

REQUEST FOR PROPOSALS

FINANCIAL FEASIBILITY STUDY FOR THE

EL DIQUIS HYDROELECTRIC POWER PROJECT

Submission Deadline: **10:00 AM**

LOCAL TIME

March 25, 2008

Submission Place: Instituto Costarricense de Electricidad
Dirección de Proveduría del ICE
Ventanilla única, del colegio los Angeles,
Sabana Norte 300 metros norte,
San José, Costa Rica
Phone: (506) 2205514
Fax: (506) 2326616

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 to provide a Financial Feasibility Study on the El Diquis Hydroelectric Power Project for the Costa Rican Institute of Electricity (ICE). 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 carry out the Feasibility Study.

1.1 BACKGROUND SUMMARY

In December 2001, the Central American countries signed the Plan Puebla-Panama (PPP) in an effort to integrate their electricity markets and transmission grids. This initiative was intended to increase security of supply, reduce the cost of electricity, and attract foreign investment. In the context of PPP, the Mesoamerican Energy Integration Program was formulated to include agreements from the Central American countries to create an electric interconnection system, the Central American Electric Interconnection System (SIEPAC). The Inter-American Development Bank is currently funding the construction of this transmission grid as well as a series of projects that support further integration and development of the Central American energy market. While electricity sales are currently taking place cross-border throughout the region, the volume is expected to increase substantially once this grid is fully in service. The objective of development of additional generation resources like this Project is to facilitate the efficiency, transparency and competitiveness of the Central American regional power market.

The El Diquís hydroelectric power facility (Project) is one of the larger projects envisioned to contribute power to the SIEPAC grid and thereby help stabilize the energy shortages in Costa Rica and the Central American region. ICE launched a pre-feasibility study in 2004 for this Project with IDB funding. The focus of the first phase of the feasibility study was to evaluate the best location for harnessing the energy potential of the Grande de Térraba, Costa's Rica's largest river basin. The site deemed most effective was called "Boruca-Cajón." Since phase one of the initial study was carried out, however, ICE conducted additional social outreach and environmental impact analysis until results determined that Baruca-Veraguas (El Diquís) was the most appropriate location. Data indicated that the hydrology at the Project site was favorable, and the proposed site had a good capacity factor and proportionately high firm energy production. The resulting Project is a 631 MW hydroelectric power plant on a reduced number of hectares, with a reduced impact on the indigenous populations and limited flooding of the surrounding territory.

While the precise location of the Project was defined, additional analysis remains which calls for a full-fledged feasibility study, valued at \$4 million, in order to move the Project toward implementation. ICE turned to the IDB and the Central American Bank for Economic Integration as well as USTDA to complement their in-kind contributions to realize the full feasibility study for this Project. USTDA is providing grant assistance in the form of a

Financial Feasibility Study for the Project, in addition a separate Geotechnical Feasibility Study.

A background Desk Study is provided for reference in Annex 2.

1.2 OBJECTIVE

The objective of the Financial Feasibility Study is to carry out a comprehensive financial analysis which will result in a recommendation of the optimal financial structure of the Project. The USTDA-funded Contractor would a) conduct further economic and financial analysis to refine the results of pre-feasibility studies, b) identify alternative financing models and help ICE determine the preferred structure for Project implementation and c) help ICE develop the methods for evaluating competing offers from prospective project partners.

The Terms of Reference (TOR) for this Feasibility Study is 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.

COST will not be a factor in the evaluation and therefore, cost proposals should not be submitted; upon detailed evaluation of technical proposals, one firm will be selected for contract negotiations. The amount for the negotiated contract has been established by a USTDA grant of U.S. \$200,000 dollars.

The feasibility study is to be undertaken in two parts (Part I and II) as indicated in the enclosed Terms of Reference. The completion of the tasks associated with Part I of the feasibility study has been valued at US\$145,000 of the total amount of the USTDA grant and the completion of tasks associated with Part II of feasibility study has been valued at US\$55,000 of the total amount of the USTDA grant.

As also indicated in the enclosed Terms of Reference, ICE has reserved the right to request that the Consultant not perform work under Part II should ICE choose none of the financing structures suggested by the Consultant. In such an event, total payments for work performed shall not exceed US\$145,000 and all work shall be completed at the conclusion of Part I.

1.4 CONTRACT FUNDED BY USTDA

The negotiated contract will be funded by USTDA in accordance with the terms and conditions of its grant to the Grantee. The Grantee shall not be responsible for making any payments to the Consultant. The contract must include certain USTDA mandatory clauses relating to nationality, taxes, payment, reporting, and other matters. The USTDA nationality

requirements and the USTDA mandatory clauses are attached at Annexes 3 and 4 for reference.

Section 2: INSTRUCTIONS TO PROPOSERS

2.1 PROJECT TITLE

The project is called "El Diquis Hydroelectric Power Project."

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

2.3 DESK STUDY REPORT

USTDA sponsored a Desk Study to address technical, financial, sociopolitical, environmental and other aspects of the proposed project. A copy of the Report is attached at Annex 2 for background information only.

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 U.S. \$200,000 dollars.

2.6 RESPONSIBILITY FOR COSTS

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

2.7 TAXES

Offerors should submit proposals which note that in Annex 4, USTDA Mandatory Contract Provisions, USTDA funds are not to be used to pay taxes or duties under the laws of host country.

2.8 Confidentiality

The Grantee will use its best efforts to preserve the confidentiality of any business proprietary or confidential information submitted by the Offeror, which is clearly designated as such by the Offeror.

2.9 ECONOMY OF PROPOSALS

Proposal documents should be prepared simply and economically, providing a comprehensive and concise description of the Offeror's capabilities to satisfy the requirements of the RFP. There is no necessity for expensive bindings, colored displays, or other promotional material unless such material is absolutely pertinent to the proposal. Emphasis should be placed on completeness and clarity of content.

2.10 SUBSTANTIVE PROPOSALS

The Offeror shall certify (a) that its proposal is genuine and is not made in the interest of, or on the 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 himself 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 host country for up to 20 percent of the amount of the USTDA grant. USTDA nationality requirements are detailed in Annex 3.

2.12 LANGUAGE OF PROPOSAL

All proposal documents shall be prepared and submitted in English and Spanish.

2.13 PROPOSAL SUBMISSION REQUIREMENTS

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

Dirección de Proveeduría del ICE
Ventanilla única, del colegio los Angeles
Sabana Norte 300 metros norte
San José, Costa Rica
Phone: (506) 2205514
Fax: (506) 2326616

An Original in English an Original in Spanish and six (6) copies in Spanish of your proposal must be received at the above address no later than 10:00 AM LOCAL TIME, on March 25, 2008.

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.

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

2.14 PACKAGING

Each 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 in English and Spanish and six (6) copies in Spanish should be collectively wrapped and sealed, and clearly marked for content.

Neither USTDA nor the Grantee will be responsible for premature opening of proposals not properly 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

Firms agree by their response to the RFP announcement to abide by the procedures set forth therein. Material modifications in the TOR or responsibilities of the parties will not be accepted.

Any exceptions in the proposal shall be clearly identified, and shall include the scope of such exception, and its impact, on the procurement. The Grantee shall make final determination as to the responsiveness of such exceptions and their acceptability.

2.18 OFFEROR QUALIFICATIONS

As provided in Section 3, Offerors shall submit evidence that they have relevant past experience and have previously delivered advisory and Feasibility Study services similar to those required in the TOR.

2.19 RIGHT TO REJECT PROPOSALS

The Grantee reserves the right to reject any and all proposals and to accept or reject any or all of the items in the proposal, and to award the contract in whole or in part if it is deemed in the best interest of the Grantee.

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 consultants and subcontractors. USTDA nationality provisions are set forth in detail in Annex 3. The successful Offeror shall cause appropriate provisions of its contract, including all mandatory USTDA clauses, to be inserted in all subcontracts ensuing to ensure fulfillment of all contractual provisions by subcontractors.

2.21 AWARD

An award resulting from this RFP shall be made to the best qualified Offeror, taking into consideration the evaluation factors set forth herein; however, the right is reserved 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) furnish all supplies, supervision, transportation, and other execution accessories, services, and facilities; (b) provide and perform all necessary labor; and (c) in accordance with good technical practice, with due diligence, and in accordance with the requirements, stipulations, provisions and conditions of this RFP and the resultant contract, execute and complete all specified work to the satisfaction of the Grantee.

2.23 INVOICING AND PAYMENT

The Contractor may submit invoices to the designated Grantee Project Director in accordance with a schedule included in this point 2.23. Upon approval of each invoice, the Grantee will forward the invoice to USTDA which will process payment to the Contractor. All payments by USTDA under the Grant Agreement will be made in U.S. currency.

In consideration for the Consultant's performance of the Study, the Grantee shall arrange for the Grant Funds to be disbursed by USTDA directly to the Consultant as follows:

- (1) US\$145,000 upon completion of the tasks associated with Part I
- (2) US\$55,000 upon completion of the tasks associated with Part II

The feasibility study is to be undertaken in two parts (Part I and II) as indicated in the enclosed Terms of Reference. The completion of the tasks associated with Part I of the feasibility study has been valued at US\$145,000 of the total amount of the USTDA grant and the completion of tasks associated with Part II of feasibility study has been valued at US\$55,000 of the total amount of the USTDA grant.

As also indicated in the enclosed Terms of Reference, ICE has reserved the right to request that the Consultant not perform work under Part II should ICE choose none of the financing structures suggested by the Consultant. In such an event, total payments for work performed shall not exceed US\$145,000 and all work shall be completed at the conclusion of Part I.

The task breakdown is shown below:

Id	Nombre de tarea	Duración	2º trimestre																		
			07	14	21	28	04	11	18	25	03	10	17	24	31	07	14	21	28	05	12
1	CONSULTING SERVICES FOR DESIGN OF FINANCING STRUCTURE FOR THE P.H. EL DIQUÍ	90 días																			
2	FASE 1 :	69 días																			
3	Market Analysis and Creation of Basic Economic Model	8 días																			
4	Investigate Potential Sources of Debt	7 días																			
5	Investigate Sources of Credit and Credit Enhancement	14 días																			
6	Sovereign Debt Credit Analysis	7 días																			
7	Investigate Potential Credit Enhancement Mechanisms	7 días																			
8	Investigate Potential Sources of Equity and Risk-Sharing Entities	8 días																			
9	Creation of Financial Model	8 días																			
10	Development Impact Analysis	8 días																			
11	Recommendation of Preferred Financial Structure	8 días																			
12	Preparation of Report 2	8 días																			
13	ICE Decision on Preferred Structure	0 días																			
14	FASE 2:	21 días																			
15	Preparation of Solicitation Guidelines	7 días																			
16	Discussions with Potential Financing Sources	7 días																			
17	Preparation of Forms of Agreement and of Report 3	7 días																			

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. No cost proposal is required as the value of the USTDA grant is established at U.S. \$200,000 dollars.

The feasibility study is to be undertaken in two parts (Part I and II) as indicated in the enclosed Terms of Reference. ICE has reserved the right to request that the Consultant not perform work under Part II should ICE choose none of the financing structures suggested by the Consultant. In such an event, total payments for work performed shall not exceed US\$145,000 and all work shall be completed at the conclusion of Part I.

Offerors shall submit an original in English an original in Spanish and six (6) copies in spanish of your proposal.

The following sections and content are required for each proposal:

- Transmittal Letter,
- Cover/Title Page,
- Table of Contents,
- Introduction and Executive Summary,
- Company Information,
- Organizational Structure, Management Plan, and Key Personnel,
- Technical Approach and Work Plan,
- Experience and Qualifications, and
- Miscellaneous.

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

3.1 SECTION 1: INTRODUCTION AND EXECUTIVE SUMMARY

An Executive Summary should be prepared describing the major facts or features of the proposal, including any conclusions, assumptions, and generalized 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 SECTION 2: COMPANY INFORMATION

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), similar information must be provided for each subcontractor. Offerors are requested to limit the length of the Company Profile Information to one (1) page per firm.

1. Name of firm and business address, including telephone and fax numbers.
2. Year established (include former firm names and year established, if applicable).
3. Type of ownership and parent company, if any.
4. Project Manager's name, address, telephone and fax number, if different from (1).

3.2.2 Offeror's Authorized Negotiator

Provide name, title, address, telephone 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 impact of any current or anticipated commitments which may impact the ability of the Offeror or its subcontractors to complete the Feasibility Study as proposed and within the project schedule.
2. Identify any specific information which is needed from the Grantee before commencing contract negotiations.

3.3 SECTION 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 must have the responsibility and authority to act on behalf of the Offeror in matters related to the proposed Feasibility Study.

Provide a listing of personnel (including subcontractors and consultants) to be engaged in the project, either U.S. or local 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 organizational relationship between the firms must be described.

A manpower schedule and the level of effort for the project period, by activities and tasks, as detailed under the 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 SECTION 4: TECHNICAL APPROACH AND WORK PLAN

Describe in detail the proposed technical approach and work plan. Discuss the project requirements as perceived by the Offeror. Include a brief narrative of 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 Technical Work Plan, including periodic reporting or review points, incremental delivery dates, and other project milestones.

Based on the Technical Work Plan, and previous project experience, explain when and where Offeror will require support from the Grantee. Detail the amount of staff time required by the Grantee or participating agencies and any work space or facilities needed to complete the Feasibility Study.

3.5 SECTION 5: EXPERIENCE AND QUALIFICATIONS

Provide a discussion of the Offeror's experience and qualifications which 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. Relevant experience and qualifications of key staff proposed shall be provided including letters of commitment from the individuals proposed concerning their availability for contract performance.

For each individual proposed, provide evidence (preferably letters of recommendation signed by current or former clients) demonstrating the qualifications of each individual in the following areas, demonstrating the qualifications of such individuals in the following areas:

- Advisory services in the fields of engineering, economics, administration, or finance in the electric power industry or other regulated industries.
- Experience in the structuring of financing for infrastructure projects, preferably in Latin America, in areas such as:
 - Coordination with major international financial institutions
 - Structuring of financing for electric generation projects, preferably hydroelectric, including limited-recourse financing
 - Team leadership and reconciliation of both technical and financial considerations in decision-making
 - Familiarity with fixed-income and equity markets on an international level, familiarity with the 144A market, and familiarity with sovereign debt analysis
 - Familiarity with financial risk management instruments

- Studies and development of financing schemes for infrastructure projects.
- The publication of articles on the subject of financial engineering may also be submitted as evidence of expertise

As many as possible but not more than six (6) relevant and verifiable project references must be provided, 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, and the Grantee shall promptly 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 shall then be undertaken with the second most qualified Offeror and so forth.

For each individual proposed, provide evidence (preferably letters of recommendation signed by current or former clients) demonstrating the qualifications of each individual in the following areas, demonstrating the qualifications of such individuals in the following areas:

- Advisory services in the fields of engineering, economics, administration, or finance in the electric power industry or other regulated industries.
- Experience in the structuring of financing for infrastructure projects, preferably in Latin America, in areas such as:
 - Coordination with major international financial institutions
 - Structuring of financing for electric generation projects, preferably hydroelectric, including limited-recourse financing
 - Team leadership and reconciliation of both technical and financial considerations in decision-making
 - Familiarity with fixed-income and equity markets on an international level, familiarity with the 144A market, and familiarity with sovereign debt analysis
 - Familiarity with financial risk management instruments
 - Studies and development of financing schemes for infrastructure projects
 - The publication of articles on the subject of financial engineering may also be submitted as evidence of expertise

4.1 EVALUATION CRITERIA

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

Industry Experience

Experience with financial structuring for infrastructure projects, (40 points)
preferably in Latin America, in areas such as:

- Coordination with major international financial institutions
- Structuring of financing for electric generation projects, preferably hydroelectric, including limited-recourse financing
- Team leadership and reconciliation of both technical and financial considerations in decision-making
- Familiarity with fixed-income and equity markets on an international level, familiarity with the 144A market, and familiarity with sovereign debt analysis
- Familiarity with financial risk management instruments
- Studies and development of financing schemes for infrastructure projects

- The publication of articles on the subject of financial engineering may also be submitted as evidence of expertise

Experience in providing advisory services in the fields of engineering, (30 points)
economics, administration, or finance in the electric power industry or other regulated industries, with specific attention to:

- Experience with technical aspects of hydroelectric project design, engineering, and construction
- Experience with integrating technical aspects of hydroelectric project design into financial structuring recommendation

Technical Approach and Work Plan (20 points)

Technical Background and Qualifications (10 points)

- Academic Qualifications
- Experience and ability to work in the Spanish Language

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

Price will not be a factor in contractor selection.

Note: Minimum acceptance qualification value of the offeror is 50 points

4.2 SELECTION PROCESS

ICE is providing the following selection methodology, offering details on how proposals will be evaluated:

Technical experts are required for the conduct of a Financial Feasibility Study to carry out a comprehensive financial analysis which will result in a recommendation of the optimal financial structure for the Project.

