established.

Task II Deliverable: The Contractor shall prepare and present a report of the work performed under Task II, including a discussion of preliminary plans, and preliminary Operations Plan relevant to the operation of the Gas-to-Market System. It shall also discuss other details pertinent to technology selection. This report is intended to inform the Grantee about best practices for the operation of the system following the construction of the System. The Task II Deliverable shall be included in the Final Report.

Task III: Economic Analysis

The Grantee intends the System both to be a profitable business in its own right, and also to contribute to the economy of the Republic of Cameroon. Task III has as its objective an analysis of: the commercial viability of the System; its contribution to the economy in general and the energy industry of Cameroon in particular; and means for optimizing



both of these objectives. This Task should be coupled with Task IV – Financial Analysis, below to ensure the viability of the plans from a financial perspective. In particular, the Contractor shall review of potential business risks and commercial options. There will be input from Task I, which is designed to cost, and to timetable different technical alternatives.

The Contractor shall produce a high-level business plan for the commercial operation of the proposed System. This is only intended as a high-level economic analysis for proceeding with the objective of the Feasibility Study stated above, by providing advice on the commercial viability of the System and its contribution to the economy and the energy industry of Cameroon. It is not expected to go into the level of detail required of a complete business plan that is the Grantee's prerogative to develop separately.

The Contractor shall conduct a visit to the Grantee at the Grantee's offices at Yaoundé at the beginning for data collection and to discuss the Grantee's economic objectives, and the objectives of major stakeholders. The Grantee shall ensure that all major stakeholders are available for meetings. During the data collection, the Contractor shall gather all supply, demand and pricing data as necessary to prepare a high-level business plan.

The Contractor shall review estimates and forecasts for the forecasted revenues for the System. These revenues shall be purely for transportation of natural gas through the Gas-to-Market System. The Contractor shall propose appropriate tariff models and means of billing the major stakeholders for their use of the System. The Contractor shall build a realistic revenue model for the Grantee. Following the revenue model, the Contractor shall build revenue forecasts based upon separate forecasts of supply and demand of natural gas.

The Grantee shall provide the Contractor with its best forecasts for relevant supply and demand of natural gas. The Contractor shall comment on the likely accuracy of these forecasts, but the Grantee shall remain responsible for these forecasts.

The Contractor shall provide appropriate costs and plans for the construction of facilities, their operations and their financing, as part of other relevant Tasks in this FS. The Contractor shall build separate economic models according to technical and financial options identified both in Tasks I and IV.

The Contractor shall assess any risks related to the economic model; in particular risks related to potential regulation of the price of natural gas in Cameroon, or other market regulation of fuels, by the government through the state Fund for Energy Price Stability (Caisse de Stabilisation des Prix des Hydrocarbures or CSPH).

A major factor in the Economic Analysis is prioritizing and timetabling, both with a long-term goal in view and with immediate priorities for exploiting gas resources soon for national economic development. The Contractor shall prepare properly risked timetables for development. In addressing the national economic objectives the Contractor shall



identify these in consultation with the Grantee and with the major stakeholders. The Contractor shall consider, at a minimum:

1. Providing a ready path to market for any potential gas finds by petroleum exploration companies offshore Cameroon
2. Monetizing the associated gas that is now being flared off from currently producing offshore fields, and reducing the associated pollution
3. Replacing traditional industrial fuels with cleaner and cheaper natural gas

The Contractor shall also advise on options open to the Grantee for the business operation of the System. The Contractor shall study, among commercial options, potential public-private partnerships, sub-contracting of operations to third parties, use of third-party facilities and outsourcing, and other strategies to encourage private sector involvement and growth. The Contractor shall also explore potential separation of transporter, shipper and marketer functions (unbundling) in the commercial operation of the transportation system.

The Contractor shall visit the Grantee at the end of this task to present and to discuss its findings. Appropriate relevant parts of these presentations shall also be made to major stakeholders, and the Grantee shall ensure that relevant major stakeholders are available.

Task III Deliverable: The Contractor shall prepare and present a report discussing the Economic Analysis and Business Plan for the commercial operation of the System. The report shall contain any details pertinent to economic and operational alternatives. The Contractor shall deliver a copy of the Economic Model used to reach the conclusions of this Task. The Task III Deliverable shall be included in the Final Report.

Task IV: Financial Analysis

The Grantee intends to finance this Project, and may either receive proposals for financing the costs of development of this Gas-to-Market System as part of responses to Requests for Proposals ("RFP") for the procurement, or the Grantee may have to finance the procurement separately. This Task is intended to help the Grantee to identify key potential sources of funding and relevant important related regulations and issues. The Contractor is not expected to prepare financing applications, negotiate with potential partners or represent the Grantee in any way in securing financing.

The Contractor shall conduct an initial visit to the Grantee at the beginning for data collection and to discuss the Grantee's financial objectives. The Grantee shall ensure that all major stakeholders are available during this week to discuss their interest in potential equity participation.

The Contractor shall provide a study of the availability of equity and debt financing as well as the views of potential public and private financing organizations, such as the World Bank, relevant regional multilateral development bank(s), the Export-Import Bank of the United States ("Ex-Im") and the Overseas Private Investment Corporation ("OPIC").



The Contractor shall review conventional financing options through commercial domestic and international investment banks.

The Contractor shall review the feasibility of bond issues to the public, either within Cameroon or abroad.

The Contractor shall describe the practical issues relating to key factors for obtaining the best interest rate possible, the correct presentation of relevant forms and applications, and means for guaranteeing repayment schedules to the lender. Since the Grantee may need to make direct applications for financing, at a minimum the Contractor shall review:

1. Key items in the application and procedures for identified feasible sources of funding
2. Key issues that control the interest rate, at each of the identified feasible sources of funding, in debt financing, including but not limited to sovereign guarantees, escrowed servicing payments, liens on property
3. Key legal constraints, issues, and significant contractual provisions of any contracts with lending agencies

The Contractor shall also review the potential for partial debt and/or equity participation from the stakeholders in this project.

A second visit will be made to the Grantee at the end of this task to present and to discuss its findings.

Task IV Deliverable: The Contractor shall prepare and present a report on the work performed under Task IV, including a discussion of the options for financing the System. The Task IV Deliverable shall be included in the Final Report.

Task V: Technical Visit to the US

Since the Grantee has never undertaken a similar project before, the Contractor is to demonstrate first-hand how similar projects have been executed in the U.S. To this end the Contractor shall organize a Technical Visit to the U.S. with the objective of providing direct contact between the stakeholders and operators of similar facilities.

The Grantee shall select a technical team made up of five representatives of the project stakeholders (the "delegates") to visit the United States for five business days to meet with U.S. companies that operate similar gas transportation and processing infrastructure. The Contractor shall organize the visit, including schedules and agendas, and shall participate in all meetings. The visit shall last at least five business days, and shall

include visits to three facilities similar to those envisaged under the Gas-to-Market System.

The Contractor shall arrange for and supply the delegates' lodging, fully refundable economy class international and domestic air fare, land transportation, meals associated with the technical visit for the five USTDA-sponsored delegates involved in the activity, and interpretation services (when needed). The Contractor shall manage the arrangements for visas for the delegates.

The Contractor shall accompany the delegation and assist in all reasonable requests to obtain any information (catalogues, brochures, annual reports, regulatory requirements, etc.) identified by the delegation. This may require follow-up mailings after the delegation has departed.

Regarding meals associated with the technical visit, these shall be provided by the Contractor. The Contractor shall arrange and pay for delegate meals, the cost of which shall be determined by using as a guide, the amounts designated for meals in the U.S. Government Meals and Incidental Expenses subsistence allowance schedule. If delegates elect not to partake of the meal provided, they are free to eat elsewhere at their own expense. No incidental expenses shall be provided.

The Contractor shall arrange meetings with actual owners and operators of similar systems. These shall include the major components listed above of the Grantee's System:

1. Offshore and onshore gas pipelines.
2. Gas Processing Plants.
3. Delivery and receipt terminals for gas.

The objective of the visit is to demonstrate how companies have financed, selected, procured, commissioned and operated similar facilities in the U.S. The visit shall also address the entire process of Feasibility Study, Front End Engineering Design, procurement, installation, commissioning and start-up. It shall then address operational issues related both to the technical aspects of ownership of the facilities and the economics and business aspects.

The Contractor shall arrange discussions that will cover at a minimum:

1. The owner/operator's strategy for front-end planning for the facility; including engineering, operations, and business
2. How the facility was financed
3. The procurement process, and the engineering, installation, and commissioning process of the facility when new
4. The elements of the operations plan for each facility visited
5. How the business is managed



Task V Deliverable: The Contractor shall prepare a report that shall describe the meetings, the U.S. technologies and facilities reviewed, and the delegates' reactions to the application of the respective technologies. The Task V Deliverable shall be included in the Final Report.

Task VI: Preparation of Conditions of Performance

The Grantee intends to proceed to a procurement of the facilities related to the System, via an international public Request for Proposals ("RFP"), or a limited RFP issued to pre-selected qualified suppliers. One of the stated objectives of this FS is to assist the Grantee in preparing and publishing this RFP.

The Contractor shall visit the Grantee for data collection and to discuss the Grantee's Project objectives.

This RFP for engineering services will contain a set of Conditions of Performance ("Conditions") that encompass a number of project execution requirements that the supplier commits to in the execution of the contract for engineering supplies and services. The Contractor shall draft for the Grantee the following sections of the RFP:

1. Mutual obligations related to commercial items, including performance and other bonds, payment schedules and deadlines, financial guarantees, and similar items
2. Mutual financial obligations, including payment and loan guarantees
3. Technical specifications, including specific engineering standards that the supply (infrastructure and product quality) must meet
4. Project management standards, including: execution processes, reporting, liaison, system testing, and similar items
5. Planning standards, including specific plans to be delivered, as part of the proposal, for commissioning, start-up and operations
6. Standard warranty provisions
7. Standard training provisions

The Contractor shall also draft additional sections of the RFP that relate to technical Conditions of Performance. The Contractor shall draft for the Grantee those sections of the RFP involving the following:

1. Distinct phases and milestones including project stop and go/no-go decisions
2. Phased payments that include retainers in case of failed performance
3. Change management and selection of engineering alternatives at project milestones

The Contractor shall use the results of the previous Tasks above to develop the necessary Conditions in a format suitable for use in an RFP, according to the standard RFP formats

in use by the Grantee. The Contractor shall provide these same Conditions in a format suitable for inclusion in an engineering supply contract.

Furthermore, the Contractor shall assist the Grantee in the preparation for publication of the RFP by including these Conditions within the standard RFP format used by the Grantee.

The Contractor shall visit the Grantee at the end of this task to present and to discuss its findings.

Task VI Deliverable: The Contractor shall prepare a document that shall specify the technical and commercial Conditions of the specifications of the Procurement. Furthermore, the Contractor shall assist the Grantee by including these Conditions within the standard RFP format used by the Grantee. The Task VI Deliverable shall be included in the Final Report.

Task VII: Preparation of Tender Documents

The Contractor shall further support the Grantee in the preparation of relevant RFP for the procurement by drafting the sections of the RFP that relate to the analysis in the Tasks performed under these Terms of Reference. The Contractor shall draft:

1. A technical description of the project
2. The preliminary Operations Plan

The Contractor shall draft the technical content for the RFP based on the findings of Task I and Task II.

Furthermore, the Contractor shall assist the Grantee in the preparation for publication of the RFP by including these sections within the standard RFP format used by the Grantee.

The Contractor shall also provide the draft in a format to be agreed upon with the Grantee that is suitable for inclusion in a contract for the Grantee's use in negotiations with any potential supplier.

Task VII Deliverable: The Contractor shall prepare technical sections for Requests for Proposals as specified in this Task VII for the Grantee's use in soliciting proposals to address needs defined in previous Tasks, and also relevant technical contract content. Furthermore, the Contractor shall assist the Grantee by including these sections within the standard RFP format used by the Grantee. The Task VII Deliverable shall be included in the Final Report.

Task VIII: Regulatory Review

The Contractor shall discuss with the Grantee regulations that would impact the Project's viability or prognosis to move forward. The Contractor shall, at a minimum, review



binding engineering standards, environmental standards, regulations that impact operations, regulations that constrain commerce, regulations that constrain labor, constraints on obtaining and servicing commercial loans, taxes and other levies, and regulations that impact the ability to do business in the energy sector in Cameroon.

The Contractor shall identify and review both regulations that are part of the law of Cameroon and applicable international regulations. The Contractor shall provide a brief discussion of why such laws apply and how they might impact the Project's viability.