Optimal Consultants would demonstrate the following:

- Team leadership and reconciliation of both technical and financial considerations in decision-making.
- Ease in communicating and delegating tasks
- Experience with integrating technical aspects of hydroelectric project design into financial structuring recommendations
- Highly organized
- Experience and ability to work in the Spanish language
- Experience with financial structuring for infrastructure projects, preferably in Latin America, in areas such as:
 - Coordination with major international financial institutions
 - Structuring of financing for electric generation projects, preferably hydroelectric, including limited-recourse financing
 - Team leadership and reconciliation of both technical and financial considerations in decision-making

- Familiarity with fixed-income and equity markets on an international level, familiarity with the 144A market, and familiarity with sovereign debt analysis
- Familiarity with financial risk management instruments
- Studies and development of financing schemes for infrastructure projects
- The publication of articles on the subject of financial engineering may also be submitted as evidence of expertise

Proposals will be evaluated according to the individual experience of consultants proposed for the carrying out of the Feasibility Study. In cases where proposed teams include more than one individual, proposals will be evaluated by determining each individual team member's score according to the procedures set below and taking their weighted average (mean) based upon the team member's level of participation as indicated in the proposal. Individual qualifications will be considered with regard given to the following areas: academic qualification, consulting experience with similar projects, and financial structuring experience. ICE will conduct evaluations according to the following procedures:

Note: Minimum acceptance qualification value of the offeror is 50 points

Financial Structuring Experience 40 points

Experience with financial structuring for infrastructure projects, preferably in Latin America, shall be considered are follows:

For twenty or more years of experience:	40 points
Between 10 and 19 years of experience, inclusive:	$(\text{Years of Experience} - 10) \times 3 + 10$ points
Less than 10 years of experience:	0 points

Financial structuring experience will be calculated according to the duration of participation in offering consulting services on infrastructure projects

Financial Analysis Experience with Similar Projects 30 points

Experience in providing advisory services in the fields of engineering, economics, administration, or finance in the electric power industry or other regulated industries shall be considered as follows:

- (1) Projects related to the energy sector (hydroelectric, thermal, or other source) with a total cost, including indirect and financial costs, of more than \$500 million.
- (2) Participation in the financial analysis of energy projects, including the evaluation of multiple financial structuring options.
- (3) Experience in drafting documents necessary for the participation of financing entities and/or private investors.

Proposals will be awarded a maximum of 30 points for meeting the above criteria as follows:

Projects developed in Latin America:	10 points each
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Projects developed outside Latin America: 8 points each

Technical Approach and Work Plan

20 points

Proposed technical approach and work plan will be evaluated as follows:

- (1) Project discussion (3 points):
Evaluation of the Consultant's understanding of the objectives and goals of the project and the Consultant's proposed program for the completion of work.
- (2) Activities description (1 point for each activity, with a maximum of 10 points):
Evaluation of the proposed methodology for the completion of each task within the Terms of Reference and
- (3) Tasks program (4 points):
Evaluation of the consistency and completeness of the work plan, specifically if the proposal accurately reflects and identifies the Consultant's responsibilities and work effort for all required tasks and deliverables included within the Terms of Reference
- (4) ICE relation and support (3 points):
Evaluation of the proposed relationship and communication between the Consultant and ICE

Technical Background and Qualifications

10 points

Technical Experts' academic qualifications relevant to the Project will be evaluated as follows:

Doctorate (PhD) (equivalent to 5 years of postgraduate studies with doctoral thesis)	10 points
Master's Degree (MSc, MEng, etc.) (equivalent to 2 years postgraduate studies with master's thesis)	7 points
Bachelor's Degree (equivalent to 4-5 years of undergraduate studies)	5 points
Associate's Degree (equivalent to 2 years of undergraduate studies)	0 points

Points earned for Academic Qualifications will not be cumulative, with the maximum number of 10 points awarded to a Technical Expert having earned a Doctorate degree. Each expert proposed as part of the technical team will be awarded points according to their highest earned degree, which should be related to the technical area for which they are proposed and accredited according to the rules established in the country of its origin.

ANNEX 1

Instituto Costarricense de Electricidad, Direccion de Proveeduría del Ice, Mr. José Manuel Lopez Pinto, Ventanilla Única del colegio los Angeles, Sabana Norte 300 Metros Norte, San José, Costa Rica, Phone: (506) 2205514, Fax (506) 2326616

B – COSTA RICA – FINANCIAL FEASIBILITY STUDY FOR THE EL DIQUIS HYDROELECTRIC POWER PROJECT

POC Evangela Kunene, USTDA, 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901, Tel: (703) 875-4357, Fax: (703) 875-4009. Financial Feasibility Study For The El Diquis Hydroelectric Power Project. The Grantee invites submission of qualifications and proposal data (collectively referred to as the "Proposal") from interested U.S. firms which are qualified on the basis of experience and capability to develop a financial feasibility study for the El Diquis Hydroelectric Power Project.

The Government of Costa Rica and its national electric utility, Instituto Costarricense de Electricidad (ICE), are committed to developing a reliable and economic supply of power for Costa Rica and to providing additional generating capacity to the regional Central American Electric Interconnection System (SIEPAC) grid.

The El Diquís hydroelectric power facility (Project) is one of the larger projects envisioned to contribute power to the SIEPAC grid and thereby help stabilize the energy shortages in Costa Rica and the Central American region. ICE launched a pre-feasibility study in 2004 for this Project with Inter-American Development Bank funding. The focus of the first phase of the feasibility study was to evaluate the best location for harnessing the energy potential of the Grande de Térraba, Costa's Rica's largest river basin. The site deemed most effective was called "Boruca-Cajón." Since phase one of the initial study was carried out, however, ICE conducted additional social outreach and environmental impact analysis until results determined that Baruca-Veraguas (El Diquís) was the most appropriate location. Data indicated that the hydrology at the Project site was favorable, and the proposed site had a good capacity factor and proportionately high firm energy production. The resulting Project is a 631 MW hydroelectric power plant.

While the precise location of the Project was defined, additional analysis remains which calls for a full-fledged feasibility study, valued at \$4 million, in order to move the Project toward implementation. ICE turned to the IDB and Central American Bank for Economic Integration as well as the U.S. Trade and Development Agency (USTDA) to complement their in-kind contributions to realize the full feasibility study for this Project. USTDA is providing funds for a comprehensive financial analysis feasibility study.

The U.S. firm selected will be paid in U.S. dollars from a \$200,000 grant to the Grantee from the U.S. Trade and Development Agency.

A detailed Request for Proposals (RFP), which includes requirements for the Proposal, the Terms of Reference, and a background desk study report are available from USTDA, at 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901. To request the RFP in PDF format, please go to: <https://www.ustda.gov/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 and Spanish directly to the Grantee by **10:00 AM LOCAL TIME on March 25, 2008** 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

FINAL REPORT

DESK STUDY

FOR THE

EL DIQUÍS HYDROELECTRIC PROJECT IN COSTA RICA

USTDA 2007-51009A

Submitted to

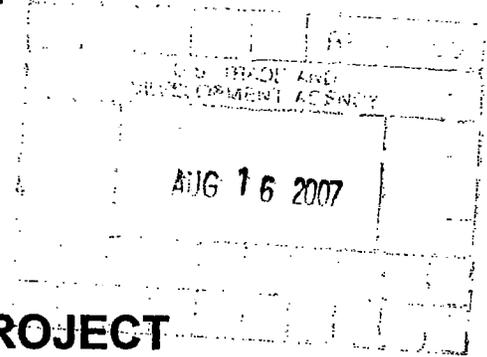
**U.S. Trade and Development Agency
Washington, D.C. 20523-1602**

By

**COMMONWEALTH POWER CORPORATION
Norfolk, Virginia 23502**

R. Peter Lalor

August 9, 2007



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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.

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The U.S. Trade and Development Agency

The U.S. Trade and Development Agency (USTDA) advances economic development and U.S. commercial interests in developing and middle income countries. The agency funds various forms of technical assistance, feasibility studies, training, orientation visits and business workshops that support the development of a modern infrastructure and a fair and open trading environment.

USTDA's strategic use of foreign assistance funds to support sound investment policy and decision-making in host countries creates an enabling environment for trade, investment and sustainable economic development. Operating at the nexus of foreign policy and commerce, USTDA is uniquely positioned to work with U.S. firms and host countries in achieving the agency's trade and development goals. In carrying out its mission, USTDA gives emphasis to economic sectors that may benefit from U.S. exports of goods and services.

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SECTION A

EXECUTIVE SUMMARY

Commonwealth Power Corporation (Consultant) was awarded Contract 2007-51009A by the U.S. Trade and Development Agency (USTDA) to carry out a Desk Study (DS) review of the request for Feasibility Study (FS) by the Costa Rican Institute of Electricity (Instituto Costarricense de Electricidad, ICE) for the 630 MW El Diquís hydroelectric project (Project) on the Grande de Térraba River in Costa Rica, to determine whether it meets the USTDA funding requirements. To qualify for funding, a project must:

- be a national development priority;
- have significant U.S. export potential;
- be economically viable and likely to be developed and financed; and
- have significant competition in relevant product markets from suppliers outside the U.S.

Consultant has assessed the Project proposal in light of USTDA's core project evaluation criteria, including developmental impact measures, U.S. export potential, likelihood of financing and implementation, foreign competition, environmental impact, and impact on US labor.

The Project would increase the energy supply in Costa Rica and the Central American region and thus make the region's electric sector or more sustainable, efficient, and competitive. A significant amount of feasibility study-level work has already been completed and confirms the likely economic viability of the Project; the principal remaining FS effort is related to preparation of specifications, environmental impact studies, supplemental geotechnical studies and studies related to practicable financial structures. The total cost of the remaining FS work, plus some additional efforts such as establishing a panel of environmental experts and an inter-institutional coordinating body, is valued at \$4,041,000. The Inter-American Development Bank (IDB) is contributing \$1.5 million, ICE is contributing \$664,000 of in-kind services, and the Central American Bank for Economic Integration (CABEI) is contributing approximately \$1.38 million. ICE has requested that USTDA provide the remaining \$500,000 of required funding support: \$300,000 for the supplemental geotechnical studies component, and \$200,000 for the financial structuring studies component. This DS addresses the request for support of both the geotechnical and financial portions of the FS for a total amount of \$500,000.

The Project as it was initially conceived was both larger in scope and more expensive (on a unit-price basis) than the revised, scaled-down version that was developed by ICE and its consultants over the 2004 – 2005 timeframe. The revised plan, which is the subject of this DS has two principal benefits compared to the earlier plan: the social impacts and environmental impacts have been greatly reduced; and, the unit costs of the Project have been reduced by roughly 25% (from approximately \$2 million per installed megawatt to \$1.5 million per installed megawatt), making the revised Project substantially more financeable than the earlier version. The construction cost of the Project (without financing charges) is very attractive at \$1 million per installed megawatt. However, the construction period of 8 years results in relatively high finance costs during construction, even with the current low cost of capital prevailing in the international capital markets.

Consultant investigated the technical and economic viability of the Project as well as the financial, legal, regulatory and institutional considerations affecting hydroelectric power projects in Costa Rica, and has determined that the Project is economically viable and likely to be financed and implemented, and otherwise meets the USTDA funding requirements.

Consultant concluded that the Project revenues appear to have been conservatively estimated; in particular, the Project's ability to store flows and release them on a peaking basis should substantially enhance its value during the dry season and drought conditions. Consultant believes the associated benefits will outweigh the burden of market pressure during periods of hydrologic excess. Moreover, the dynamics that underpin the current high cost of generating power in the region are unlikely to change with the implementation of market systems, particularly as global fossil fuel prices appear to be stabilizing at relatively high levels. Accordingly, we believe that a decline in the real price of energy is unlikely, and it appears that this Project will be viable, even in a flat price environment.

The principal considerations other than likely economic viability that make the Project an attractive candidate for USTDA assistance are listed below, and a more detailed list of attractive Project attributes is given in Section B-3.

Developmental Impact

The Government of Costa Rica and its national electric utility, ICE, are committed to a reliable and economic supply of power to the Costa Rican grid. This Project would unquestionably serve that purpose, and thus provide direct and important benefits to the people of Costa Rica. In addition, the Project is located in an area that is generally impoverished and not well-served by the electric system, and the Project would support economic development and the provision of reliable service to the local community, as well as the rest of the nation and the Central American region. Finally, it would also facilitate the evolution of regional markets for power: the offtake capability of the soon-to-be-inaugurated grid of the Sistema de Interconexión Eléctrica de Países de América Central (SIEPAC) grid will allow the benefits of the project to be realized at a regional level. It is hoped that the SIEPAC structure will also permit binding financial commitments from consumers in the region that will help in the realization of the Project itself, and in any event it is the sponsor's intention to sell excess available energy throughout the Central American region via the SIEPAC grid.

Export Potential

The Project is large in scale, with a total engineering and construction cost of more than \$900 million, and US vendors should be competitive for approximately \$300 million of that amount.

Degree of Geologic and Hydrologic Certainty

The geology and hydrology at the site have been studied in adequate detail to conclude that the Project justifies further, more detailed investigations, and the hydrology in particular has been very well characterized for a project at this stage.

We have therefore concluded that the Project merits USTDA support and recommend that USTDA support both the U.S. \$200,000 of the financial structuring component of the FS and the U.S. \$300,000 to carry out the geotechnical component of the FS for the Project.

SECTION B

PROJECT BACKGROUND, DESCRIPTION AND ASSESSMENT

1. PROJECT BACKGROUND

A. General

While there has been some limited success in developing new, large hydroelectric projects in Latin America and elsewhere in the world over the past few decades, the vast majority of new capacity added during that time has been thermal generation fueled by (nonrenewable) fossil energy sources. The preference for fossil-fueled thermal plants is, in most cases, readily explained. When compared to hydroelectric projects of comparable size, thermal projects can be constructed more quickly, with less risk—both at a construction and operational level. The availability and cost of capital for thermal projects is correspondingly better. The fact that financing costs have been relatively high for hydroelectric projects has a particularly large impact, as the projects are typically very capital-intensive compared to thermal projects. Finally, costs of fossil fuels in both spot and futures markets has traditionally exhibited some volatility, but has generally been low compared to the cost of capital for renewable energy projects.

Central America has the disadvantage of having few indigenous natural resources suitable for energy production. While in some regions there is significant hydroelectric potential, and in other regions there is geothermal potential, there are practically no reserves of natural gas, crude oil, or coal, so Central America is dependent on external resources for its fossil fuel needs. Moreover, the transportation and handling costs for the delivery of fossil fuels to Central American power stations is substantial and results in a major comparative cost disadvantage for the region.

However, over the past two years oil and coal markets have seen significant price increases that have substantially eroded the relative attractiveness of fossil-fueled thermal generation. Moreover, the cost of long-term equity and debt capital on international markets has reached, and stabilized at, historically low levels; this provides a significant benefit to capital-intensive projects. As Costa Rica has substantial untapped hydroelectric potential, and as indigenous energy resources are scarce in Central America and therefore at a premium, Costa Rica appears to have an unusually attractive opportunity to take advantage of natural resources to provide itself and its neighbors with the benefits of a clean, reliable and relatively inexpensive long-term energy source. To the extent that emissions trading or other mechanisms are ultimately put in place to discourage fossil fuel consumption, the benefits of indigenous, renewable energy resources will be even greater.

Beginning in February of 2004, ICE awarded a series of contracts for evaluation of various options for harnessing the potential of the Térraba basin. The work was originally geared toward a conventional design study, but it was modified to determine practicable structure for project execution that fully take into account the Project's social and environmental context as well as its technical and economic aspects.

The Project as currently configured offers several evident advantages: is situated in the south, in Costa Rica's largest watershed and in one of the country's least developed areas and therefore offers both a cost-effective natural resource and the potential to catalyze socioeconomic growth in the southern part of the country. It also complements regional electric integration by facilitating regional electricity trade and competitiveness through potential savings and lower prices in the

region. The Indicative Regional Generation Expansion Plan 2005 -- 2019 prepared by the Central American Electrification Council's Regional Indicative Planning Working Group identifies capital and operations-related savings to the regional electric market of US \$157 million to US\$170 million, with a drop in long-term marginal costs of from US\$1.8/megawatt hour to US\$3.5/megawatt hour as a result of the development of large-scale hydroelectric projects.

B. Need for Additional Generating Capacity

Costa Rica is a country with a population over four million. The country has experienced rapid economic growth, of approximately 4% per year, and growth in electrical demand, in the 5-6% per year range, over the past five years. Growth at that rate is expected to continue for the indefinite future.¹ The nation has recently (mid-April through the first week of May, 2007) faced power shortages as a result of low rainfall and correspondingly low reservoir levels. The Project is not scheduled to come on line until approximately 2016, and so would not address the near-term need for additional energy supplies. The recent shortages are nevertheless an indication of the current deficiency.

ICE has the primary responsibility for the production, transmission and distribution, of electricity in Costa Rica. It has an interconnected national network of 230 kV transmission lines extending to most of Costa Rica. From that network, subtransmission and distribution lines supply electricity to most of the people in the country. However, there are still communities not well served by the grid. Portions of the Rio Térraba basin, for instance, are economically less developed and do not receive reliable electrical service.

In addition, the Central American region is in the process of establishing a substantially enhanced interconnection, and the electric sectors in most Central American countries are undergoing some degree of privatization. Electricity sales are taking place cross-border throughout the region, and are expected to increase substantially as interconnection facilities currently under construction are placed in service. The development of additional generation resources will facilitate the evolution of markets, and the associated efficiencies and transparency.

2. PROJECT DESCRIPTION

Catchment Statistics. The catchment area above the dam would be 2540 km², with average annual rainfall of 2277 mm/year. The average flow at the damsite is 167 m³/second, and the Probable Maximum Flood is estimated at 22,300 m³/sec, with a total volume of 1987 hm³.

Dam. The dam would be a concrete-faced, rockfill gravity dam. The crest of the dam would be at El 310 m, ten meters above the normal maximum pool of 300 m msl. The maximum height would be 170 m above the natural river channel. The crest length would be 600 m, and the estimated volume of material in the dam would be 12,680,000 m³. The spillway would have a discharge capacity of 13,933 m³/s.

Reservoir. The reservoir would cover an area of 6190 hectares, and have a live storage of 1646 hm³ between the operating limits of El 300 m and El 260 m. Inactive storage below El 260 m is

¹ The Costa Rican electric system has a current peak demand (2005) of 1390 MW and installed generating capacity of 1960 MW, with a total annual production (2005) of 8146 GWh. Of those figures, hydro accounts for 1300 MW and 6560 GWh, thermal for 420 MW and 300 GWh, geothermal for 165 MW and 1100 GWh, and wind for 68 MW and 200 GWh. The comparable figures for Central America as a whole are: peak demand of 5952 MW; aggregate installed capacity of 9065 MW and production of 34,518 GWh; hydro 3880 MW and 17,050 GWh; thermal 4690 MW and 14,820 GWh; geothermal 427 MW and 2445 GWh; and wind 69 MW and 204 GWh.

1212 hm³, and would be used to contain the sediment inflow estimated at 3.6 million tons per year.

Powerhouse. The powerhouse would be subterranean, and as currently conceived would consist of four Francis units, each with 92% efficiency and an output of 147 MW while operating at full gate under a rated net head of 254 m. The turbine discharge capacity at the rated net head would be 64.3 m³/s. The generators would be 24-pole, 300 rpm units with 13.8 kV output, rated a 169 MVA and 98.5% efficiency, and would feed three monophasic 13.8/230 kV transformers with 10% impedance. In addition, a small generating unit of 23 MW with a design discharge capacity of about 18 m³/s would be incorporated into the design of the dam for meeting minimum release requirements. Water would be released through this unit on a more or less continuous basis. The projected annual generation from the main powerhouse is projected at 2869 GWh and that from the bypass flow at 181 GWh, for a total projected generation of 3050 GWh per year.

A 230 kV switchyard would be constructed adjacent to the powerhouse area. The switchyard would contain circuit breakers, a takeoff structure, disconnect switches, surge arresters, a power-line carrier transmitter/receiver, and all associated substation hardware for interconnection with the national and regional grids.

3. PROJECT ASSESSMENT

The Project is in a relatively late stage of development, and there is sufficient information to conclude that the proposal has substantial merit. A great deal of work has already been performed by ICE characterizing the Project's geology, hydrology, and economics.

The hydrologic studies benefit from the location of a long-term flow gauging station near the proposed dam site, from extensive hydrometeorological records throughout the drainage basin, and from the application of sophisticated hydrologic modeling algorithms in recent, prior studies.

ICE has also completed comprehensive geotechnical studies, and as a result the Project has materially less construction uncertainty than a typical development-stage hydro project. However, further geophysical and geotechnical studies to confirm and expand on the results of the prior investigations will be necessary to characterize Project construction costs to within a range of ±10%. Support for those studies is the subject of a portion of this DS.

ICE has undertaken extensive economic studies of the Project, which have been supported by both the hydrologic modeling noted above and by application of a complex electric system production model. Further economic and financial studies will be necessary to refine the results of the prior studies, to identify preferred financing structures for the Project, and to evaluate competing offers from prospective project partners. Support for those studies is also the subject of a portion of this DS.

In our investigations on whether the Project is likely to be economically justified, we concluded that Project revenues appear to have been conservatively estimated; in particular, the Project's ability to store flows and release them on a peaking basis should substantially enhance its value during the dry season and drought conditions. We believe the associated benefits will outweigh the burden of market pressure during periods of hydrologic excess. Moreover, the dynamics that underpin the current high cost of generating power in the region are unlikely to change with the implementation of market systems, particularly as global fossil fuel prices appear to be stabilizing at relatively high levels. Accordingly, we believe that a decline in the real price of energy is unlikely, and it appears that this Project will be viable, even in a flat price environment.

Consultant investigated the technical and economic viability of the Project as well as the financial², legal, regulatory and institutional considerations affecting independent power projects in Costa Rica. Consultant has determined that the Project meets the USTDA funding requirements. The primary considerations other than likely economic viability that make the Project an attractive candidate for USTDA Grant assistance are as follows.

Developmental Impact

The goal of the Government of Costa Rica (GOCR) and its national electric utility, ICE, is the reliable and economic supply of power to the Costa Rican grid. This Project would unquestionably serve that purpose, and provide direct and important benefits to the people of Costa Rica. In addition, the Project is located in an area that is generally impoverished and not well-served by the electric system, and the Project would support economic development and the provision of reliable service to the local community, as well as the rest of the nation and the Central American region. It would also facilitate the evolution of regional markets for power: the offtake capability of the soon-to-be-inaugurated SIEPAC grid will allow the benefits of the project to be realized at a regional level. It is hoped that the SIEPAC structure will also permit binding financial commitments from consumers in the region that will help in the realization of the Project itself, and in any event it is the sponsor's intention to sell excess available energy throughout the Central American region via the SIEPAC grid.

Export Potential

The Project is large in scale, with a total engineering and construction cost of more than \$900 million, and US vendors should be competitive for approximately \$300 of that amount.

Degree of Geologic and Hydrologic Certainty

The sponsors have performed a substantial amount of study work to reduce the risks normally associated with hydro development. The geology and hydrology at the site have been studied in adequate detail to conclude that the Project justifies further, more detailed investigations, and the hydrology in particular has been very well characterized for a project at this stage.

Additional attractive attributes of the project are as follows.

- By the time this Project goes into operation, Costa Rica will be part of an integrated Central American grid. The region is already suffering from a power deficit during moderate drought conditions, and will need significant amounts of new power to supply the growing needs of the region. Data indicate that the hydrology at the Project site is favorable, and the proposed Project has a good capacity factor and proportionately high firm energy production. Moreover, the addition of new capacity will facilitate the development of power markets at a regional level, with associated efficiencies and transparency.
- In general, the initial capital cost estimates (with interest during construction included) and the development budget appear to be comprehensive and credible (although uncertainty remains with regard to foundation rock conditions), and include the cost of necessary transmission works.

² In performing our evaluations of Project prospects, we have evaluated the Project using a conventional 70/30 debt/equity structure and assumed capital market conditions roughly the same as those currently prevailing, in order to assess a cost of capital for use in our preliminary financial evaluation. In general, the usual factors which lenders and capital market participants will look to in assessing Project and sub-investment grade country risk profiles are favorable.

- The capital cost estimates indicate a Project with a rather attractive capital cost. The Project has a projected all-in cost of almost \$1,500 per kW, which is relatively economic, and a construction only cost of \$1 million per MW, which is very competitive. The Project must be competitive with other new entrants in the Central American market, and the Project is at the lower end of the range where, given current fuel pricing and capital markets equilibrium, it should be competitive. Financing for a project with that level of installed cost should be possible during "windows" of unusually favorable conditions in the capital markets, such as are currently in place.
- There are limited environmental and social impacts associated with the inundation of reservoir areas.
- The Project appears well located from a transmission point of view. Consultant has reviewed available system maps and diagrams, and believes that the Project is unlikely to cause stability concerns and is unlikely to create load flow complications.

SECTION C

PROJECT SPONSOR'S CAPABILITIES AND COMMITMENT

The Project's sponsor, ICE, is an organization with strong capabilities in electric power planning, design and operation. It has the primary responsibility for the production, transmission and distribution, of electricity in Costa Rica. ICE has extensive experience and full expertise in the management of engineering, environmental and economic studies, and in the construction and operation of hydroelectric power projects. It unquestionably has the institutional capacity to undertake all of its commitments in connection with this project. It also unquestionably has the motivation to do so; there is strong interest on the part of both the Government of Costa Rica and ICE to move forward with this Project, given the recent cancellation of a large geothermal project in Costa Rica, growth in annual energy demand of approximately 6%, and recent shortages and power rationing throughout the country.

The only question relevant to ICE's capabilities is related to its financial ability to sponsor the entire project, the output from which substantially exceeds Costa Rica's near-term needs. That is uncertain; it is likely that some sort of public-private partnership, with contribution of private capital to construction funding, will be required. That issue will be addressed by one of the two studies for which USTDA support has been requested.

SECTION D

IMPLEMENTATION FINANCING

The projected level of investment for this Project is approximately \$930,000,000. At this stage, it is not possible to predict the likely financing structure that will ultimately be used by the Project. That structure will be dependent on the ownership / partnership / concession structure ultimately decided on by ICE and the Government, and of course by conditions in the capital markets at the time of financing; recommendations on preferred financing structures are the subject of one of the studies for which USTDA funding has been requested.

The principal funding agency for the Project studies is expected to be the IDB, through the Forum for the Financing of Technical Cooperation for Initiatives for Regional Infrastructure Integration (FIRII), with the expectation that IDB will finance a significant part of full project implementation. Consultant has confirmed that financing is likely to be available from the IDB and other sources, and has made an assessment of ICE's intentions for the implementation financing.

It is also likely that U.S. Overseas Private Investment Corporation (OPIC) and/or the U.S. Export-Import Bank (Ex-Im) will be involved in project financing if U.S. vendors are successful. OPIC provides medium to long-term financing in the form of investment guarantees and direct loans to projects with at least 25 percent U.S. investor equity. In addition, it offers political risk insurance that protects against expropriation, political violence and inconvertibility. Ex-Im also offers a wide range of guarantees, insurance and financing to U.S. exporters. Machinery and other capital goods exports to Costa Rica may be financed at low rates and long terms through special credit lines offered by such export credit agencies.

The total cost of the remaining FS work is valued at \$4,041,000. The IDB is contributing \$1.5 million, ICE is contributing \$664,000 of in-kind services, and CABEL is contributing approximately \$1.38 million, to carry out portions of the basic design and technical specifications, perform socio-environmental analysis and environmental impact studies, and to establish a panel of experts and a body for inter-institutional coordination. ICE has requested that USTDA fund the remaining \$500,000 to identify preferred practicable financial structures and to carry out supplemental geotechnical studies.

SECTION E

U.S. EXPORT POTENTIAL

In the past, U.S. vendors of hydroelectric equipment have had at best limited success in penetrating foreign markets. However, the recent decline in the US Dollar should greatly enhance prospects for US exports.

The estimated construction cost for the Project is as follows:

	US \$
Mobilization & Infrastructure	10,000,000
Environmental Protection and Social Budget	84,120,000
Dam, Diversion and Appurtenances	247,600,000
Conveyance Facilities	133,510,000
Powerhouse and Discharge	73,010,000
Electromechanical Equipment	213,270,000
TOTAL DIRECT COST	761,510,000
Contingency	93,700,000
Project Administrative and Engineering Interest during Construction	76,150,000
TOTAL INDIRECT COST	169,850,000
<u>TOTAL ESTIMATED COST</u>	<u>\$931,360,000</u>

The US export potential for the Project is approximately U.S. \$300 million. This total includes all of the electromechanical equipment (estimated at approximately \$91 million of mechanical equipment, \$82 million of powerhouse electrical equipment, and \$40 million of transmission facilities), a portion of the conveyance facilities, and a portion of engineering and construction management services.

Costa Rica does not have any industrial facilities that produce electrical power generation equipment for large installations such as this Project. The physical characteristics of this Project are such that Francis-type turbines are likely to be used. There are at least two U.S. firms (American Hydro Corporation and Voith Hydro Inc.) that can be competitive for this equipment. The U.S. is also expected to be competitive in the areas of generator and transformer equipment, penstock steel, electrical and control systems, and engineering and construction services.

The potential equipment and services supplies for the Project and some of the potential U.S. suppliers are:

<u>Equipment / Service</u>	<u>U.S. Firms</u>
1. Hydroturbines	Voith Hydro American Hydro
2. Penstock Steel	Chicago Bridge & Iron McDermott Marine Corp.
3. Instruments & Controls	Foxboro Co. Bailey Controls (ABB) Emerson Process Management/Fisher-Rosemount
4. Electrical Systems and Substations	Westinghouse Electric General Electric Ideal Electric Co. Waukesha Electric Systems
5. Engineering Services & Construction Management	Montgomery Watson Harza Black & Veatch

SECTION F

FOREIGN COMPETITION AND MARKET ENTRY ISSUES

Most major foreign firms that compete in the global power generation market are currently represented in Costa Rica. European (Sulzer in Switzerland, Siemens-Voith in Germany, Alstom/ABB in France and Sweden), South American (Impsa in Argentina and Brazil), Japanese (Fuji, Mitsubishi) and Canadian (GE Canada/Kvaerner) firms are capable of supplying all major equipment and services for the Project³. Moreover, they can offer favorable credit support and other development incentives from their national governments.

³ Neither Siemens nor ABB makes hydroturbines. They make generators and heavy electrical equipment, which are designed and supplied in conjunction with hydroturbines made by Voith and Alstom respectively.

SECTION G

DEVELOPMENTAL IMPACT

This Project is expected to have a significant beneficial impact on the energy sector of Costa Rica and the Central American region. The infrastructure of the Costa Rican grid will be substantially augmented and strengthened by the investment in this Project, and Costa Rica will significantly enhance its ability to produce electricity inexpensively, reliably and with minimal environmental impact. As noted in Section B, the Project offers advantages that enhance its developmental impact: it is situated in one of the country's least developed areas and therefore offers both a cost-effective natural resource and the potential to catalyze socioeconomic growth in the southern part of the country.

Development of the Project would be consistent with the SIEPAC Central American Energy Integration and Development Plan, which is designed to reduce the burden on regional consumers of high oil prices, and to make the regional energy sector more sustainable, efficient and competitive. The plan includes actions in the short term aimed at cutting losses and reducing energy consumption; in the medium-term design to increase energy supply via renewable sources, including hydroelectric plants; and in the long term to promote changes in energy supplies such as wind and solar power projects, geothermal energy projects, bioenergy projects, large-scale hydroelectric projects, natural gas projects, etc.

In addition, the Project will support the goal of implementing market-oriented reforms regionally: increasing power supplies will enhance the potential for price efficiencies in the energy market, thus reducing costs generation and prices for the consumer and increasing price transparency. Energy produced by the Project will be deliverable to the SIEPAC grid. That should improve the regional market for power, because the Project will facilitate regional electricity trade and competitiveness. The Indicative Regional Generation Expansion Plan 2005 – 2019 prepared by the Central American Electrification Council's Regional Indicative Planning Working Group identifies capital and operations-related savings to the regional electric market of US \$157 million to US\$170 million, with a drop in long-term marginal costs of between US\$1.8/megawatt hour to US\$3.5/megawatt hour as a result of the development of large-scale hydroelectric projects.

This Project is also compatible with USTDA goals and is supported by the US Embassy in San José. Development of alternative energy sources is a priority for Central America, as well as one of the sectors specified in USTDA's CAFTA-DR Trade Integration Initiative. Furthermore, this Project is consistent with USTDA's commitment to the goals of the Mesoamerican Energy Integration Program (PIEM) in the context of Plan Puebla Panama, and with US Government interagency efforts to promote energy security in Central America through investments in alternative and renewable energy sources. It also supports the commitment to enhance investments in alternative and renewable energy sources, and the Commitment of the IDB and USTDA to work together to promote economic sustainability in the region.

SECTION H

IMPACT ON THE ENVIRONMENT

The Project will create a reservoir that will result in flooding of an area of approximately 5,500 hectares. The development of the Project would require resettlement of the population living in the affected areas, and the reach of the river immediately downstream of the dam will be bypassed by all but minimum environmental flows.

ICE has redesigned the Project from its original configuration to reduce potential environmental and social impacts. The area flooded by the reservoir was reduced from 10,700 hectares in the original plan to 5,500; the flooding of indigenous territory was reduced from 3559 hectares to 726 hectares; the indigenous population for which relocation was required was reduced from 839 to 0, and non-indigenous relocation was reduced from 1104 to 1068. IDB and CABEL will, moreover, fund economic and social impact studies⁴ that will include an analysis of the Project's impact on the population, including indigenous peoples, and the Project will be required to meet the IDB's policy guidelines with regard to resettlement and social issues. The Consultant has reviewed the anticipated social impact of the project as part of their funding recommendation to USTDA.

Hydroelectric projects offer society a number of environmental benefits when compared to fossil fuel plants. The principal benefit is that the use of hydroelectric resources will displace fossil fuels, thereby reducing pollution and global warming. However, the benefits also have some associated costs. There are three principal drawbacks of hydro. The first is disruption of ecosystems and human social systems which are located on land inundated by water impoundments (although periodic inundation of downstream areas due to uncontrolled floods is also reduced, thus reducing social system disruptions in the reaches below the impoundment). This is likely to be the most serious environmental concern associated with this Project, because of the extent of the inundation. The second is the impact on biota downriver from alterations in the quantity and quality of natural flow. This impact is particularly pronounced in the reach of the river which is bypassed by the Project's conveyance structures. In addition to the concerns associated with the bypass reach, concerns about environmental impact downstream of the main discharge structure must be addressed. The temperature, dissolved oxygen, pH, and other physico-chemical characteristics downstream of the plant discharge are also necessarily altered by the existence of the dam. A third drawback is the barrier that dams can pose to migrating fish species, although that has not been identified as a concern for this project. There is also a fourth, less widely adopted concern, that the aesthetic benefits of free-flowing rivers outweigh whatever social and aesthetic benefits might be associated with impoundments.

The Project has a significant impoundment, so the planned detailed environmental and social impact study will obviously be necessary to draw a final conclusion on the Project's net environmental impact. While there are certainly some environmental detriments associated with the Project, there are also environmental benefits that should be taken into account. At this stage it is reasonable to expect that the development of the Project would have a net beneficial effect on overall environmental quality for Costa Rica by the use of renewable resources for electric energy generation, and fostering economic growth generally. Adverse impacts will presumably be minimized as a result of conditions imposed on the Project by the IDB or other international development institutions involved in financing the Project, and by jurisdictional agencies in Costa Rica.