The Contractor shall examine the impact of any current and potential future regulation of the price of energy commodities on the viability of the Project.

Task VIII Deliverable: The Contractor shall prepare a report of the work performed under Task VIII including an assessment that reviews the impact of local and international regulations on the Project's anticipated technical, financial and commercial viability. The Task VIII Deliverable shall be included in the Final Report.

Task IX: Preliminary Environmental and Social Impact Assessment

The Contractor shall perform a preliminary review of the Project's anticipated environmental and social impacts with reference to Host Country government requirements and those of multilateral lending agencies, such as the World Bank. This review shall identify potential negative impacts, discuss the extent to which they can be mitigated, and develop plans for a more detailed environmental and social impact assessment if and when the Project moves forward to the implementation stage. Such impacts may include plant or animal endangerment, disruption of agricultural outputs, destruction of livelihoods, relocation of people and flooding of ancestral areas. The Contractor shall identify the steps that will need to be undertaken by the Grantee subsequent to the study's completion and prior to Project implementation.

Task IX Deliverable: The Contractor shall prepare a preliminary environmental impact assessment that reviews the Project's anticipated impact on the environment. The Task IX Deliverable shall be included in the Final Report.

Task X: Developmental Impact Assessment

The Contractor shall perform an analysis of host country development impacts in the areas of: Infrastructure, Human Capacity Building, Technology Transfer and Productivity Improvement and/or Market-Oriented Reform). These Development Impact factors are intended to provide the Project's decision-makers and interested parties with a broader view of the Project's potential effects on the Host Country.

The Contractor shall place specific focus on the immediate impact of the Project covered under the Study. The Contractor shall consider and describe any additional developmental benefits that may result from the Project's implementation, including



spin-off and demonstration effects. The contractor shall assess each of the following categories with respect to the Project's overall development impact:

Infrastructure: improvements in the physical, financial, and social infrastructure of Cameroon.

Technology Transfer and Productivity Improvements: introduction of advanced technologies and improvement of processes that stimulate greater economic productivity.

Human Capacity Building: new job opportunities, sustained employment, or advanced training to upgrade the capability of the workforce.

Market-Oriented Reforms: transparency and private sector participation.

Other/Spin-Off Effects: any other developmental benefits derived from the Project including, for example, increased good governance or improved financial revenue flows to Cameroon.

Task X Deliverable: The Contractor shall prepare a developmental impact assessment, which reviews the Project's anticipated developmental impacts. The Task X Deliverable shall be included in the Final Report.

Task XI: Potential U.S. Sources of Supply

The Contractor shall create a comprehensive and searchable list of potential U.S. sources of supply with reference to the Requests for Proposals developed under Task VII. The Contractor shall include the business name, point of contact, address, telephone, e-mail, and fax numbers for each identified source.

Task XI Deliverable: The Contractor shall prepare a list of potential U.S. sources of supply, which may be used in the implementation of the Project. The Task XI Deliverable shall be included in the Final Report.

Task XII: Implementation Plan

The Contractor shall draft an implementation plan which describes the next steps to be taken upon completion of the study and prior to the start-up of the proposed System. The Contractor shall describe:

1. The need for a detailed environmental impact assessment and a cost estimate for such an assessment.
2. The need for a detailed geotechnical analysis including a geological and geophysical inspection of terrain, drilling for and securing oil samples, field and laboratory tests of surface soils and subsurface soil and rock samples, and an assessment of the geological and seismic stability of the affected area as well as a cost estimate for such an analysis.

3. The permits, public hearings and similar proceedings that may be required during the approval process.

Task XII Deliverable: The Contractor shall prepare an Implementation Plan which describes the next steps to be taken upon completion of the study and prior to start-up of the proposed System. The Task XII deliverable shall be included in the final report.

Task XIII Final Report

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

The Contractor shall provide to the Grantee five (5) hard copies of the Final Report and ten (10) electronic copies on read-write CD-ROM disks.

Notes:

- (1) The Contractor is responsible for compliance with U.S. export licensing requirements, if applicable, in the performance of the Terms of Reference.
- (2) The Contractor and the Grantee shall be careful to ensure that the public version of the Final Report contains no security or confidential information.
- (3) The Grantee and USTDA shall have an irrevocable, worldwide, royalty-free, non-exclusive right to use and distribute the Final Report and all work product that is developed under these 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 the Government of the Republic of Cameroon acting through the Ministry of Energy and Water Resources (Ministère de l'Énergie et de l'Eau) or MINEE ("Client"), dated _____ ("Grant Agreement"). The Client has selected _____ ("Contractor") to perform the feasibility study ("Study") for the MINEE Gas-to-Market System project ("Project") in Cameroon ("Host Country"). 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 J. In addition, in the event of any inconsistency between the Grant Agreement and any contract or subcontract thereunder, the Grant Agreement shall be controlling.

B. USTDA as Financier

(1) USTDA Approval of Contract

All contracts funded under the Grant Agreement, and any amendments thereto, including assignments and changes in the Terms of Reference, 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 has been formally approved by USTDA or until the contract conforms to modifications required by USTDA during the contract review process.

(2) 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 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 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 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 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 services funded by USTDA under the Grant Agreement: (a) for professional services, the Contractor must be either a U.S. firm or U.S. individual; (b) the Contractor may use U.S. subcontractors without limitation, but the use of subcontractors from Host Country may not exceed twenty percent (20%) of the USTDA Grant amount and may only be used for specific services from the Terms of Reference identified in the subcontract; (c) employees of U.S. Contractor or U.S. subcontractor firms responsible for professional services shall be U.S. citizens or non-U.S. citizens lawfully admitted for permanent residence in the U.S.; (d) 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 (e) 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 contract term 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. Reporting Requirements

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, and fax number. 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.

H. Disbursement Procedures

(1) USTDA Approval of Contract

Disbursement of Grant funds will be made only after USTDA approval of this contract. To make this review in a timely fashion, USTDA must receive from either the Client or the Contractor a photocopy of an English language version of a signed contract or a final negotiated draft version to the attention of the General Counsel's office at USTDA's address listed in Clause M below.

(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 receipt by USTDA of an approved Final Report in accordance with the specifications and quantities set forth in Clause I 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 provisions 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 provisions 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 provisions 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 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 by courier or mail to the attention of the Finance Department at USTDA's address listed in Clause M below.