⁴ The studies and tasks to be performed will include a Comprehensive Environmental Impact Assessment, Socioenvironmental Studies, an Environmental Impact Assessment of the transmission civil works associated with the Project, establishing a panel of environmental experts, and establishing an interagency coordinating body.

SECTION I

IMPACT ON U.S. LABOR

Consultant has concluded that the impact on U.S. labor from the Project would be positive. The output of the Project would be exclusively electricity, which can be neither stored nor transported outside of the Central American integrated grid. The Project will provide badly needed electrical energy to support economic growth in Costa Rica, but the primary prospective impact of the Project on the US would be the enhancement of production levels by U.S. firms and importation into Costa Rica of capital goods.

Consultant has reviewed the scope of activities proposed for the Project and believes that it does not violate any of the legislative prohibitions on the use of Foreign Assistance Funds as specified in Public Law No. 103-306, 108 Stat. 1608 regarding U.S. Labor, export markets and other issues as applicable to the Project.

TERMS OF REFERENCE

**CONSULTING SERVICES FOR
THE SELECTION AND DESIGN OF THE
FINANCING STRUCTURE FOR THE
EL DIQUÍS HYDROELECTRIC PROJECT**

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1. Executive Summary

ICE-USTDA: Consulting services for the selection and design of the preferred financing structure for the El Diquis Hydroelectric Project				
Budget	BID	USTDA	ICE	TOTAL
	-	USD\$200,000		USD\$200,000
General Purpose	Assist ICE in a comprehensive analysis of financial viability of the El Diquis Hydroelectric Project (the "Project") and the selection and design of a preferred financing structure for the Project, taking into consideration (1) all relevant technical, economic and financial issues as well as relevant social, legal, political, fiscal and organizational factors and (2) the likely availability and conditions of funding for the Project from a variety of sources in the domestic and international capital markets.			
Specific Objectives	<p>Create a multi-criteria analytical model which will allow the comparison and evaluation of various possible financing structures, including explicit presentation and consideration of underlying assumptions and of a variety of risk allocation alternatives for each such structure. Establish and validate a decision model to select a recommendation on the preferred financing structure based on the analytical model, and submit the recommendation and supporting documentation to ICE for decision.</p> <p>Guide the ICE professionals in a review and analysis of the conditions of both Costa Rican and international capital markets (e.g., sovereign debt credit analysis and analysis of risk spreads of similar issues) to define the parameters of the principal variables of the financial model.</p> <p>Upon determination by ICE of the preferred financing structure (which will occur not more than three months from the date of Contractor's recommendation), develop and submit a work plan to implement that structure.</p> <p>Prepare all necessary or appropriate documentation to implement the preferred structure, in collaboration with ICE.</p> <p>Prepare, in collaboration with ICE, a description of alternative mechanisms and guidelines for announcement and publication of participation opportunities and solicitation of equity participants in the preferred structure.</p>			
Scope	<p>The work is to be performed in two phases. In all aspects of the work, the Contractor will take into consideration, in addition to relevant technical, economic and financial factors, all legal, political and fiscal issues affecting the Project in particular and the Costa Rican electric industry in general.</p> <p>In Phase 1, the Contractor will review, and supplement as necessary, all available information on the Project. Contractor will take into consideration the range of financing structures already under consideration by ICE (set forth in the 2005 INGETECH study <i>Estudio y análisis del MEAC y del entorno financiero</i>) as well as all other structures deemed worthy of consideration by Contractor. Contractor will take into consideration international experience with the financing of hydroelectric and other infrastructure projects, in particular those projects based on public-private partnership models.</p> <p>The Contractor multi-criteria analytical model will include explicit risk allocation options that will support the ranking of alternatives and identification of a recommended financing structure. To the extent that limitations on implementation of any viable scheme would result from legal or institutional constraints (including norms and requirements of multilateral and bilateral financing institutions), those constraints will be clearly identified and remedies suggested.</p> <p>Two reports will be prepared in Phase 1: the first report will include Chapters describing the results of Tasks 2, 3, and 4; the second will describe the results of Tasks 1, 5, 6, and 7. A third report, for Phase 2, will describe the results of Tasks 9, 10 and 11. Drafts of each Chapter will be submitted for review and comment by ICE prior to compilation of the corresponding report.</p> <p>In Phase 2, after ICE has informed Contractor which financing structure it chooses to pursue, Contractor will undertake detailed planning for the financing process, including: (1) preparation of a description of alternative mechanisms and guidelines for a solicitation for equity participants in the preferred structure, including criteria and methodology for evaluation</p>			

	of financing proposals; (2) preparation of complete drafts of all necessary or appropriate documentation; and (3) identification and preliminary discussions with, potential sources of equity and institutional financing.
Activities	Analyze internal Costa Rican and external conditions relevant to the financing of projects such as El Diquís. Design a multi-criteria analytical model and recommend a financial structure that maximizes the value and financeability of the project while integrating social, technical, financial, legal and organizational factors that affect the Project. Prepare complete drafts of all necessary or appropriate documentation, for example Power Purchase/Lease Agreements, Implementation Agreements, Guarantees and Counter-Guarantees that may be associated with the preferred financing structure, and proposed a work plan for implementation of that structure.
Work Product	Draft Chapters on Tasks 1 through 11 for inclusion in Reports 1 and 2/Phase 1 Report and Phase 2 Report. Draft and Final Report 1 (Phase 1) Draft and Final Report 2 (Phase 1) Final Phase 1 Report Final Phase 2 Report Preparation of complete drafts of all necessary or appropriate documentation, such as Power Purchase/Lease Agreements, Implementation Agreements, Guarantees and Counter-Guarantees that may be associated with the preferred financing structure. Preparation of a work plan for implementation of the preferred financing structure.
Term	12 months
Observations on the Scope	Includes advisory services as well as collaboration with ICE personnel.
Observations on the Term	Includes financial engineering as well as advisory services to ICE.
Technical Comments	The Contractor must supply personnel, satisfactory to ICE in ICE's sole discretion, who meet the requirements set forth below.

2. Background

In February of 2004 the Instituto Costarricense de Electricidad (ICE) awarded contract CSL-01-03 "Contratación de servicios de consultoría para el estudio de factibilidad del Proyecto Hidroeléctrico Boruca" to the Colombian consulting firm INGETEC S.A. INGENIEROS CONSULTORES, with the purpose of evaluating several alternative configurations for a large dam, reservoir and hydroelectric project on the Grande de Térraba River, selecting a preferred construction alternative, and completing the associated feasibility study.

In November of 2005 the Contractors delivered to ICE the Final Report for the Feasibility Study. One of the studies prepared as part of the Feasibility Study is the report "*Estudio y análisis del MEAC¹ y del entorno financiero*", which integrated all available information with the results of the studies and identified a number of potentially viable structures by which the Project might be financed. The Project as it was initially conceived was both larger in scope and more expensive (on a unit-price basis) than the revised, scaled-down version that was developed by ICE and its consultants over the 2004 - 2005 timeframe. The revised plan, for a Project of approximately 630 MW, is called the El Diquís hydroelectric project (Project).

¹ Mercado Eléctrico del Área Centroamericana

That Project, which is the subject of this DS, has two principal benefits compared to the earlier plan: the social impacts and environmental impacts have been greatly reduced; and, the unit costs of the Project have been reduced by roughly 25% (from approximately \$2 million per installed megawatt to \$1.5 million per installed megawatt), making the revised Project substantially more financeable than the earlier version. The construction cost of the Project (without financing charges) is very attractive at \$1 million per installed megawatt. However, the construction period of 8 years results in relatively high finance costs during construction, even with the current low cost of capital prevailing in the international capital markets.

The Project output would exceed the incremental needs of the Costa Rican electric system in the early years of Project operation. Financing the Project using conventional structures, and on the basis of domestic demand exclusively, has the potential to place undue burden on the financial resources of ICE and the Government. However, the Central American region has established a market and mechanism for cross-border electricity exchanges, and the transfer capabilities of the grid will be substantially enhanced by the completion of the initial stages of the Sistema de Interconexión Eléctrica de Países de América Central (SIEPAC). The offtake capability of the SIEPAC grid should allow the benefits of the project to be realized at a regional level. It is expected that the SIEPAC structure will also permit binding financial commitments from consumers in the region to support the financing of the Project.

In January of 2006 the Subgerencia del Sector Electricidad presented an official request to the Inter-American Development Bank (IADB) to obtain funding for technical cooperation to support financial engineering studies and other supplementary studies to complete the feasibility studies for the Project. Because the amount requested exceed the resources available, ICE and IADB requested the support of USTDA and CABEI to complete the financing of the activities initially requested from the IADB.

IADB granted technical assistance to ICE, principally to fund environmental studies, and USTDA is considering funding to support two additional studies that will be required to complete the Feasibility Study process for the Project. One of those studies, which is designed to identify preferred financing structures for the Project, is the subject of these Terms of Reference.

3. Objective of this Feasibility Study and Description of Tasks

The objective of this feasibility study (FS) is to assist ICE in a comprehensive analysis of financial viability of the Project and the selection and design of a preferred financing structure for the Project, taking into consideration (1) all relevant technical, economic and financial issues as well as relevant social, legal, political, fiscal and organizational factors, and (2) the likely availability and conditions of funding for the Project from a variety of sources in the domestic and international capital markets. The work is to be performed in two phases.

In Phase 1, the Contractor will review, and supplement as necessary, all available information on the Project. The Contractor will take into consideration the range of financing structures already under consideration by ICE (set forth in the *Estudio y análisis del MEAC y del entorno financiero*) as well as all other structures deemed worthy of consideration by Contractor. The Contractor will take into consideration international experience with the financing of hydroelectric and other infrastructure projects, in particular those projects based on public-private partnership models.

The Contractor will create a multi-criteria analytical model that will include explicit risk allocation options to support a ranking of alternatives and identification of a recommended financing structure. To the extent that limitations on implementation of any viable scheme would result from legal or institutional constraints (including norms and requirements of multilateral and bilateral financing institutions), those constraints will be clearly identified and remedies suggested.

It should be noted that the model components—economic, financial, and risk-allocation—are not intended to fix an optimum Project physical configuration at any time during this FS. They are intended to establish a flexible framework that will allow ICE to evaluate alternative proposals at the time that equity and debt financing is arranged. The optimum physical configuration at that time will be determined by then-current construction costs and drawdown schedules, and then-current valuation of Project output; it is in any event not possible to make that determination with currently available information.

The Contractor will work in conjunction with ICE staff in all aspects of both Phases. Following is a detailed description of the Tasks to be performed.

Phase 1

Task 1: Market Analysis and Creation of Basic Economic Model

1.1 The Contractor shall consult with ICE to collect and update the assumptions and underlying data used in prior studies, including the INGETECH studies. The Contractor will require support from ICE or third parties to supply personnel and computer resources to generate stochastic hydrologic simulations, and to input the results of those simulations and other data to the SDDP system operation/dispatch model for valuation of energy and capacity delivered to the SIEPAC system. Those requirements are not included or priced in these Terms of Reference and will be provided pursuant to a separate contract.

1.2 The Contractor shall perform an analysis of both national and regional energy markets in sufficient depth to construct an estimated demand curve. The Contractor shall create an Excel-based spreadsheet with sufficient detail that basic project parameters can be modeled and modified, and sensitivity analyses run, across the full range of possible project configurations. In particular, the model shall allow for full flexibility in modifying the Project inputs, including but not limited to the following:

Minimum Bypass Flow (Caudal Ecológico)
Design Flow
Net Effective Head
Turbine-Generator Number, Unit Size and Efficiency Curves
Construction Cost (Not Including Interest During Construction) by Major Project Element and Total
Construction Drawdown Schedule
Time for Reservoir Initial Fill
Annual Energy Production
Annual Capacity Revenues
Annual Energy Revenues
Annual Operations Costs
Annual Maintenance Costs

Deliverable: 10 printed and bound copies of a Draft Chapter on the results of Task 1 and 10 copies in electronic form recorded on CD for review and comment, including the basic economic model in spreadsheet form.

Task 2: Investigate Potential Sources of Debt

- 2.1 The Contractor shall review the availability of, the applicability of, and the terms and conditions associated with, debt raised internally on the Costa Rican debt markets, with particular attention to the requirements and restrictions associated with lending from pension funds.
- 2.2 The Contractor shall review the availability, the applicability and the terms and conditions associated with debt raised in international capital markets, with particular attention to the likely spreads available, and costs of issuance incurred, when raising limited-recourse debt by means of Regulation D and Rule 144 A exemptions in US debt markets and any similar mechanisms that may be available in non-US securities markets.
- 2.3 The Contractor shall review the availability, the applicability and the terms and conditions associated with commercial bank debt raised in international capital markets.
- 2.4 The Contractor shall review the availability, the applicability and the terms and conditions for debt available from international finance institutions (IFIs) such as International Finance Corporation (IFC), Multilateral Investment Guarantee Agency (MIGA), Inter-American Investment Corporation (IIC), European Investment Bank (EIB), Nordic Investment Bank (NIB) and Nordic Development Fund (NDF) and bilateral DFIs such as Overseas Private Investment Corporation (OPIC), Commonwealth Development Corporation (CDC), Japan Bank for International Cooperation (JBIC), Deutsche Investitions and Entwicklungsgesellschaft mbH (DEG), Norfund and Société de Promotion et de Participation pour la Coopération Economique (Proparco), and export credit agencies (ECAs) such as the Export-Import Bank of the US (Ex-Im), Nippon Export and Investment Insurance (NEXI), Swiss Export Risk Insurance (SERV), Garanti-Instituttet For Eksportkredit (GIEK) and Euler Hermes.

Task 3: Investigate Sources of Credit and Credit Enhancement

The Contractor shall identify and evaluate all prospective purchasers of Project output/sources of credit that might be relevant to success of the Project. The Project's credit ultimately rests on the ability and willingness of the consumers served by the Costa Rican and SIEPAC system to purchase the Project's output. Those consumers might be represented, in countries with vertically integrated monopolies, by a "single buyer" such as ICE, in turn perhaps supported by the full faith and credit of the host government or by a mechanism to sequester domestic or external electric sales revenues. Alternatively-- in restructured electric systems-- the consumers might be represented by distribution companies or market agents, or themselves be major consumers, each with distinct creditworthiness.

Task 3.1 *Costa Rica Sovereign Debt Analyses*

The Contractor shall carry out sovereign debt credit analysis for Costa Rica. The analysis shall include, at a minimum, an analysis of the following ratios, as well as the median ratios for higher quality speculative-grade (Ba/BB) and lower quality investment-grade (Baa/BBB) sovereign credits.

Factors that relate to a country's long-term ability to pay its debt:

- *GDP per capita*
- *Real GDP growth rate*
- *Fiscal balance as a percentage of GDP*
- *Current account balance as a percentage of GDP*
- *Debt-to-GDP ratio*
- *External Debt to current account receipts ratio*

Factors that relate to a country's short-term ability to pay its debt:

- *International reserves as a percentage of GDP*
- *Debt-service-to-GDP ratio*
- *Debt-service to current account receipts ratio*
- *Sum of exports and imports divided by the GDP.*
- *Inflation rate.*

The Contractor shall recalculate these ratios under a variety of assumptions, ranging from all Project debt issued/guaranteed by the Costa Rican government to no debt issued by the government--the only government involvement being a guarantee of convertibility. The Contractor shall compare the recalculated ratios with the median ratios for high-quality speculative grade (Ba/BB rated) sovereign debt, and estimate the likely impact on Costa Rica sovereign credit.

Task 3.2 *Regional Sovereign Debt Analyses*

The Contractor shall carry out sovereign debt credit analysis for each SIEPAC country that has not already devolved retail electricity supply to market agents.² The analysis shall include, at a minimum, an analysis of the following ratios for each such country, as well as the median ratios for higher quality speculative-grade (Ba/BB) and lower quality investment-grade (Baa/BBB) sovereign credits.

Factors that relate to a country's long-term ability to pay its debt:

- *GDP per capita*
- *Real GDP growth rate*
- *Fiscal balance as a percentage of GDP*
- *Current account balance as a percentage of GDP*
- *Debt-to-GDP ratio*
- *External Debt to current account receipts ratio*

Factors that relate to a country's short-term ability to pay its debt:

- *International reserves as a percentage of GDP*
- *Debt-service-to-GDP ratio*
- *Debt-service to current account receipts ratio*
- *Sum of exports and imports divided by the GDP.*
- *Inflation rate.*

Task 3.3 *Investigate Potential Credit Enhancement Mechanisms*

3.3.1 The Contractor shall identify and investigate potential credit enhancement mechanisms that reduce the risk of nonpayment of debt obligations, extend the due dates of principal or interest repayments and extend the average life of the debt, or enhance debt service coverage ratios for periods which would otherwise serve constrain Project leverage.

3.3.2 The Contractor shall investigate the practicability of creating enforceable regulatory commitments in which funds derived from Costa Rican (or external) electricity consumers are held in escrow or trust for the benefit of debtholders and/or equity participants in the Project. The Contractor shall evaluate the effect on this mechanism of leasing/trust structures already in place for the debt of several Costa Rican power projects, and shall consider the possibility of establishing a leasing/trust structure for distinct portions of the Project.

² Even if they have relatively poor credit ratings, national utilities that are participants in the SIEPAC grid may be the best candidates for the long-term commitments necessary to support limited-recourse financing of the Project; it is typical of systems that have adopted market mechanisms that forward pricing exhibits significant backwardation (i.e., long-term prices are below current prices) because there is very little demand for futures products that extend beyond the term for which current customers are committed to their supplier.

3.3.3 For those SIEPAC countries that have devolved the supply of retail electricity to market agents, the Contractor shall perform an assessment of the creditworthiness of public sector distribution companies; privatized or partially privatized distribution companies; major consumers other than distribution companies; and electricity trading companies having any material market share.

3.3.4 The Contractor shall assess the potential for complementarity of the Project with other SIEPAC hydroelectric projects (including, but not limited to Chixoy in Guatemala, and Cerron Grande and Arenal in El Salvador) particularly those located in regions with countercyclical hydrology. The Contractor shall consider and make a recommendation on implementation of contractual mechanisms that would afford contracting parties benefits such as those provided under Brazil's regulatory structure to increase firm energy commitments and effectively reduce hydrological risk.

3.3.5 The Contractor shall assess the availability, the applicability and the terms and conditions for credit support or enhancement mechanisms available from IFIs, including IBRD/IFC, IDB/IIC, MIGA, CAF, BCIE, EIB, NIB and NDF, bilateral DFIs such as OPIC, EDC, CDC, JBIC, DEG/KfW, Norfund and Proparco, and ECAs such as Ex-Im, NEXI, SERV, GIEK and Euler Hermes. In particular, the Contractor shall review the availability, applicability and the terms and conditions associated with partial risk guarantees and partial credit guarantees offered by the IBRD and the IDB and the prospects for using these mechanisms to extend the average life of debt sourced from institutional and commercial lenders.

Task 4: Investigate Potential Sources of Equity and Risk-Sharing Entities

4.1 The Contractor shall investigate and characterize all potential sources of equity capital, both within Costa Rica and external to Costa Rica, including but not be limited to ICE, issuance of shares on the Costa Rican equity market, the IFC and the IIC; investment funds including, but not limited to the Scudder Latin Power Funds, the Tenaska Power Funds, ArcLight Power Funds, and the Globeleq Funds; strategic investors in the international power sector, including but not limited to AES, Endesa, Union Fenosa, Hydro-Quebec, and SUEZ-Tractebel; and project participants including equipment vendors, general contractors and civil works contractors.

4.2 The Contractor shall estimate the likely cost of investment funds, and conditions required by prospective equity participants, based on available information about prior investments by those participants, suitably adjusted for changes in market conditions.

4.3 In addition to sharing risks and rewards as equity participants in the Project, equipment suppliers and contractors can also participate in risk and reward sharing through their supply and construction contracts, providing a sort of "quasi-equity" to the extent that they accept or

share risks associated with the construction phase. The Contractor shall assess the practicability and desirability of such quasi-equity.³

4.4 The Contractor shall develop a set of risk allocation matrices that illustrate alternative risksharing structures, and shall estimate the cost of premiums associated with the assignment of risk to the various parties involved in those structures. The risks that to be specifically identified, allocated and priced shall include, without limitation:

Design/Engineering Risk

1. Cost Overruns
2. Scope Changes
3. Changes in Project Assumptions
4. Proposal Costs (for prospective project participants)

Construction Period Risk

1. Enforceability of Contracts
2. Construction Cost Overruns
3. Scope Changes
4. Unforeseen Weather Conditions
5. Unforeseen Subsurface Conditions
6. Delays Due to Other Reasons
7. Variations in Interest Rate
8. Variations in Exchange Rate

Project Performance Risk

1. Equipment Deficiencies/ Enforceability of Contracts
2. Design deficiencies/ Enforceability of Contracts
3. Interconnection/Grid Limitations
4. Variations in Interest Rate
5. Variations in Exchange Rate
6. Take or Pay/Take and Pay

Environmental Risk

1. Delay in Issuance or Change in Permits
2. Acquisition of Necessary Rights
3. Social/Resettlement Issues

Hydrologic Risk

1. Short-Term Deficits
2. Long-Term Deficits
3. Fundamental Changes in Basin Hydrology
4. Flood Damage during Construction

³ Efficient risksharing requires that risk be allocated to the party best able to manage/control that risk. The "water-to-wire" guarantee package that is typically available from hydroelectric equipment vendors is a good example of sensible risk allocation. On the other hand, it is rarely cost-effective to buy "insurance" from a contractor to cover risks that are beyond that contractor's control, for example the risk of unforeseen subsurface conditions or extraordinary flooding during the construction phase.

5. Flood Damage during Operation
6. Take or Pay/Take and Pay

Value of Output

1. Short-Term Variations in Fuel Markets/Short-Term Nodal Prices
2. Long-Term Variations in Fuel Markets/Long-Term Nodal Prices
3. Variations in Equipment/Construction Costs and "Cost of New Entry"
4. Variations in Capital Markets/Cost of New Entry
5. Variations in Transmission Constraint Locations/Congestion Values/"Basis Spread"
6. Variations in Demand Growth/Supply-Demand Equilibrium Point
7. Take or Pay/Take and Pay

Force Majeure

1. Payment Requirements, If Any: Interest Only/Full Amortization/Return to Equity
2. Cost to Reconstruct/Refurbish
3. Business Interruption Coverage through Insurance, Cost of Premiums/Risk of Delayed Payout

Political/Regulatory

1. Obligations of Costa Rican Offtakers/Guarantors (this shall specifically include addressing the risk of regulatory/legal uncertainties and denial of cost pass-through to consumers)
2. Obligations of External Offtakers/Guarantors, and Enforceability of Power Purchase Agreements
3. Unavailability of Funds for Dollar Conversion
4. Tax Regime/Exemptions and Changes to Tax Law
5. Changes to Other Laws Affecting the Project

Task 5: Preparation of Draft Report

5.1 Upon completion of Tasks 2, 3 and 4 the Contractor shall present (both written and oral) a Draft Report 1 (containing Chapters describing the results of Tasks 2, 3 and 4) to ICE for comment.

5.2 The Contractor shall discuss the Draft Report 1 with ICE.

5.3 The Contractor shall incorporate comments by ICE into a final Draft Report of Tasks 2, 3, and 4.

Deliverable: 10 printed and bound copies of Draft Chapters on the results of Tasks 2, 3 and 4, and 10 copies of each in electronic form recorded on CD, for review and comment.

Task 6: Creation of Financial Model

6.1 Using the economic model developed in Task 1 as a base, the Contractor shall supplement that model with an "overlay" financing structure having sufficient detail that basic project finance parameters can be modeled and modified, and sensitivity analyses run, across the full range of possible project finance configurations. In particular, the model shall allow for full flexibility in modifying the following Project financial inputs:

- Offtake commitments from multiple parties, each with a unique creditworthiness, and with term and with pricing that varies with time and by party;
- Debt sourced from multiple parties, with term and pricing that varies with time and by party (including different "grace periods" for each party), and with priority of payment by party or by group of parties;
- Equity and subordinated debt sourced from multiple parties, with term and pricing that varies with time and by party, and with priority of payment by party or by group of parties.

6.2 The Contractor shall prepare an Excel spreadsheet showing all financial market-related inputs explicitly on the "Inputs" page and shall ensure that they can easily be modified to reflect future changes in market rates. All such inputs shall be disaggregated into published, market-derived data and market-derived or assumed spreads expected to be charged by capital sources for providing Project-specific capital. In addition, the Excel-based financial model shall include "toggle switches" or other mechanism to readily assign/shift risks and assumed risk premiums among the equity, sub debt and supplier/contractor participants, provided that a mechanism is included to assure that all relevant risks have been identified, priced and allocated.

Task 7: Development Impact Analysis

For the benefit of those interested in the Project, the Contractor shall assess the development benefits associated with the Project. The Contractor shall specifically focus on examples from the criteria below to determine which are likely to result from the Project implementation and shall develop a methodology for assessing the impact over time. Where possible, the Contractor shall make quantitative estimates although it is recognized that qualitative measures are often easier to predict.

Infrastructure: Improvement in and security of physical, financial, or social infrastructures in Costa Rica

Technology Transfer & Productivity Improvements: Introduction of advanced technologies or licenses, and improvements of processes and/or systems that stimulate greater economic productivity or allow more efficient use of resources.

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

Market-oriented Reforms: Encouraging more transparent regulatory systems and institutions, promotion of greater competition, lowering of non-tariff barriers to trade, strengthening of intellectual property rights, and modernization of international trade systems and regulations.

Task 8: Recommendation of Preferred Financial Structure

8.1 Using the risk allocation matrices developed in Task 4 and the financial model developed in Task 5, the Contractor shall model not less than three alternative financial structures and shall identify the conditions and circumstances under which each one might be preferred. The Contractor shall, in consultation with ICE, make explicit assumptions about (1) the various aspects of costs and revenues associated with the Project that it believes most likely project the future of those parameters for Costa Rica and SIEPAC and (2) all legal, institutional and social factors bearing in any material way on the availability or cost of financing for the Project.

8.2 The Contractor shall rank-order the alternative financial structures in accordance with likelihood of successful financing, and shall perform analysis of each alternative to determine the "stability" of model results for that alternative in case future reality does not conform to expectations.

Task 9: Preparation of Draft Report 2 and Phase 1 Final Report

The Contractor shall present (both written and oral) a Draft Report 2 (containing Chapters describing the results of Tasks 6, 7 and 8) of Phase I to ICE for comment.

The Contractor shall discuss the Draft Report 2 with ICE.

The Contractor shall then prepare and deliver to ICE and USTDA a substantive and comprehensive final report of all work performed under Phase 1 of these Terms of Reference ("Phase 1 Final Report"). The Phase 1 Final Report shall be organized according to the above tasks, and shall include all topics required to be included in the draft chapters and draft reports previously provided to ICE. The Project Final Report shall be prepared in accordance with Clause I of Annex II of the Grant Agreement between USTDA and ICE, attached as Appendix B. It shall be prepared in English and Spanish.

The Contractor and ICE shall ensure that the public version of the Final Report contains no secure or confidential information.

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

ICE 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.

Deliverables: 10 printed and bound copies of Draft Chapters on the results of Tasks 6, 7 and 8, and 10 copies in electronic form recorded on CD, for review and comment, which shall comprise Draft Report 2; and, after incorporating responses to ICE comments to Chapters 1 through 8, one duly executed original and nine copies of the Phase 1 Final Report (Chapters 1 through 8), printed and bound, with 10 copies in electronic form recorded on CD.

ICE Decision on Preferred Structure

ICE shall have six months (180 calendar days) from the submission of the Final Report to make a selection of the preferred financing scheme from the options presented by Contractor in the Phase 1 Final Report. If ICE fails to notify Contractor of the preferred financing structure within the 180 Calendar Day period, the structure recommended by Contractor will be deemed the preferred structure and the Contractor shall proceed to draft all documentation necessary or appropriate for that model, and shall prepare planning and solicitation documents accordingly.

Phase 2

In Phase 2, after ICE has confirmed with Contractor which financing structure it chooses to pursue (or the default determination described in the foregoing paragraph has been made), the Contractor will, in close collaboration with ICE, undertake detailed planning and preparation for the financing process, including: (1) preparation of a description of alternative mechanisms and guidelines for a solicitation for equity participants in the preferred structure, including criteria and methodology for evaluation of financing proposals; (2) preparation of complete drafts of all necessary or appropriate documentation; and (3) identification of, and preliminary discussions with, potential sources of equity and institutional financing.

Task 10: Preparation of Solicitation Guidelines

The Contractor will, in collaboration with ICE, prepare a description of alternative mechanisms and guidelines for a solicitation for equity participants in the preferred structure, including criteria and methodology for evaluation of financing proposals.

Task 11: Discussions with Potential Financing Sources

The Contractor shall identify, and undertake preliminary discussions with, at least 4 potential sources of equity and institutional financing in order to determine the likely availability, tenor, rates, and terms and conditions of financing from those sources. The Contractor shall advise ICE reasonably in advance of, and ICE shall be given the opportunity to attend (or at its option participate by live video web conferencing or telephone in), all meetings with potential financing sources.

Task 12: Preparation of Forms of Agreement

The Contractor shall prepare complete drafts of all necessary or appropriate documentation for the proposed financing, which might include: a draft Equity Term Sheet and corresponding LLC Operating Agreement or equivalent shareholder agreement, a Draft Power Purchase Agreement for ICE/third-party purchasers and/or an ICE lease agreement, an Implementation Agreement, Debt Term Sheets, Government Counter-Guarantees.

Task 13: Preparation of Draft Phase 2 Report and Final Report

The Contractor shall present (both written and oral) a Draft Phase 2 Report (containing Chapters describing the results of Tasks 10, 11 and 12) to ICE for comment.

The Contractor shall discuss the Draft Report with ICE.

The Contractor shall then prepare and deliver to ICE and USTDA a substantive and comprehensive final report of all work performed under Phases 1 and 2 of these Terms of Reference ("Project Final Report"). The Project Final Report shall be organized according to the above tasks, and shall include all topics required to be included in the draft chapters previously provided to ICE. The Project Final Report shall be prepared in accordance with Clause I of Annex II of the Grant Agreement between USTDA and ICE, attached as Appendix B. It shall be prepared in English and Spanish.

The Contractor and ICE shall ensure that the public version of the Final Report contains no secure or confidential information.

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

ICE 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.

Deliverables: 10 printed and bound copies of Draft Chapters on the results of Tasks 10, 11, and 12 and 10 copies in electronic form recorded on CD for review, which shall comprise the Draft Phase 2 Report; and, after incorporating responses to ICE comments, one duly executed original and nine copies of the Final Report (Chapters 1 through 12), printed and bound, with 10 copies in electronic form recorded on CD.

4. Contractor Qualifications and Selection Procedures

The qualifications of the personnel proposed by Contractor will be weighted to take into consideration: a) academic background and qualifications; b) technical experience with similar projects as client or Contractor; and c) experience in financial structuring of similar projects. Complete facility with both conversational and written Spanish is required of all personnel unless express written waiver for specific individuals is applied for by Contractor and granted by ICE. The Contractor shall supply a list of individuals proposed for the work, each subject to approval by ICE, with evidence satisfactory to ICE, that they meet the following desired characteristics:

Academic Background and Qualifications

- Team-oriented, results-based.
- Academically Qualified.
- Facility in the Spanish Language
- Excellent communication skills and ability to delegate.
- Demonstrated understanding of the technical aspects of hydroelectric project design, engineering and construction and to integrate them with advice and recommendations related to financing structures for the Project.
- Organizational skills.

(20 points)

Experience

The Contractor must provide, for each individual proposed, evidence satisfactory to ICE (preferably letters of recommendation signed by current or former clients), demonstrating the qualifications of such individuals in the following areas:

- Advisory services in the fields of engineering, economics, administration, or finance in the electric power industry or other regulated industries.
- (40 points)
- Experience in the structuring of financing for infrastructure projects, preferably in Latin America, in areas such as:
 - Coordination with major international financial institutions.
 - Structuring of financing for electric generation projects, preferably hydroelectric, including limited-recourse financing.
 - Team leadership and reconciliation of both technical and financial considerations in decision-making.
 - Familiarity with fixed-income and equity markets on an international level, familiarity with the 144A market, and familiarity with sovereign debt analysis.
 - Familiarity with financial risk management instruments.
 - Studies and development of financing schemes for infrastructure projects.

- The publication of articles on the subject of financial engineering may also be submitted as evidence of expertise.

(40 points)

5. Obligations of the Contractor

The Contractor shall:

- Review and analyze the most current information available about the Project as of the date of mobilization, and incorporate whatever information becomes available during the performance of the work.
- Take note of national legislation in effect as well as the directions and observations issued by ICE that may be relevant to the proper performance of the studies.
- Draft and document any modifications or clarifications which may be required regarding the completed study, in accordance with ICE's requests.
- Throughout the performance of the work, maintain an open and direct communication with ICE, through the ICE Designated Representative.
- The Contractor is responsible for compliance with U.S. export licensing requirements, if applicable, in the performance of the Terms of Reference.

6. Requirements of the Reports

All Reports submitted to ICE shall comply with the following requirements:

- a) The metric system will be used for all calculations, quantity takeoffs, etc. The scaling used for the drawings will be consistent with the metric system and with accepted engineering practice.
- b) All text, figures, charts, graphs, drawings, etc. in Preliminary and Draft Reports will be in the Spanish language. The Project Final Report text, figures, charts, graphs, drawings, etc. will also be presented in the English language.
- c) All reports will be prepared in accordance with the instructions established by ICE unless otherwise agreed by both parties
- d) The stipulated number of printed and electronic copies of all reports shall be delivered to ICE, in the format of WORD for Windows (for text); the figures, maps, charts, tables, graphs, etc. will be in PowerPoint, Excel, AutoCAD v. 13, Idrisi, ARCINFO, ARCVIEW, and Project Manager.

- e) For the Final Project Report, 10 copies printed and bound and ten electronic copies recorded on CD will be delivered to USTDA contemporaneously with delivery to ICE at the following address:

US Trade and Development Agency
c/o Ms Kate Maloney
1000 Wilson Boulevard
Suite 1600
Arlington, VA 22209-3901

7. Term

It is expected that the services performed under Phase 1 of this contract can be completed within 4 months (90 working days or 120 calendar days), including the time required to draft reports and incorporate additions and clarifications which respond to ICE comments and suggestions. ICE will have three months (90 calendar days) to make a selection of the preferred financing scheme from the options presented by Contractor in the Final Project Report. If ICE fails to notify Contractor within 90 Calendar Days of the preferred financing structure, the structure recommended by Contractor will be deemed the preferred structure and Contractor shall proceed to draft all documentation necessary or appropriate for that model, and shall prepare planning and solicitation documents accordingly.