(4) Termination

In the event that the Contract is terminated prior to completion, the Contractor will be eligible, subject to USTDA approval, for reasonable and documented costs which have been incurred in performing the Terms of Reference prior to termination, as well as reasonable wind down expenses. Reimbursement for such costs shall not exceed the total amount of undisbursed Grant funds. 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 reasonable and documented costs incurred in performing the Terms of Reference prior to termination.

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 version 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) 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) copy of the Public Version of the Final Report to the Foreign Commercial Service Officer or the 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, USTDA's mailing and delivery addresses. 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 mailing and delivery addresses, 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 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 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.

J. Modifications

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

K. Study Schedule

(1) Study Completion Date

The completion date for the Study, which is December 31, 2011, is the date by which the 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) all funds made available under the Grant Agreement must be disbursed within four (4) years from the Effective Date of the Grant Agreement.

L. Business Practices

The Contractor agrees not to pay, promise to pay, or authorize the payment of any money or anything of value, directly or indirectly, to any person (whether a governmental official or private individual) for the purpose of illegally or improperly inducing anyone to take any action favorable to any party in connection with the Study. The Client agrees not to receive any such payment. The Contractor and the Client agree that each will require that any agent or representative hired to represent them in connection with the Study will comply with this paragraph and all laws which apply to activities and obligations of each party under this Contract, including but not limited to those laws and obligations dealing with improper payments as described 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 9/10 1001
Activity No.: 2009-11030A
Reservation No.: 2009110044
Grant No.: GH2008110013

N. Definitions

All capitalized terms not otherwise defined herein shall have the meaning set forth in the Grant Agreement.



O. 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. Neither the Client nor the Contractor will seek reimbursement from USTDA for such taxes, tariffs, duties, fees or other levies.



ANNEX 5

Annex I

Terms of Reference

Background

The Ministry of Energy and Water Resources (MINEE) of Cameroon (the Grantee) is responsible for strategic planning of the energy industry in the Republic of Cameroon. It controls several key government owned companies in the energy sector:

- The National Oil Refining Company, (Société Nationale de Raffinage, or SONARA), which produces the majority of domestic petroleum products
- The Petroleum Bulk Storage (Petroleum Depot) Company, (Société Camerounaise de Dépôts Pétroliers or SCDP)
- The electric power plants, that are currently mostly hydro-electric or oil, and eventually could burn natural gas

MINEE is also the regulator for private oil and gas companies operating in the downstream petroleum sector.

Other important stakeholders are the Ministère De L'Industrie, Des Mines Et Du Développement Technologique (Ministry of Industry and Development Technology or MINIMIDT) the Cameroon National Hydrocarbons Company, (Société National des Hydrocarbures or SNH). SNH is responsible for commercial upstream oil and gas exploration and production and is a partner to overseas oil companies that operate in Cameroon.

MINEE and MINIMIDT are, in particular, concerned with improving supplies of gas onshore and developing the infrastructure for a domestic natural gas market and is planning a comprehensive Gas Infrastructure Project. The objective of this Gas Infrastructure Project is to take gas from its point of production at offshore oil and gas wells, to process it to yield industrial fuel gas, and transport it to industrial end-users of natural gas.

Preliminary studies suggest that this infrastructure includes: shallow offshore gathering system(s) to take gas from platforms and move it onshore; an onshore gas processing plant; and onshore dry gas transmission pipelines. Relevant operational systems will also be involved, including Supervisory Control and Data Acquisition ("SCADA"); Systems Modeling and Optimization; Leak and Fault Detection; and Process Automation.

This Feasibility Study (FS) is to support MINEE and MINIMIDT in the technical planning and procurement of supplies and services for their Gas Infrastructure Project. The objective of this FS is to provide detailed advice on the conceptual technical design of the system, tendering and procurement of necessary equipment and services, the business plan for its operation, the engineering and operations plan, the means of

financing this project and an implementation plan. An important consideration is the evaluation and promotion of natural gas in Cameroon's industry.

The Contractor can expect the collaboration of SNH, as an important stakeholder, in this FS.

The Contractor should expect to work in the bilingual English-French environment of the Republic of Cameroon. The Contractor shall deliver all reports and other written materials to the Grantee in English. However, the Contractor may similarly receive materials in French or English and may need to converse with Grantee staff in either language.

Objective of the Feasibility Study

The Grantee has the intention of procuring the infrastructure (the "Procurement") necessary to take gas from its point of production at offshore oil and gas wells, to process it to yield industrial fuel gas, and transport it to industrial end-users of natural gas (the "Gas-to-Market System", or "System"). The Grantee also has the intention of operating these facilities, both technically and commercially, and may need to finance its purchase. At this stage, there are only preliminary plans covering the actual design of the System, execution of this procurement, operation of the facilities, and potential funding mechanisms. The purpose of this Feasibility Study is to provide a sufficient level of technical and economic analysis and advice to the Grantee to reach the point of initiating a procurement tendering process and to apply for financing for the installation of the System. However, the Contractor will not be expected to participate in the actual publication of the RFP or the vendor selection process.

Task I: Technical Conceptual Design

The first task has the objective of advising the Grantee on engineering alternatives that are available towards the Grantee's goal of developing the Gas-to-Market System. This preliminary Conceptual Design is only intended as a basis for proceeding with the objective of the Feasibility Study stated above, by providing general engineering design options, high-level budgetary costs, and broad timetables. It is not intended to go into the level of detail required of a Preliminary Front-End Engineering Design, often referred to as a "pre-FEED," that is appropriate to an engineering supply contract.

The Contractor shall conduct a visit for data collection at the beginning of this task, during which the Contractor shall make sure to discuss the Grantee's proposed Gas-to-Market System, as well as existing proposals including SNH's Conceptual Design and the Gaz de France ("GdF") proposal, at the Grantee's offices at Yaoundé. The Grantee shall ensure that all major stakeholders are available for meetings. During the data collection, the Contractor shall also visit relevant field locations as agreed upon with the Grantee to assess facilities and the terrain as necessary to prepare an informed preliminary Conceptual Design.



The Contractor shall provide a review for the Grantee of any existing conceptual design studies and project proposals for the System. In particular, the Contractor shall review proposed budgets, timetables, and technical options. The Grantee shall make this information available to the Contractor under a confidentiality agreement provided that nothing contained in the confidentiality agreement shall preclude the Contractor from performing all of its obligations under the Contract, including, but not limited to, the delivery to USTDA of a substantive and comprehensive final report of all the work performed under these Terms of Reference in accordance with Task XIII hereof.