It is expected that the services performed under Phase 2 of this contract can be completed within 3 months (68 working days or 90 calendar days), including the time required to prepare (1) e.g, an Equity Term Sheet, LLC Operating Agreement or equivalent, a Draft Power Purchase Agreement, an Implementation Agreement, Debt Term Sheets, Government Counter-Guarantees, etc., as well as (2) a description of alternative mechanisms and guidelines for a solicitation for equity participants in the preferred structure, including criteria and methodology for evaluation of financing proposals and (3) preliminary discussions with potential sources of equity and institutional financing.

8. Obligations of ICE

ICE will:

- Provide Contractor with all information at its disposal for the performance of the contracted services and will perform its obligations as set forth in this contract.
- Make available to Contractor personnel, services and computer resources to generate stochastic hydrologic simulations and input the results to the SDDP system operation/dispatch/ production cost model for valuation of energy and capacity delivered to the SIEPAC system, as necessary to support the operation of the basic economic model and the financial model.

- Provide Contractor with the full-time services of two senior staff attorneys with specific expertise in the legal and institutional aspects of the electric power industry in Costa Rica, the source and scope of limitations imposed by the legal and institutional framework on ICE's actions, and the steps which would be required to modify those limitations. In addition, the attorneys should be capable of drafting proposed legislative modifications, contracts such as Power Purchase Agreements and Implementation Agreements, Trust Documents and Lease Agreements, with the collaboration and guidance of Consultant.
- Appoint a Technical Coordinator who will be in charge of the ICE technical team and who will be responsible for oversight of the quality of work and the referral to the ICE Designated Representative of technical concerns and technical information relevant to the execution of the work.
- Appoint an Administrative Coordinator who will serve as the ICE Designated Representative, who shall be responsible for oversight of the Contractor's work and who shall be the official and formal point of contact for the exchange of information with the Contractor's Designated Representative. Under no circumstances shall any contract modification or interpretation have any validity unless it is in writing and signed by the Designated Representatives of both parties.
- Work with the Contractor to support its technical and administrative management during performance of the work.

APPENDIX B

FEASIBILITY STUDY BUDGET

The estimated cost for the proposed tasks outlined in the TORs is U.S. \$500,000. Recommended Project budgets are shown in Tables B-1 and B-2.

APPENDIX B-1
 GEOTECHNICAL FEASIBILITY STUDY
 COST ESTIMATE

COST ESTIMATE	UNIT RATES(1)	TASK 1		TASK 2		TASK 3		TASK 4		TASK 5		TASK 6		
		UNITS	\$/UNIT	UNITS	COST	UNITS	COST	UNITS	COST	UNITS	COST	UNITS	COST	
LABOR - Senior Drilling Technician Assistant Drilling Technician Apprentice Drilling Technician Geophysicist Geotechnical Engineer	DAYS	\$178.25	5	\$891	200	\$35,650	65	\$11,586	0	\$0	0	\$0	10	\$1,783
	DAYS	\$118.25	10	\$1,163	200	\$23,250	30	\$3,488	0	\$0	0	\$0	25	\$2,908
	DAYS	\$54.25	20	\$1,085	510	\$27,688	50	\$2,713	0	\$0	0	\$0	0	\$0
	DAYS	\$620.00	5	\$3,100	0	\$0	0	\$0	50	\$31,000	8	\$4,960	5	\$3,100
Geotechnical Engineer	DAYS	\$620.00	5	\$3,100	5	\$3,100	5	\$3,100	0	\$0	0	\$0	5	\$3,100
SUBTOTAL - LABOR			45	\$9,339	915	\$98,688	190	\$20,886	50	\$31,000	8	\$4,960	45	\$10,889
OTHER DIRECT COSTS														
Travel and Equipment Transport	TRIPS	\$1,000.00	4	\$4,000	18	\$18,000	0	\$0	9	\$9,000	0	\$0	0	\$0
Hydrofracturing Equipment	TOT	\$30,000.00	0	\$0	1	\$30,000	0	\$0	0	\$0	0	\$0	0	\$0
Drilling Equipment and Supplies	TOT	\$21,000.00	0	\$0	1	\$21,000	0	\$0	0	\$0	0	\$0	0	\$0
Materials	TOT	\$44,230.00	0	\$0	1	\$44,230	0	\$0	0	\$0	0	\$0	0	\$0
SUBTOTAL - OTHER DIRECT				\$4,000		\$111,230		\$0		\$9,000		\$0		\$0
TOTAL				\$13,339		\$200,888		\$20,886		\$40,000		\$4,960		\$10,889

* Includes benefits estimated at 40% of Direct Labor

APPENDIX B-1
 GEOTECHNICAL FEASIBILITY STUDY
 COST ESTIMATE

COST ESTIMATE	TASK 7		TOTAL	
	Project			
	Final	Report	UNITS	COST
LABOR *	UNITS	COST	UNITS	COST
Senior Drilling Technician	10	\$1,783	290	\$51,693
Assistant Drilling Technician	25	\$2,906	280	\$33,713
Apprentice Drilling Technician	0	\$0	580	\$31,485
Geophysicist	5	\$3,100	73	\$45,260
Geotechnical Engineer	2	\$1,240	22	\$13,640
SUBTOTAL - LABOR	42	\$9,029	1,255	\$175,770
OTHER DIRECT COSTS				
Travel and Equipment Transport	0	\$0	29	\$29,000
Hydrifracuring Equipment	0	\$0	1	\$30,000
Drilling Equipment and Supplies	0	\$0	1	\$21,000
Materials	0	\$0	1	\$44,230
SUBTOTAL - OTHER DIRECT		\$0		\$124,230
TOTAL		\$9,029		\$300,000

APPENDIX B-2
FINANCIAL STRUCTURING FEASIBILITY STUDY
COST ESTIMATE

COST ESTIMATE		UNIT RATES(1)	TASK 1		TASK 2		TASK 3		TASKS 4 AND 5		TASK 6		TASK 7		TASK 8	
			Market Analysis and Creation of Basic Economic Model	Investigate Potential Sources of Debt	Investigate Sources of Credit and Credit Enhancement	Investigate Potential Equity/Risk-Sharing Sources, Report 1	Creation of Financial Model	Development Impact Analysis	Recommendation of Preferred Financial Structure							
LABOR	UNITS	\$/UNIT	UNITS	COST	UNITS	COST	UNITS	COST	UNITS	COST	UNITS	COST	UNITS	COST	UNITS	COST
Project Manager	DAYS	\$1,450.00	3	\$4,350	0.5	\$725	1.0	\$1,450	0.5	\$725	1	\$1,450	0	\$0	1.5	\$2,175
Senior Project Finance Specialist	DAYS	\$1,200.00	3	\$3,600	2	\$2,400	4	\$4,800	4	\$4,800	3	\$3,600	0	\$0	2	\$2,400
Mid-Level Project Finance Specialist	DAYS	\$1,000.00	4	\$4,000	2	\$2,000	8	\$8,000	9	\$9,000	3	\$3,000	2	\$2,000	2	\$2,000
Junior Project Finance Specialist	DAYS	\$800.00	4	\$3,200	9	\$7,200	0	\$0	5	\$4,000	12	\$9,600	4	\$3,200	10	\$8,000
Power Markets Specialist	DAYS	\$1,200.00	4	\$4,800	0	\$0	0	\$0	3	\$3,600	1	\$1,200	0	\$0	0	\$0
SUBTOTAL - LABOR			18	\$19,950	14	\$12,325	13	\$14,250	22	\$22,125	20	\$18,850	6	\$5,200	16	\$14,575
OTHER DIRECT COSTS																
Travel																
Airfare	TRIPS	\$1,200.00	3	\$3,600	2	\$2,400	2	\$2,400	2	\$2,400	0	\$0	0	\$0	0	\$0
Perdiem	DAYS	\$239.00	8	\$1,912	4	\$956	4	\$956	4	\$956	0	\$0	0	\$0	0	\$0
Auto / Taxi	DAYS	\$50.00	8	\$400	4	\$200	4	\$200	4	\$200	0	\$0	0	\$0	0	\$0
Misc. - Telephone, Fax, Courier, Etc.	EACH	\$150.00	3	\$450	2	\$300	1	\$150	1	\$150	3	\$450	1	\$150	2	\$300
SUBTOTAL - OTHER DIRECT				\$6,362		\$3,856		\$3,706		\$3,706		\$450		\$150		\$300
TOTAL				\$26,312		\$16,181		\$17,956		\$26,831		\$19,300		\$5,350		\$14,875

APPENDIX B-2
FINANCIAL STRUCTURING FEASIBILITY STUDY
COST ESTIMATE

COST ESTIMATE	TASK 9		TASK 10		TASK 11		TASK 12		TASK 13		TOTAL	
	Preparation of Draft Report 2 and Phase 1 Final Report	UNITS	Preparation of Solicitation Guidelines	COST	UNITS	Discussions with Potential Finance Sources	COST	Preparation of Forms of Agreement	UNITS	Preparation of Draft Phase 2 Report and Project Final Report	COST	UNITS
Project Manager	3	\$4,350	0.5	\$725	0	\$0	1	\$1,450	3	\$4,350	15	21,750
Senior Project Finance Specialist	3	\$3,900	5	\$9,000	0	\$0	2	\$2,400	3	\$3,900	31	37,200
Mid-Level Project Finance Specialist	2	\$2,000	5	\$5,000	2	\$2,000	12	\$12,000	5	\$5,000	56	56,000
Junior Project Finance Specialist	5	\$4,000	0	\$0	4	\$3,200	0	\$0	5	\$4,000	56	48,400
Power Markets Specialist	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	8	9,800
SUBTOTAL - LABOR	13	\$13,950	11	\$11,725	6	\$5,200	15	\$15,850	16	\$16,950	168	170,950
OTHER DIRECT COSTS												
Travel												
Airfare	2	\$2,400	0	\$0	0	\$0	0	\$0	2	\$2,400	13	15,600
Perdiem	6	\$1,434	0	\$0	0	\$0	0	\$0	6	\$1,434	32	7,848
Auto /Taxi	3	\$150	0	\$0	0	\$0	0	\$0	3	\$150	26	1,300
Misc. - Telephone, Fax, Courier, Etc.	3	\$450	3	\$450	4	\$600	4	\$600	3	\$450	30	4,500
SUBTOTAL - OTHER DIRECT		\$4,434		\$450		\$600		\$600		\$4,434		29,048
TOTAL		\$18,384		\$12,175		\$5,800		\$16,450		\$21,384		199,998

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

CG 7/11
07- 51890

GRANT AGREEMENT

A. J. ...
[Signature]
SEP - 5 2007
AM. KE. JE [Signature]

This Grant Agreement is entered into between the U.S. Trade and Development Agency ("USTDA") and the Costa Rican Institute of Electricity (Instituto Costarricense de Electricidad, ICE) ("Grantee"). USTDA agrees to provide the Grantee under the terms of this Agreement US\$200,000 ("USTDA Grant") to fund the cost of goods and services required for a financial feasibility study ("Study") on the proposed El Diquís Hydroelectric Power Project ("Project") in Costa Rica ("Host Country").

1. USTDA Funding

I - English + Spanish text

The funding to be provided under this Grant Agreement shall be used to fund the costs of an Agreement of Understanding between the Grantee and the U.S. firm recommended for selection by the Grantee ("Consultant") under which the Consultant will perform the Study ("Agreement of Understanding"). Payment to the Consultant 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 financial and other critical aspects of the proposed Project. The Terms of Reference for the Study shall also be included in the Agreement of Understanding.

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 Consultant 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 Consultant in accordance with applicable laws and regulations in effect, such as local transportation, office space, and secretarial support.

5. USTDA as Financier

(A) USTDA Approval of Competitive Selection Procedures

The Grantee will recommend the selection of the U.S. Consultant according to established procedures for the competitive selection of consultants as published in the Request for Proposals (RFP) with advance notice of the procurement published in the public domain 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 approval.

(B) USTDA Approval of Recommended Consultant Selection

The Grantee shall notify USTDA at the address of record set forth in Article 17 below of the recommended selection of the Consultant to perform the Study. Upon approval of this selection by USTDA, the Grantee and the Consultant shall then enter into an Agreement of Understanding 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 Agreement of Understanding Between Grantee and Consultant

The Grantee and the Consultant shall enter into an Agreement of Understanding for performance of the Study. This Agreement of Understanding shall be executed in both the English and Spanish languages. The English language version shall be the binding and controlling language for all matters relating to the meaning or interpretation of the Agreement of Understanding. This Agreement of Understanding 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 Consultant 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 Agreement of Understanding or a final negotiated draft version of the Agreement of Understanding.

(D) USTDA Not a Party to the Agreement of Understanding

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 Agreement of Understanding and any amendments thereto, including assignments, the selection of all consultants, the Terms of Reference, the Final Report, and any and all documents related to the Agreement of Understanding 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 Agreement of Understanding. 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 Agreement of Understanding 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 Consultant, or relieve the Consultant of any liability which the Consultant 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 Agreement of Understanding or subcontract thereunder must be consistent with this Grant Agreement. In the event of any inconsistency between the Grant Agreement and any Agreement of Understanding or subcontract funded by the Grant Agreement, the Grant Agreement shall be controlling.

6. Disbursement Procedures

(A) USTDA Approval of Agreement of Understanding Required

USTDA will make disbursements of Grant funds directly to the Consultant after USTDA approves the Grantee's Agreement of Understanding with the Consultant.

(B) Consultant Invoice Requirements

The Grantee should request disbursement of funds by USTDA to the Consultant 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 January 15, 2009, is the date by which the parties estimate that the Study will have been completed. In the event of a justifiable delay, the parties may request an extension of the Study Completion Date to be approved by USTDA via an Implementation Letter.

(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

The Agreement of Understanding 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 Consultant must be either a U.S. firm or U.S. individual; (b) the Consultant 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. Consultant 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 Consultant 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 consultants, receipt and approval of Agreement of Understanding deliverables, and approval or disapproval of consultant 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 U.S. Trade and Development Agency will be represented by the Acting Director, Leocadia I. Zak and the Grantee will be represented by the Executive President of ICE, Sr. Pedro Pablo Quirós Cortés. 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: Pedro Pablo Quirós Cortés
Presidente Ejecutivo del Instituto Costarricense de Electricidad
Instituto Costarricense de Electricidad (ICE)
Apartado 10032-1000
San José, Costa Rica

Attention: Unidad Gestión de Proyectos
Subgerencia Sector Electricidad

Tel: (506) 220 7940
Fax: (506) 220 8233

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

Tel: (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.: 117/81001
Activity No.: 2007-51009C
Reservation No.: 2007510028
Grant No.: GH2007510006

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 U.S. Trade and Development Agency and the Costa Rican Institute of Electricity (Instituto Costarricense de Electricidad, ICE), each acting through its duly authorized representative, have caused this Agreement to be signed in the English and Spanish languages 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 U.S. Trade and Development Agency

By: Leocadia I. Zak

Leocadia I. Zak

Date: 29/08/07

For the Costa Rican Institute of Electricity

By: Pedro Pablo Quirós Cortés

Pedro Pablo Quirós Cortés

Date: 03/09/07

Annex I -- Terms of Reference

Annex II -- USTDA Mandatory Clauses

Annex I

Terms of Reference

The objective of this Feasibility Study (“Study”) is to carry out a comprehensive analysis of the financial viability of the El Diquís Hydroelectric Power Project (“Project”) which will result in a recommendation of the optimal financial structure of the Project. This analysis shall include the creation of a multi-criteria analytical model which will allow the comparison and evaluation of possible financing structures, including explicit presentation and consideration of underlying assumptions and variety of risk allocation alternatives for each structure.

Throughout the Study, the Consultant shall take into consideration (1) all relevant technical, economic and financial issues as well as relevant social, legal, political and fiscal issues affecting the Project in particular, and the Costa Rican electric industry in general; and (2) the likely availability and conditions of funding for the Project from a variety of sources in the domestic and international capital markets.