The Contractor shall prepare a review of the conceptual design prepared by SNH. This design covers the infrastructure necessary to take gas from its point of production at offshore oil and gas wells, and to process it onshore at a Gas Processing Plant ("GPP") to yield industrial grade fuel gas. The Grantee shall make this conceptual design available to the Contractor.

The Contractor shall also specifically review the proposals by GdF and SNH that design the infrastructure necessary to take gas from its point of production at offshore oil and gas wells, to transport it to an offshore export terminal, and then to convert it to Liquefied Natural Gas ("LNG") for transportation by sea. The Contractor is only expected to review these proposals to the extent that they relate to the transportation of gas, and is not expected to review the LNG facilities themselves. These proposals are only relevant as they relate to the Grantee's proposed System. The Grantee shall make these proposals available to the Contractor.

Independently of any previous work, the Contractor and the Grantee shall agree upon a preliminary Conceptual Design of the System. This design will form the basis of the rest of the study. The Conceptual Design shall examine the major components of the System, including but not limited to:

1. Offshore gathering pipelines, to take gas from its point of production at offshore oil and gas platforms to a terminal onshore.
2. At least one GPP.
3. A system of onshore transportation pipelines to reach industrial users of natural gas.

The Contractor shall, in this Conceptual Design, identify useful engineering design alternatives including:

1. Alternative offshore oil and gas fields and wells from which gas should be gathered
2. Routes and design specifications for the offshore gathering pipelines
3. Alternative locations for the onshore GPP
4. Routes and design specifications for the onshore transportation pipelines
5. Options relating to the sizing of facilities including throughput capacity, storage capacity, expandability, etc.

The Contractor shall, as part of the Conceptual Design, include technical specifications for supporting operational systems, including:

1. SCADA
2. Safety systems, including leak detection
3. Operations software applications, including inventory management and measurement

The Contractor shall provide estimated timetables for the construction of facilities using this design basis. The Contractor shall describe the impact of any of the engineering design alternatives that are identified on project plans and timetable. In addition, the Contractor shall examine viable alternatives for phasing the construction of facilities over time.

The Contractor shall provide budgetary estimates for the construction of facilities related to this design basis. The Contractor shall also provide the impact of any of the engineering design or project planning alternatives that are identified in the budget.

The Contractor shall share this Conceptual Design with the major stakeholders in the Gas-to-Market System, who will be identified by the Grantee but will include at least:

- SNH, which is responsible for upstream production of oil and gas
- Private oil and gas companies active offshore Cameroon
- Tradex, which is the marketer and negotiates prices and tariffs for oil and gas domestically. It is a 50-50 joint venture between SNH and Addax Petroleum Ltd. of Canada
- SONARA, which is the potential offtaker of gas & condensate to improve its crude oil refining yields and in-plant cogeneration needs
- Major electric power plants that may be converted to utilize natural gas, at a minimum the one at Limbé, which is currently actively examining this option and any other power plants identified by the Grantee

The Contractor shall meet Grantee at the Grantee's offices at Yaoundé at the end of this task to present and to discuss its findings. These presentations shall also be made to all major stakeholders, and the Grantee shall ensure that all major stakeholders are available.

Task I Deliverable: The Contractor shall prepare and present a report of the work performed under Task I, including but not limited to a discussion of any proposals currently held by the Grantee, an agreed preliminary Conceptual Design, and a summary of design options that are relevant to the Grantee's plans for the System. This Conceptual Design will include a preliminary budget. It shall also contain any other details pertinent

to technology selection. The Task I Deliverable shall be included in the Final Report. The Task I Deliverable shall also be used as material for Tasks VI and VII below.

Task II: Operational Analysis

The Grantee intends, once the Gas-to-Market System has been successfully installed and commissioned, to operate it independently, either through one of its own current operational subsidiaries or through a new entity. Task II has the objective of advising the Grantee on engineering best practices, procedures and tools ("Operations Plan") used in operating a System of this nature, as defined technically in Task I above. This is only intended as a preliminary Operations Plan for proceeding with the objective of the Feasibility Study stated above. It is not expected to go into the level of detail required of a detailed operations plan that is appropriate to an engineering supply contract.

The Contractor shall conduct a visit to the Grantee at the Grantee's offices at Yaoundé for data collection and to discuss the Grantee's preliminary operations plans and the relevant operations plans of major stakeholders. The Grantee shall ensure that all major stakeholders are available during this week for meetings. During the data collection, the Contractor shall make sure to visit relevant locations to assess facilities as necessary to prepare an informed preliminary Operations Plan.

The Contractor shall provide a review of any existing conceptual operations plans of the Grantee for the System. In particular, the Contractor shall review the proposed operations plans related to the SNH conceptual design and to the GdF proposal cited above in Task I. The Contractor shall clearly identify any potential shortfalls or weaknesses in these current plans.

Independently of any previous work, the Contractor and the Grantee shall agree upon a preliminary operations plan. The Contractor is not expected to prepare a complete plan, since many key engineering and human factors will be unknown at this stage. This template will form the basis of a specification that any final Operations Plan must meet. The Operations Plan shall examine the operations of all the major components of the System, including but not limited to:

1. Offshore and onshore gas pipelines.
2. GPPs
3. Delivery and receipt terminals for gas

The Contractor shall in particular examine issues related to the safe and efficient testing and start-up of any newly installed engineering facilities that may be received from an engineering contractor following the construction of the System.

The Contractor shall report in writing on the implementation of processes and procedures for health, safety and environmental protection that are internationally accepted, and relevant to the transportation of toxic and inflammable natural gas.

The Contractor shall also report on the state of the art in the use of operational systems, SCADA; systems modeling and optimization; leak and fault detection; and process automation. Their utilization within a comprehensive Operations Plan, and in particular as part of a safety and environmental protection program, shall be explained clearly to the Grantee in the report.

The Contractor shall review the connections between the Operations Plan of the Gas-to-Market System and the operations plans of major stakeholders, including at a minimum:

- SNH, which operates upstream oil and gas platforms
- MINEE
- MINIMIDT
- The Ministère des Postes et des Télécommunications (Ministry of Post and Telecommunications or MINPTT), which licenses indirect telecommunications and telecommunications infrastructure
- The Ministère de l'Environnement et de la Protection de la Nature (Ministry of Environment and Protection of Nature or MINEP), which has an interest in environmental management
- The Ministère des Finances (Ministry of Finance or MINFI), which manages macro-economic issues related to revenues for the gas industry
- Major power producers licensed to operate power plants that may be converted to operate gas turbines including AES SONEL and its affiliate Kribi Power Development Company (KPDC)

The Contractor shall visit the Grantee at the end of this task to present and to discuss its findings. These presentations will be made to all major stakeholders, and the Grantee shall ensure that all major stakeholders are available. At the end of these presentations, the technical operational basis for proceeding with the FS will be established.

Task II Deliverable: The Contractor shall prepare and present a report of the work performed under Task II, including a discussion of preliminary plans, and preliminary Operations Plan relevant to the operation of the Gas-to-Market System. It shall also discuss other details pertinent to technology selection. This report is intended to inform the Grantee about best practices for the operation of the system following the construction of the System. The Task II Deliverable shall be included in the Final Report.

Task III: Economic Analysis

The Grantee intends the System both to be a profitable business in its own right, and also to contribute to the economy of the Republic of Cameroon. Task III has as its objective an analysis of: the commercial viability of the System; its contribution to the economy in general and the energy industry of Cameroon in particular; and means for optimizing



both of these objectives. This Task should be coupled with Task IV – Financial Analysis, below to ensure the viability of the plans from a financial perspective. In particular, the Contractor shall review of potential business risks and commercial options. There will be input from Task I, which is designed to cost, and to timetable different technical alternatives.

The Contractor shall produce a high-level business plan for the commercial operation of the proposed System. This is only intended as a high-level economic analysis for proceeding with the objective of the Feasibility Study stated above, by providing advice on the commercial viability of the System and its contribution to the economy and the energy industry of Cameroon. It is not expected to go into the level of detail required of a complete business plan that is the Grantee's prerogative to develop separately.

The Contractor shall conduct a visit to the Grantee at the Grantee's offices at Yaoundé at the beginning for data collection and to discuss the Grantee's economic objectives, and the objectives of major stakeholders. The Grantee shall ensure that all major stakeholders are available for meetings. During the data collection, the Contractor shall gather all supply, demand and pricing data as necessary to prepare a high-level business plan.

The Contractor shall review estimates and forecasts for the forecasted revenues for the System. These revenues shall be purely for transportation of natural gas through the Gas-to-Market System. The Contractor shall propose appropriate tariff models and means of billing the major stakeholders for their use of the System. The Contractor shall build a realistic revenue model for the Grantee. Following the revenue model, the Contractor shall build revenue forecasts based upon separate forecasts of supply and demand of natural gas.

The Grantee shall provide the Contractor with its best forecasts for relevant supply and demand of natural gas. The Contractor shall comment on the likely accuracy of these forecasts, but the Grantee shall remain responsible for these forecasts.

The Contractor shall provide appropriate costs and plans for the construction of facilities, their operations and their financing, as part of other relevant Tasks in this FS. The Contractor shall build separate economic models according to technical and financial options identified both in Tasks I and IV.

The Contractor shall assess any risks related to the economic model; in particular risks related to potential regulation of the price of natural gas in Cameroon, or other market regulation of fuels, by the government through the state Fund for Energy Price Stability (Caisse de Stabilisation des Prix des Hydrocarbures or CSPH).

A major factor in the Economic Analysis is prioritizing and timetabling, both with a long-term goal in view and with immediate priorities for exploiting gas resources soon for national economic development. The Contractor shall prepare properly risked timetables for development. In addressing the national economic objectives the Contractor shall



identify these in consultation with the Grantee and with the major stakeholders. The Contractor shall consider, at a minimum:

1. Providing a ready path to market for any potential gas finds by petroleum exploration companies offshore Cameroon
2. Monetizing the associated gas that is now being flared off from currently producing offshore fields, and reducing the associated pollution
3. Replacing traditional industrial fuels with cleaner and cheaper natural gas

The Contractor shall also advise on options open to the Grantee for the business operation of the System. The Contractor shall study, among commercial options, potential public-private partnerships, sub-contracting of operations to third parties, use of third-party facilities and outsourcing, and other strategies to encourage private sector involvement and growth. The Contractor shall also explore potential separation of transporter, shipper and marketer functions (unbundling) in the commercial operation of the transportation system.

The Contractor shall visit the Grantee at the end of this task to present and to discuss its findings. Appropriate relevant parts of these presentations shall also be made to major stakeholders, and the Grantee shall ensure that relevant major stakeholders are available.

Task III Deliverable: The Contractor shall prepare and present a report discussing the Economic Analysis and Business Plan for the commercial operation of the System. The report shall contain any details pertinent to economic and operational alternatives. The Contractor shall deliver a copy of the Economic Model used to reach the conclusions of this Task. The Task III Deliverable shall be included in the Final Report.

Task IV: Financial Analysis

The Grantee intends to finance this Project, and may either receive proposals for financing the costs of development of this Gas-to-Market System as part of responses to Requests for Proposals ("RFP") for the procurement, or the Grantee may have to finance the procurement separately. This Task is intended to help the Grantee to identify key potential sources of funding and relevant important related regulations and issues. The Contractor is not expected to prepare financing applications, negotiate with potential partners or represent the Grantee in any way in securing financing.

The Contractor shall conduct an initial visit to the Grantee at the beginning for data collection and to discuss the Grantee's financial objectives. The Grantee shall ensure that all major stakeholders are available during this week to discuss their interest in potential equity participation.

The Contractor shall provide a study of the availability of equity and debt financing as well as the views of potential public and private financing organizations, such as the World Bank, relevant regional multilateral development bank(s), the Export-Import Bank of the United States ("Ex-Im") and the Overseas Private Investment Corporation ("OPIC").

The Contractor shall review conventional financing options through commercial domestic and international investment banks.

The Contractor shall review the feasibility of bond issues to the public, either within Cameroon or abroad.

The Contractor shall describe the practical issues relating to key factors for obtaining the best interest rate possible, the correct presentation of relevant forms and applications, and means for guaranteeing repayment schedules to the lender. Since the Grantee may need to make direct applications for financing, at a minimum the Contractor shall review:

1. Key items in the application and procedures for identified feasible sources of funding
2. Key issues that control the interest rate, at each of the identified feasible sources of funding, in debt financing, including but not limited to sovereign guarantees, escrowed servicing payments, liens on property
3. Key legal constraints, issues, and significant contractual provisions of any contracts with lending agencies

The Contractor shall also review the potential for partial debt and/or equity participation from the stakeholders in this project.