Part I

Task 1: Market Analysis and Creation of Basic Economic Model

- 1.1 The Consultant shall consult with ICE to collect, review and update as necessary, all available information (assumptions and underlying data) on the Project. The Consultant shall take into consideration the range of financing structures already under consideration by ICE (as set forth in the 2005 pre-feasibility study by INGETECH) as well as other structures deemed worthy of consideration by the Consultant. The Consultant shall take into consideration international experience with the financing of hydroelectric and other infrastructure projects, in particular those based on public-private partnership models.
- 1.2 The Consultant shall perform an analysis of both national and regional energy markets in sufficient depth to construct an estimated demand curve.
- 1.3 The Consultant shall create a basic economic model of multiple analytical criteria (Excel-based spreadsheet) with sufficient detail upon which basic project parameters can be modeled and modified, and sensitivity analyses run, across the full range of possible project configurations. The model shall include explicit risk allocation options that will support the ranking of alternatives and identification of a recommended financing structure. To the extent that limitations on implementation of any viable scheme would result from legal or institutional constraints (including norms and requirements of multilateral and bilateral financing institutions), the Consultant shall clearly identify and suggest remedies. In particular, the model shall allow for full flexibility in modifying the Project inputs, including but not limited to, the following:
 - Minimum Bypass Flow (Caudal Ecológico)
 - Design Flow

- Net Effective Head
- Turbine-Generator Number, Unit Size and Efficiency Curves
- Construction Cost (not including interest during construction) by Major Project Element and Total
- Construction Drawdown Schedule
- Time for Reservoir Initial Fill
- Annual Energy Production
- Annual Capacity Revenues
- Annual Energy Revenues
- Annual Operations Costs
- Annual Maintenance Costs

Deliverable: Draft Chapter #1 (in hardcopy and electronic format) including all work performed under Task 1

Task 2: Investigate Potential Sources of Debt

Costa Rica Sovereign Debt Analyses

- 2.1 The Consultant shall review the availability, and the applicability, and the terms and conditions associated with debt raised internally on the Costa Rican debt markets, with particular attention to the requirements and restrictions associated with lending from pension funds.
- 2.2 The Consultant shall review the availability, the applicability, and the terms and conditions associated with debt raised in international capital markets, with particular attention to the likely spreads available, and costs of issuance incurred when raising limited-recourse debt by means of Regulation D and Rule 144 A exemptions in U.S. debt markets and any similar mechanisms that may be available in non-U.S. securities markets.
- 2.3 The Consultant shall review the availability, the applicability, and the terms and conditions associated with commercial bank debt raised in international capital markets.
- 2.4 The Consultant shall review the availability, the applicability, and the terms and conditions for debt available from various institutions, including but not limited to, the following: multilateral development finance institutions (DFIs) such as the International Finance Corporation (IFC), Multilateral Investment Guarantee Agency (MIGA), and Inter-American Investment Corporation (IIC); bilateral DFIs such as the Overseas Private Investment Corporation (OPIC); and export credit agencies (ECAs) such as the U.S. Export-Import Bank (Ex-Im).

Deliverable: Draft Chapter #2 including all work performed under Task 2

Task 3: Investigate Sources of Credit and Credit Enhancement

Costa Rica Sovereign Debt Analyses

- 3.1 The Consultant shall carry out sovereign debt credit analysis for Costa Rica. The analysis shall include, at a minimum, an analysis of the following ratios, as well as the median ratios for higher quality speculative-grade (Ba/BB) and lower quality investment-grade (Baa/BBB) sovereign credits:

Factors that relate to a country's long-term ability to pay its debt

- GDP per capita
- Real GDP growth rate
- Fiscal balance as a percentage of GDP
- Current account balance as a percentage of GDP
- Debt-to-GDP ratio
- External Debt to current account receipts ratio

Factors that relate to a country's short-term ability to pay its debt

- International reserves as a percentage of GDP
- Debt-service-to-GDP ratio
- Debt-service to current account receipts ratio
- Sum of exports and imports divided by the GDP
- Inflation rate

- 3.2 The Consultant shall recalculate these ratios under a variety of assumptions, ranging from all Project debt issued/guaranteed by the Costa Rican government to no debt issued by the Costa Rican government – the only government involvement being a guarantee of convertibility. The Consultant shall compare the recalculated ratios with the median ratios for high-quality speculative grade (Ba/BB rated) sovereign debt, and estimate the likely impact on Costa Rica sovereign credit.

Regional Sovereign Debt Analyses

- 3.3 The Consultant shall carry out sovereign debt credit analysis for each country that is a member of the Central American Electrical Interconnection System (“SIEPAC”) that has not already devolved retail electricity supply to market agents. The analysis shall include, at a minimum, an analysis of the following ratios for each such country, as well as the median ratios for higher quality speculative-grade (Ba/BB) and lower quality investment-grade (Baa/BBB) sovereign credits.

Factors that relate to a country's long-term ability to pay its debt

- GDP per capita
- Real GDP growth rate
- Fiscal balance as a percentage of GDP
- Current account balance as a percentage of GDP

- Debt-to-GDP ratio
- External Debt to current account receipts ratio

Factors that relate to a country's short-term ability to pay its debt

- International reserves as a percentage of GDP
- Debt-service-to-GDP ratio
- Debt-service to current account receipts ratio
- Sum of exports and imports divided by the GDP
- Inflation rate

Potential Credit Enhancement Mechanisms

- 3.4 The Consultant shall identify and investigate potential credit enhancement mechanisms that reduce the risk of nonpayment of debt obligations, extend the due dates of principal or interest repayments and extend the average life of the debt, or enhance debt service coverage ratios for periods which would otherwise constrain Project leverage.
- 3.5 The Consultant shall investigate the practicability of creating enforceable regulatory commitments in which funds derived from Costa Rican (or external) electricity consumers are held in escrow or trust for the benefit of debt holders and/or equity participants in the Project. The Consultant shall evaluate the effect of this mechanism of leasing/trust structures already in place for the debt of other Costa Rican power projects, and shall consider the possibility of establishing a leasing/trust structure for distinct portions of the Project.
- 3.6 For those SIEPAC countries that have devolved the supply of retail electricity to market agents, the Consultant shall perform an assessment of the creditworthiness of public sector distribution companies; privatized or partially privatized distribution companies; major consumers other than distribution companies; and electricity trading companies having any material market share.
- 3.7 The Consultant shall assess the potential for complementarity of the Project with other SIEPAC hydroelectric projects (including, but not limited to Chixoy in Guatemala, Cerron Grande and Arenal in El Salvador) particularly those located in regions with countercyclical hydrology. The Consultant shall consider and make a recommendation on implementation of contractual mechanisms that would afford contracting parties benefits such as those provided under Brazil's regulatory structure to increase firm energy commitments and effectively reduce hydrological risk.
- 3.8 The Consultant shall review the availability, the applicability, and the terms and conditions for credit support or enhancement mechanisms available from various institutions, including but not limited to, the following: multilateral development finance institutions (DFIs) such as the International Finance Corporation (IFC), Multilateral Investment Guarantee Agency (MIGA), and the Inter-American Investment Corporation (IIC); bilateral DFIs such as Overseas Private Investment

Corporation (OPIC); and export credit agencies (ECAs) such as the U.S. Export-Import Bank (Ex-Im). The Consultant shall review the availability, applicability, and the terms and conditions associated with partial risk guarantees and partial credit guarantees offered by the International Bank for Reconstruction and Development (IBRD) and the InterAmerican Development Bank (IDB) and the prospects for using these mechanisms to extend the average life of debt sourced from institutional and commercial lenders.

Deliverable: Draft Chapter #3 including all the work performed under Task 3

Task 4: Investigate Potential Sources of Equity and Risk-Sharing Entities

- 4.1 The Consultant shall investigate and characterize all potential sources of equity capital, both internal and external to Costa Rica, including but not be limited to, the following: ICE, the Costa Rican equity market (e.g. the issuance of shares), the IFC and the IIC, investment funds, strategic investors in the international power sector, and project participants including equipment vendors, general contractors and civil works contractors.
- 4.2 The Consultant shall estimate the likely cost of investment funds, and conditions required by prospective equity participants, based on available information about prior investments by those participants, suitably adjusted for changes in market conditions.
- 4.3 In addition to sharing risks and rewards as equity participants in the Project, equipment suppliers and contractors can also participate in risk and reward sharing through their supply and construction contracts, providing a sort of "quasi-equity" to the extent that they accept or share risks associated with the construction phase. The Consultant shall assess the practicability and desirability of such quasi-equity.
- 4.4 The Consultant shall develop a set of risk allocation matrices that illustrate alternative risk sharing structures, and shall estimate the cost of premiums associated with the assignment of risk to the various parties involved in those structures. The risks to be specifically identified, allocated and priced shall include, without limitation:

Design/Engineering Risk

- 1. Cost Overruns
- 2. Scope Changes
- 3. Changes in Project Assumptions
- 4. Proposal Costs (for prospective project participants)

Construction Period Risk

- 1. Enforceability of Contracts
- 2. Construction Cost Overruns
- 3. Scope Changes

- 4. Unforeseen Weather Conditions
- 5. Unforeseen Subsurface Conditions
- 6. Delays Due to Other Reasons
- 7. Variations in Interest Rate
- 8. Variations in Exchange Rate

Project Performance Risk

- 1. Equipment Deficiencies / Enforceability of Contracts
- 2. Design deficiencies / Enforceability of Contracts

3. Interconnection / Grid Limitations
4. Variations in Interest Rate
5. Variations in Exchange Rate
6. Take or Pay / Take and Pay

Environmental Risk

1. Delay in Issuance or Change in Permits
2. Acquisition of Necessary Rights
3. Social / Resettlement Issues

Hydrologic Risk

1. Short-Term Deficits
2. Long-Term Deficits
3. Fundamental Changes in Basin Hydrology
4. Flood Damage during Construction
5. Flood Damage during Operation
6. Take or Pay / Take and Pay

Force Majeure

1. Payment Requirements, If Any: Interest Only / Full Amortization / Return to Equity
2. Cost to Reconstruct / Refurbish
3. Business Interruption Coverage through Insurance, Cost of Premiums / Risk of Delayed Payout

Value of Output

1. Short-Term Variations in Fuel Markets / Short-Term Nodal Prices

2. Long-Term Variations in Fuel Markets / Long-Term Nodal Prices
3. Variations in Equipment / Construction Costs and "Cost of New Entry"
4. Variations in Capital Markets / Cost of New Entry
5. Variations in Transmission Constraint Locations / Congestion Values / "Basis Spread"
6. Variations in Demand Growth / Supply-Demand Equilibrium Point
7. Take or Pay / Take and Pay

Political/Regulatory

1. Obligations of Costa Rican Off Takers / Guarantors (this shall specifically include addressing the risk of regulatory/legal uncertainties and denial of cost pass-through to consumers)
2. Obligations of External Off Takers / Guarantors, and Enforceability of Power Purchase Agreements
3. Unavailability of Funds for Dollar Conversion
4. Tax Regime / Exemptions and Changes to Tax Law
5. Changes to Other Laws Affecting the Project

Deliverable: Draft Chapter #4 containing all work performed under Task 4

Task 5: Preparation of Draft Report 1

- 5.1 Upon completion of Task 4, the Consultant shall prepare a Draft Report 1 containing Chapters describing the results of Tasks 1, 2, 3, and 4 and present to ICE for comment.
- 5.2 The Consultant shall discuss the Draft Report 1 with ICE.
- 5.3 The Consultant shall incorporate comments by ICE into a Report 1.

Deliverable: Report 1 (10 hardbound and 10 electronic recorded on CD)

Task 6: Creation of Financial Model

- 6.1 Using the basic economic model developed in Task 1, the Consultant shall supplement that model with an "overlay" financing structure having sufficient detail that basic project finance parameters can be modeled and modified, and sensitivity analyses run, across the full range of possible project finance configurations. In particular, the model shall allow for full flexibility in modifying the following Project financial inputs:
- Off-take commitments from multiple parties, each with a unique creditworthiness, and with term and with pricing that varies with time and by party;
 - Debt sourced from multiple parties, with term and pricing that varies with time and by party (including different "grace periods" for each party), and with priority of payment by party or by group of parties;
 - Equity and subordinated debt sourced from multiple parties, with term and pricing that varies with time and by party, and with priority of payment by party or by group of parties.
- 6.2 The Consultant shall prepare an Excel spreadsheet showing all financial market-related inputs explicitly on the "Inputs" page and shall ensure that they can easily be modified to reflect future changes in market rates. All such inputs shall be disaggregated into published, market-derived data and market-derived or assumed spreads expected to be charged by capital sources for providing Project-specific capital. In addition, within the Excel-based financial model, the Consultant shall include "toggle switches" or other mechanisms to readily assign/shift risks and assumed risk premiums among the equity, sub-debt and supplier/Consultant participants, provided that a mechanism is included to assure that all relevant risks have been identified, priced, and allocated.

Deliverable: Draft Chapter #6 containing all the work performed under Task 6

Task 7: Development Impact Analysis

- 7.1 For the benefit of those interested in the Project, the Consultant shall assess the development benefits associated with the Project. The Consultant shall specifically focus on examples from the criteria below to determine which are likely to result from the Project implementation and shall develop a methodology for assessing the impact over time. Where possible, the Consultant shall make quantitative estimates although it is recognized that qualitative measures are often easier to predict.

Infrastructure: Improvement in and security of physical, financial, or social infrastructures in Costa Rica

Technology Transfer & Productivity Improvements: Introduction of advanced technologies or licenses, and improvements of processes and/or systems that stimulate greater economic productivity or allow more efficient use of resources.

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

Market-oriented Reforms: Encouraging more transparent regulatory systems and institutions, promotion of greater competition, lowering of non-tariff barriers to trade, strengthening of intellectual property rights, and modernization of international trade systems and regulations.

Deliverable: Draft Chapter #7 containing all work performed under Task 7

Task 8: Recommendation of Preferred Financial Structure

- 8.1 Using the risk allocation matrices developed in Task 4 and the financial model developed in Task 6, the Consultant shall model not less than three alternative financial structures for the Project and shall identify the conditions and circumstances under which each one might be preferred.
- 8.2 The Consultant shall, in consultation with ICE, make explicit assumptions about (1) the various aspects of costs and revenues associated with the Project that it believes most likely project the future of those parameters for Costa Rica and SIEPAC, and (2) all legal, institutional and social factors bearing in any material way on the availability or cost of financing for the Project.
- 8.3 The Consultant shall rank-order the alternative financial structures in accordance with likelihood of successful financing, and shall perform analysis of each alternative to determine the "stability" of model results for that alternative in case future reality does not conform to expectations.
- 8.4 The Consultant shall arrange a meeting in person with ICE to discuss the analysis conducted and recommendation made for financing the Project.

Deliverable: Draft Chapter #8 containing all work performed under Task 8

Task 9: Preparation of Draft Report 2

- 9.1 Upon completion of Task 8, the Consultant shall prepare a Draft Report 2 containing Chapters describing the results of Tasks 6, 7 and 8 and present to ICE in an electronic format for their comment and use.
- 9.2 The Consultant shall discuss the Draft Report 2 with ICE.
- 9.3 The Consultant shall prepare and deliver to ICE and USTDA a substantive and comprehensive report containing all work performed under Tasks 1-9 of these Terms of Reference ("Part I Report"). The Part I Report shall be organized according to the above tasks, and shall include all topics required to be included in the Draft Chapters and Draft Reports previously provided to ICE.

Deliverable: Part I Report (ten (10) printed and hardbound copies and ten (10) copies in electronic format recorded on CD)

Part II

Upon receipt of the Part I Report, ICE shall make a selection of the preferred financing scheme from the options presented by Consultant in the Part I Report. After ICE has confirmed with Consultant which financing structure it chooses to pursue, the Consultant will, in close collaboration with ICE, undertake detailed planning and preparation for the financing process. In the event that none of the options presented by the Consultant to ICE are acceptable, ICE reserves the right to request that the Consultant not perform work under Part II. The Consultant and ICE shall notify USTDA immediately if ICE requests that the Consultant not perform the work under Part II or upon knowledge of any potential modifications to the Terms of Reference, and must obtain USTDA written approval of any modifications in order for the modifications to be effective with respect to expenditure of USTDA grant funds.

Task 10: Preparation of Solicitation Guidelines

10.1 The Consultant shall, in collaboration with ICE, prepare a description of alternative mechanisms and guidelines for a solicitation for equity participants in the preferred structure, including criteria and methodology for evaluation of financing proposals.

Deliverable: Draft Chapter #10 containing all work performed under Task 10

Task 11: Discussions with Potential Financing Sources

11.1 The Consultant shall identify, undertake, and document preliminary discussions with at least four (4) potential sources of equity and institutional financing in order to determine the likely availability, tenor, rates, and terms and conditions of financing from those sources. The Consultant shall advise ICE reasonably in advance of, and shall be given the opportunity to attend (or at its option participate by live video, web conferencing or telephone) all meetings with potential financing sources.

Deliverable: Draft Chapter #11 containing all work performed under Task 11

Task 12: Preparation of Forms of Agreement

12.1 The Consultant shall prepare complete drafts of all necessary or appropriate documentation for the proposed financing structure, which may include the following: a draft Equity Term Sheet and corresponding LLC Operating Agreement or equivalent shareholder agreement, a Draft Power Purchase Agreement for ICE/third-party purchasers and/or an ICE lease agreement, an Implementation Agreement, Debt Term Sheets, or Government Counter-Guarantees.

Deliverable: Draft Chapter #12 containing all work performed under Task 12

Task 13: Final Report

- 13.1 The Consultant shall prepare a Draft Final Report which shall include the Part I Report and the results of Part II (Tasks 10, 11, and 12). The Consultant shall submit the Draft Final Report to ICE for comment.
- 13.2 After submitting the Draft Final Report to ICE, the Consultant shall travel to ICE headquarters to make an oral presentation to ICE. The Consultant shall draft and document modifications and clarifications which may be necessary pursuant to the request of ICE and in accordance with the requirements of these Terms of Reference. Upon receipt of comments from ICE, the Consultant shall revise and incorporate the relevant comments into the Final Report.
- 13.3 The Consultant shall then prepare and deliver to ICE 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. It shall be prepared in English and Spanish.
- 13.4 The Consultant shall deliver to ICE one original and nine (9) printed and bound copies and ten (10) copies in electronic format. The Consultant shall deliver the Final Report to USTDA in accordance with Clause I of Annex II of the Grant Agreement.

Notes:

- (1) The Consultant is responsible for compliance with U.S. export licensing requirements, if applicable, in the performance of the Terms of Reference.
- (2) The Consultant 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.
- (4) The Grantee is responsible for all finance-related final discussions.