A second visit will be made to the Grantee at the end of this task to present and to discuss its findings.

Task IV Deliverable: The Contractor shall prepare and present a report on the work performed under Task IV, including a discussion of the options for financing the System. The Task IV Deliverable shall be included in the Final Report.

Task V: Technical Visit to the US

Since the Grantee has never undertaken a similar project before, the Contractor is to demonstrate first-hand how similar projects have been executed in the U.S. To this end the Contractor shall organize a Technical Visit to the U.S. with the objective of providing direct contact between the stakeholders and operators of similar facilities.

The Grantee shall select a technical team made up of five representatives of the project stakeholders (the "delegates") to visit the United States for five business days to meet with U.S. companies that operate similar gas transportation and processing infrastructure. The Contractor shall organize the visit, including schedules and agendas, and shall participate in all meetings. The visit shall last at least five business days, and shall



include visits to three facilities similar to those envisaged under the Gas-to-Market System.

The Contractor shall arrange for and supply the delegates' lodging, fully refundable economy class international and domestic air fare, land transportation, meals associated with the technical visit for the five USDA-sponsored delegates involved in the activity, and interpretation services (when needed). The Contractor shall manage the arrangements for visas for the delegates.

The Contractor shall accompany the delegation and assist in all reasonable requests to obtain any information (catalogues, brochures, annual reports, regulatory requirements, etc.) identified by the delegation. This may require follow-up mailings after the delegation has departed.

Regarding meals associated with the technical visit, these shall be provided by the Contractor. The Contractor shall arrange and pay for delegate meals, the cost of which shall be determined by using as a guide, the amounts designated for meals in the U.S. Government Meals and Incidental Expenses subsistence allowance schedule. If delegates elect not to partake of the meal provided, they are free to eat elsewhere at their own expense. No incidental expenses shall be provided.

The Contractor shall arrange meetings with actual owners and operators of similar systems. These shall include the major components listed above of the Grantee's System:

1. Offshore and onshore gas pipelines.
2. Gas Processing Plants.
3. Delivery and receipt terminals for gas.

The objective of the visit is to demonstrate how companies have financed, selected, procured, commissioned and operated similar facilities in the U.S. The visit shall also address the entire process of Feasibility Study, Front End Engineering Design, procurement, installation, commissioning and start-up. It shall then address operational issues related both to the technical aspects of ownership of the facilities and the economics and business aspects.

The Contractor shall arrange discussions that will cover at a minimum:

1. The owner/operator's strategy for front-end planning for the facility; including engineering, operations, and business
2. How the facility was financed
3. The procurement process, and the engineering, installation, and commissioning process of the facility when new
4. The elements of the operations plan for each facility visited
5. How the business is managed

Task V Deliverable: The Contractor shall prepare a report that shall describe the meetings, the U.S. technologies and facilities reviewed, and the delegates' reactions to the application of the respective technologies. The Task V Deliverable shall be included in the Final Report.

Task VI: Preparation of Conditions of Performance

The Grantee intends to proceed to a procurement of the facilities related to the System, via an international public Request for Proposals ("RFP"), or a limited RFP issued to pre-selected qualified suppliers. One of the stated objectives of this FS is to assist the Grantee in preparing and publishing this RFP.

The Contractor shall visit the Grantee for data collection and to discuss the Grantee's Project objectives.

This RFP for engineering services will contain a set of Conditions of Performance ("Conditions") that encompass a number of project execution requirements that the supplier commits to in the execution of the contract for engineering supplies and services. The Contractor shall draft for the Grantee the following sections of the RFP:

1. Mutual obligations related to commercial items, including performance and other bonds, payment schedules and deadlines, financial guarantees, and similar items
2. Mutual financial obligations, including payment and loan guarantees
3. Technical specifications, including specific engineering standards that the supply (infrastructure and product quality) must meet
4. Project management standards, including: execution processes, reporting, liaison, system testing, and similar items
5. Planning standards, including specific plans to be delivered, as part of the proposal, for commissioning, start-up and operations
6. Standard warranty provisions
7. Standard training provisions

The Contractor shall also draft additional sections of the RFP that relate to technical Conditions of Performance. The Contractor shall draft for the Grantee those sections of the RFP involving the following:

1. Distinct phases and milestones including project stop and go/no-go decisions
2. Phased payments that include retainers in case of failed performance
3. Change management and selection of engineering alternatives at project milestones

The Contractor shall use the results of the previous Tasks above to develop the necessary Conditions in a format suitable for use in an RFP, according to the standard RFP formats

in use by the Grantee. The Contractor shall provide these same Conditions in a format suitable for inclusion in an engineering supply contract.

Furthermore, the Contractor shall assist the Grantee in the preparation for publication of the RFP by including these Conditions within the standard RFP format used by the Grantee.

The Contractor shall visit the Grantee at the end of this task to present and to discuss its findings.

Task VI Deliverable: The Contractor shall prepare a document that shall specify the technical and commercial Conditions of the specifications of the Procurement. Furthermore, the Contractor shall assist the Grantee by including these Conditions within the standard RFP format used by the Grantee. The Task VI Deliverable shall be included in the Final Report.

Task VII: Preparation of Tender Documents

The Contractor shall further support the Grantee in the preparation of relevant RFP for the procurement by drafting the sections of the RFP that relate to the analysis in the Tasks performed under these Terms of Reference. The Contractor shall draft:

1. A technical description of the project
2. The preliminary Operations Plan

The Contractor shall draft the technical content for the RFP based on the findings of Task I and Task II.

Furthermore, the Contractor shall assist the Grantee in the preparation for publication of the RFP by including these sections within the standard RFP format used by the Grantee.

The Contractor shall also provide the draft in a format to be agreed upon with the Grantee that is suitable for inclusion in a contract for the Grantee's use in negotiations with any potential supplier.

Task VII Deliverable: The Contractor shall prepare technical sections for Requests for Proposals as specified in this Task VII for the Grantee's use in soliciting proposals to address needs defined in previous Tasks, and also relevant technical contract content. Furthermore, the Contractor shall assist the Grantee by including these sections within the standard RFP format used by the Grantee. The Task VII Deliverable shall be included in the Final Report.

Task VIII: Regulatory Review

The Contractor shall discuss with the Grantee regulations that would impact the Project's viability or prognosis to move forward. The Contractor shall, at a minimum, review



binding engineering standards, environmental standards, regulations that impact operations, regulations that constrain commerce, regulations that constrain labor, constraints on obtaining and servicing commercial loans, taxes and other levies, and regulations that impact the ability to do business in the energy sector in Cameroon.

The Contractor shall identify and review both regulations that are part of the law of Cameroon and applicable international regulations. The Contractor shall provide a brief discussion of why such laws apply and how they might impact the Project's viability.

The Contractor shall examine the impact of any current and potential future regulation of the price of energy commodities on the viability of the Project.

Task VIII Deliverable: The Contractor shall prepare a report of the work performed under Task VIII including an assessment that reviews the impact of local and international regulations on the Project's anticipated technical, financial and commercial viability. The Task VIII Deliverable shall be included in the Final Report.

Task IX: Preliminary Environmental and Social Impact Assessment

The Contractor shall perform a preliminary review of the Project's anticipated environmental and social impacts with reference to Host Country government requirements and those of multilateral lending agencies, such as the World Bank. This review shall identify potential negative impacts, discuss the extent to which they can be mitigated, and develop plans for a more detailed environmental and social impact assessment if and when the Project moves forward to the implementation stage. Such impacts may include plant or animal endangerment, disruption of agricultural outputs, destruction of livelihoods, relocation of people and flooding of ancestral areas. The Contractor shall identify the steps that will need to be undertaken by the Grantee subsequent to the study's completion and prior to Project implementation.

Task IX Deliverable: The Contractor shall prepare a preliminary environmental impact assessment that reviews the Project's anticipated impact on the environment. The Task IX Deliverable shall be included in the Final Report.

Task X: Developmental Impact Assessment

The Contractor shall perform an analysis of host country development impacts in the areas of: Infrastructure, Human Capacity Building, Technology Transfer and Productivity Improvement and/or Market-Oriented Reform). These Development Impact factors are intended to provide the Project's decision-makers and interested parties with a broader view of the Project's potential effects on the Host Country.

The Contractor shall place specific focus on the immediate impact of the Project covered under the Study. The Contractor shall consider and describe any additional developmental benefits that may result from the Project's implementation, including



spin-off and demonstration effects. The contractor shall assess each of the following categories with respect to the Project's overall development impact:

Infrastructure: improvements in the physical, financial, and social infrastructure of Cameroon.

Technology Transfer and Productivity Improvements: introduction of advanced technologies and improvement of processes that stimulate greater economic productivity.

Human Capacity Building: new job opportunities, sustained employment, or advanced training to upgrade the capability of the workforce.

Market-Oriented Reforms: transparency and private sector participation.

Other/Spin-Off Effects: any other developmental benefits derived from the Project including, for example, increased good governance or improved financial revenue flows to Cameroon.

Task X Deliverable: The Contractor shall prepare a developmental impact assessment, which reviews the Project's anticipated developmental impacts. The Task X Deliverable shall be included in the Final Report.

Task XI: Potential U.S. Sources of Supply

The Contractor shall create a comprehensive and searchable list of potential U.S. sources of supply with reference to the Requests for Proposals developed under Task VII. The Contractor shall include the business name, point of contact, address, telephone, e-mail, and fax numbers for each identified source.

Task XI Deliverable: The Contractor shall prepare a list of potential U.S. sources of supply, which may be used in the implementation of the Project. The Task XI Deliverable shall be included in the Final Report.

Task XII: Implementation Plan

The Contractor shall draft an implementation plan which describes the next steps to be taken upon completion of the study and prior to the start-up of the proposed System. The Contractor shall describe:

1. The need for a detailed environmental impact assessment and a cost estimate for such an assessment.
2. The need for a detailed geotechnical analysis including a geological and geophysical inspection of terrain, drilling for and securing oil samples, field and laboratory tests of surface soils and subsurface soil and rock samples, and an assessment of the geological and seismic stability of the affected area as well as a cost estimate for such an analysis.

3. The permits, public hearings and similar proceedings that may be required during the approval process.

Task XII Deliverable: The Contractor shall prepare an Implementation Plan which describes the next steps to be taken upon completion of the study and prior to start-up of the proposed System. The Task XII deliverable shall be included in the final report.

Task XIII Final Report

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

The Contractor shall provide to the Grantee five (5) hard copies of the Final Report and ten (10) electronic copies on read-write CD-ROM disks.

Notes:

- (1) The Contractor is responsible for compliance with U.S. export licensing requirements, if applicable, in the performance of the Terms of Reference.
- (2) The Contractor and the Grantee shall be careful to ensure that the public version of the Final Report contains no security or confidential information.
- (3) The Grantee and USTDA shall have an irrevocable, worldwide, royalty-free, non-exclusive right to use and distribute the Final Report and all work product that is developed under these Terms of Reference.



7. Project Manager's name, address, telephone number, e-mail address and fax number .

B. Offeror's Authorized Negotiator

Provide 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.

C. Negotiation Prerequisites

1. Discuss any current or anticipated commitments which may impact the ability of the Offeror or its subcontractors to complete the Feasibility Study as proposed and reflect such impact within the project schedule.

2. Identify any specific information which is needed from the Grantee before commencing contract negotiations.

D. Offeror's Representations

Please provide exceptions and/or explanations in the event that any of the following representations cannot be made:

1. Offeror is a corporation [*insert applicable type of entity if not a corporation*] duly organized, validly existing and in good standing under the laws of the State of _____ . The Offeror 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 Feasibility Study. The Offeror 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. The Offeror has included, with this

proposal, a certified copy of its Articles of Incorporation, and a certificate of good standing issued within one month of the date of its proposal by the State of _____.

2. Neither the Offeror nor any of its principal officers have, within the three-year period preceding this RFP, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.
3. Neither the Offeror, 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.
4. There are no federal or state tax liens pending against the assets, property or business of the Offeror. The Offeror, has not, within the three-year period preceding this RFP, been notified of any delinquent federal or state taxes in an amount that exceeds \$3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.
5. The Offeror 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 Offeror has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.

The selected Offeror shall notify the Grantee and USTDA if any of the representations included in its proposal are no longer true and correct at the time of its entry into a contract with the Grantee. USTDA retains the right to request an updated certificate of good standing from the selected Offeror.

Signed: _____
(Authorized Representative)

Print Name: _____

Title: _____

Date: _____