Annex II

USTDA Mandatory Clauses for Agreement of Understanding

A. USTDA Mandatory Clauses Controlling

The parties to this Agreement of Understanding acknowledge that this Agreement of Understanding is funded in whole or in part by the U.S. Trade and Development Agency ("USTDA") under the Grant Agreement between USTDA and the Costa Rican Institute of Electricity (Instituto Costarricense de Electricidad, ICE), ("Grantee"), dated _____ ("Grant Agreement"). The Grantee has selected _____ ("Consultant") to perform the financial feasibility study ("Study") for the El Diquís Hydroelectric Power Project ("Project") in Costa Rica ("Host Country"). Notwithstanding any other provisions of this Agreement of Understanding, the following USTDA mandatory clauses shall govern. All subcontracts entered into by Consultant funded or partially funded with USTDA Grant funds shall include these USTDA mandatory 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 Agreement of Understanding or subcontract thereunder, the Grant Agreement shall be controlling.

B. USTDA as Financier

(1) USTDA Approval of Agreement of Understanding

The Agreement of Understanding 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 Agreement of Understanding has been formally approved by USTDA or until the Agreement of Understanding conforms to modifications required by USTDA during the review process.

(2) USTDA Not a Party to the Agreement of Understanding

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 Agreement of Understanding and amendments thereto, including assignments, the selection of all consultants, the Terms of Reference, the Final Report, and any and all documents related to the Agreement of Understanding 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 Agreement of Understanding. 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 Agreement of Understanding 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 Consultant, or relieve the Consultant of any liability which the Consultant might otherwise have to the Grantee 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 Consultant must be either a U.S. firm or U.S. individual; (b) the Consultant 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. Consultant 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 Consultant 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 Agreement of Understanding. 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 term of the Agreement of Understanding and for a period of three (3) years after final disbursement by USTDA. The Consultant 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 Consultant shall provide adequate Workman's Compensation Insurance coverage for work performed under this Agreement of Understanding.

G. Reporting Requirements

The Consultant 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 Consultant receives follow-on work from the Grantee, the Consultant shall so notify USTDA and designate the Consultant'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 Consultant 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 Agreement of Understanding

Disbursement of Grant funds will be made only after USTDA approval of this Agreement of Understanding. To make this review in a timely fashion, USTDA must receive from either the Grantee or the Consultant a photocopy of an English language version of a signed Agreement of Understanding 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 Consultant shall be included in this Agreement of Understanding. 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 an advance payment; (2) all other payments, with the exception of the final payment, shall be based upon Agreement of Understanding 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) Consultant Invoice Requirements

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

(a) Consultant's Invoice

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

(i) For an advance payment (if any):

"As a condition for this advance payment, which is an advance against future Study costs, the Consultant certifies that it will perform all work in accordance with the terms of its Agreement of Understanding with the Grantee. To the extent that the Consultant does not comply with the terms and conditions of the Agreement of Understanding, including the USTDA mandatory provisions contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA. "

(ii) For Agreement of Understanding performance milestone payments:

"The Consultant has performed the work described in this invoice in accordance with the terms of its Agreement of Understanding with the Grantee and is entitled to payment thereunder. To the extent the Consultant has not complied with the terms and conditions of the Agreement of Understanding, including the USTDA mandatory provisions contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA."

(iii) For final payment:

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

(b) Grantee's Approval of the Consultant's Invoice

(i) The invoice for an advance payment must be approved in writing by the Grantee.

(ii) For Agreement of Understanding performance milestone payments, the following certification by the Grantee must be provided on the invoice or separately:

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

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

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

(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 Agreement of Understanding is terminated prior to completion, the Consultant 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 Consultant all USTDA Grant funds previously disbursed to the Consultant (including but not limited to advance 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 Grantee.

(2) Final Report Submission Requirements

The Consultant 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 Grantee in writing and must be in the English language. It is the responsibility of the Consultant 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) Three (3) copies of the Final Report suitable for public distribution ("Public Version"). The Public Version shall have been approved by the Grantee 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 (provided USTDA receives a total of four (4) copies). In any event, the Public Version must be informative and contain sufficient Project detail to be useful to prospective equipment and service providers.

The Consultant 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 Grantee, the name of the Consultant who prepared the report, a report title, USTDA's logo, USTDA's mailing and delivery addresses, and 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 Consultant and any subcontractor that performs 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 Consultant and each subcontractor.

(d) 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.

(e) The Final Report shall be accompanied by a letter or other notation by the Grantee which states that the Grantee approves the Final Report. A certification by the Grantee 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 Agreement of Understanding 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 January 15, 2009, 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 Agreement of Understanding 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 Consultant 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 Grantee agrees not to receive any such payment. The Consultant and the Grantee 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 Agreement of Understanding, 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 Agreement of Understanding 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.: 117/81001
Activity No.: 2007-51009C
Reservation No.: 2007510028
Grant No.: GH2007510006

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 Grantee nor the Consultant will seek reimbursement from USTDA for such taxes, tariffs, duties, fees or other levies.

ANNEX 5

Annex I

Terms of Reference

The objective of this Feasibility Study (“Study”) is to carry out a comprehensive analysis of the financial viability of the El Diquís Hydroelectric Power Project (“Project”) which will result in a recommendation of the optimal financial structure of the Project. This analysis shall include the creation of a multi-criteria analytical model which will allow the comparison and evaluation of possible financing structures, including explicit presentation and consideration of underlying assumptions and variety of risk allocation alternatives for each structure.

Throughout the Study, the Consultant shall take into consideration (1) all relevant technical, economic and financial issues as well as relevant social, legal, political and fiscal issues affecting the Project in particular, and the Costa Rican electric industry in general; and (2) the likely availability and conditions of funding for the Project from a variety of sources in the domestic and international capital markets.

Part I

Task 1: Market Analysis and Creation of Basic Economic Model

- 1.1 The Consultant shall consult with ICE to collect, review and update as necessary, all available information (assumptions and underlying data) on the Project. The Consultant shall take into consideration the range of financing structures already under consideration by ICE (as set forth in the 2005 pre-feasibility study by INGETECH) as well as other structures deemed worthy of consideration by the Consultant. The Consultant shall take into consideration international experience with the financing of hydroelectric and other infrastructure projects, in particular those based on public-private partnership models.
- 1.2 The Consultant shall perform an analysis of both national and regional energy markets in sufficient depth to construct an estimated demand curve.
- 1.3 The Consultant shall create a basic economic model of multiple analytical criteria (Excel-based spreadsheet) with sufficient detail upon which basic project parameters can be modeled and modified, and sensitivity analyses run, across the full range of possible project configurations. The model shall include explicit risk allocation options that will support the ranking of alternatives and identification of a recommended financing structure. To the extent that limitations on implementation of any viable scheme would result from legal or institutional constraints (including norms and requirements of multilateral and bilateral financing institutions), the Consultant shall clearly identify and suggest remedies. In particular, the model shall allow for full flexibility in modifying the Project inputs, including but not limited to, the following:
 - Minimum Bypass Flow (Caudal Ecológico)
 - Design Flow

- Net Effective Head
- Turbine-Generator Number, Unit Size and Efficiency Curves
- Construction Cost (not including interest during construction) by Major Project Element and Total
- Construction Drawdown Schedule
- Time for Reservoir Initial Fill
- Annual Energy Production
- Annual Capacity Revenues
- Annual Energy Revenues
- Annual Operations Costs
- Annual Maintenance Costs

Deliverable: Draft Chapter #1 (in hardcopy and electronic format) including all work performed under Task 1

Task 2: Investigate Potential Sources of Debt

Costa Rica Sovereign Debt Analyses

- 2.1 The Consultant shall review the availability, and the applicability, and the terms and conditions associated with debt raised internally on the Costa Rican debt markets, with particular attention to the requirements and restrictions associated with lending from pension funds.
- 2.2 The Consultant shall review the availability, the applicability, and the terms and conditions associated with debt raised in international capital markets, with particular attention to the likely spreads available, and costs of issuance incurred when raising limited-recourse debt by means of Regulation D and Rule 144 A exemptions in U.S debt markets and any similar mechanisms that may be available in non-U.S. securities markets.
- 2.3 The Consultant shall review the availability, the applicability, and the terms and conditions associated with commercial bank debt raised in international capital markets.
- 2.4 The Consultant shall review the availability, the applicability, and the terms and conditions for debt available from various institutions, including but not limited to, the following: multilateral development finance institutions (DFIs) such as the International Finance Corporation (IFC), Multilateral Investment Guarantee Agency (MIGA), and Inter-American Investment Corporation (IIC); bilateral DFIs such as the Overseas Private Investment Corporation (OPIC); and export credit agencies (ECAs) such as the U.S. Export-Import Bank (Ex-Im).

Deliverable: Draft Chapter #2 including all work performed under Task 2

Task 3: Investigate Sources of Credit and Credit Enhancement

Costa Rica Sovereign Debt Analyses

- 3.1 The Consultant shall carry out sovereign debt credit analysis for Costa Rica. The analysis shall include, at a minimum, an analysis of the following ratios, as well as the median ratios for higher quality speculative-grade (Ba/BB) and lower quality investment-grade (Baa/BBB) sovereign credits:

Factors that relate to a country's long-term ability to pay its debt

- GDP per capita
- Real GDP growth rate
- Fiscal balance as a percentage of GDP
- Current account balance as a percentage of GDP
- Debt-to-GDP ratio
- External Debt to current account receipts ratio

Factors that relate to a country's short-term ability to pay its debt

- International reserves as a percentage of GDP
- Debt-service-to-GDP ratio
- Debt-service to current account receipts ratio
- Sum of exports and imports divided by the GDP
- Inflation rate

- 3.2 The Consultant shall recalculate these ratios under a variety of assumptions, ranging from all Project debt issued/guaranteed by the Costa Rican government to no debt issued by the Costa Rican government – the only government involvement being a guarantee of convertibility. The Consultant shall compare the recalculated ratios with the median ratios for high-quality speculative grade (Ba/BB rated) sovereign debt, and estimate the likely impact on Costa Rica sovereign credit.

Regional Sovereign Debt Analyses

- 3.3 The Consultant shall carry out sovereign debt credit analysis for each country that is a member of the Central American Electrical Interconnection System (“SIEPAC”) that has not already devolved retail electricity supply to market agents. The analysis shall include, at a minimum, an analysis of the following ratios for each such country, as well as the median ratios for higher quality speculative-grade (Ba/BB) and lower quality investment-grade (Baa/BBB) sovereign credits.

Factors that relate to a country's long-term ability to pay its debt

- GDP per capita
- Real GDP growth rate
- Fiscal balance as a percentage of GDP
- Current account balance as a percentage of GDP

- Debt-to-GDP ratio
- External Debt to current account receipts ratio

Factors that relate to a country's short-term ability to pay its debt

- International reserves as a percentage of GDP
- Debt-service-to-GDP ratio
- Debt-service to current account receipts ratio
- Sum of exports and imports divided by the GDP
- Inflation rate

Potential Credit Enhancement Mechanisms

- 3.4 The Consultant shall identify and investigate potential credit enhancement mechanisms that reduce the risk of nonpayment of debt obligations, extend the due dates of principal or interest repayments and extend the average life of the debt, or enhance debt service coverage ratios for periods which would otherwise constrain Project leverage.
- 3.5 The Consultant shall investigate the practicability of creating enforceable regulatory commitments in which funds derived from Costa Rican (or external) electricity consumers are held in escrow or trust for the benefit of debt holders and/or equity participants in the Project. The Consultant shall evaluate the effect of this mechanism of leasing/trust structures already in place for the debt of other Costa Rican power projects, and shall consider the possibility of establishing a leasing/trust structure for distinct portions of the Project.
- 3.6 For those SIEPAC countries that have devolved the supply of retail electricity to market agents, the Consultant shall perform an assessment of the creditworthiness of public sector distribution companies; privatized or partially privatized distribution companies; major consumers other than distribution companies; and electricity trading companies having any material market share.
- 3.7 The Consultant shall assess the potential for complementarity of the Project with other SIEPAC hydroelectric projects (including, but not limited to Chixoy in Guatemala, Cerron Grande and Arenal in El Salvador) particularly those located in regions with countercyclical hydrology. The Consultant shall consider and make a recommendation on implementation of contractual mechanisms that would afford contracting parties benefits such as those provided under Brazil's regulatory structure to increase firm energy commitments and effectively reduce hydrological risk.
- 3.8 The Consultant shall review the availability, the applicability, and the terms and conditions for credit support or enhancement mechanisms available from various institutions, including but not limited to, the following: multilateral development finance institutions (DFIs) such as the International Finance Corporation (IFC), Multilateral Investment Guarantee Agency (MIGA), and the Inter-American Investment Corporation (IIC); bilateral DFIs such as Overseas Private Investment

Corporation (OPIC); and export credit agencies (ECAs) such as the U.S. Export-Import Bank (Ex-Im). The Consultant shall review the availability, applicability, and the terms and conditions associated with partial risk guarantees and partial credit guarantees offered by the International Bank for Reconstruction and Development (IBRD) and the InterAmerican Development Bank (IDB) and the prospects for using these mechanisms to extend the average life of debt sourced from institutional and commercial lenders.

Deliverable: Draft Chapter #3 including all the work performed under Task 3

Task 4: Investigate Potential Sources of Equity and Risk-Sharing Entities

- 4.1 The Consultant shall investigate and characterize all potential sources of equity capital, both internal and external to Costa Rica, including but not be limited to, the following: ICE, the Costa Rican equity market (e.g. the issuance of shares), the IFC and the IIC, investment funds, strategic investors in the international power sector, and project participants including equipment vendors, general contractors and civil works contractors.
- 4.2 The Consultant shall estimate the likely cost of investment funds, and conditions required by prospective equity participants, based on available information about prior investments by those participants, suitably adjusted for changes in market conditions.
- 4.3 In addition to sharing risks and rewards as equity participants in the Project, equipment suppliers and contractors can also participate in risk and reward sharing through their supply and construction contracts, providing a sort of "quasi-equity" to the extent that they accept or share risks associated with the construction phase. The Consultant shall assess the practicability and desirability of such quasi-equity.
- 4.4 The Consultant shall develop a set of risk allocation matrices that illustrate alternative risk sharing structures, and shall estimate the cost of premiums associated with the assignment of risk to the various parties involved in those structures. The risks to be specifically identified, allocated and priced shall include, without limitation:

Design/Engineering Risk

- 1. Cost Overruns
- 2. Scope Changes
- 3. Changes in Project Assumptions
- 4. Proposal Costs (for prospective project participants)

Construction Period Risk

- 1. Enforceability of Contracts
- 2. Construction Cost Overruns
- 3. Scope Changes

- 4. Unforeseen Weather Conditions
- 5. Unforeseen Subsurface Conditions
- 6. Delays Due to Other Reasons
- 7. Variations in Interest Rate
- 8. Variations in Exchange Rate

Project Performance Risk

- 1. Equipment Deficiencies / Enforceability of Contracts
- 2. Design deficiencies / Enforceability of Contracts

3. Interconnection / Grid Limitations
4. Variations in Interest Rate
5. Variations in Exchange Rate
6. Take or Pay / Take and Pay

Environmental Risk

1. Delay in Issuance or Change in Permits
2. Acquisition of Necessary Rights
3. Social / Resettlement Issues

Hydrologic Risk

1. Short-Term Deficits
2. Long-Term Deficits
3. Fundamental Changes in Basin Hydrology
4. Flood Damage during Construction
5. Flood Damage during Operation
6. Take or Pay / Take and Pay

Force Majeure

1. Payment Requirements, If Any: Interest Only / Full Amortization / Return to Equity
2. Cost to Reconstruct / Refurbish
3. Business Interruption Coverage through Insurance, Cost of Premiums / Risk of Delayed Payout

Value of Output

1. Short-Term Variations in Fuel Markets / Short-Term Nodal Prices

2. Long-Term Variations in Fuel Markets / Long-Term Nodal Prices
3. Variations in Equipment / Construction Costs and "Cost of New Entry"
4. Variations in Capital Markets / Cost of New Entry
5. Variations in Transmission Constraint Locations / Congestion Values / "Basis Spread"
6. Variations in Demand Growth / Supply-Demand Equilibrium Point
7. Take or Pay / Take and Pay

Political/Regulatory

1. Obligations of Costa Rican Off Takers / Guarantors (this shall specifically include addressing the risk of regulatory/legal uncertainties and denial of cost pass-through to consumers)
2. Obligations of External Off Takers / Guarantors, and Enforceability of Power Purchase Agreements
3. Unavailability of Funds for Dollar Conversion
4. Tax Regime / Exemptions and Changes to Tax Law
5. Changes to Other Laws Affecting the Project

Deliverable: Draft Chapter #4 containing all work performed under Task 4

Task 5: Preparation of Draft Report 1

- 5.1 Upon completion of Task 4, the Consultant shall prepare a Draft Report 1 containing Chapters describing the results of Tasks 1, 2, 3, and 4 and present to ICE for comment.
- 5.2 The Consultant shall discuss the Draft Report 1 with ICE.
- 5.3 The Consultant shall incorporate comments by ICE into a Report 1.

Deliverable: Report 1 (10 hardbound and 10 electronic recorded on CD)

Task 6: Creation of Financial Model

- 6.1 Using the basic economic model developed in Task 1, the Consultant shall supplement that model with an "overlay" financing structure having sufficient detail that basic project finance parameters can be modeled and modified, and sensitivity analyses run, across the full range of possible project finance configurations. In particular, the model shall allow for full flexibility in modifying the following Project financial inputs:
- Off-take commitments from multiple parties, each with a unique creditworthiness, and with term and with pricing that varies with time and by party;
 - Debt sourced from multiple parties, with term and pricing that varies with time and by party (including different "grace periods" for each party), and with priority of payment by party or by group of parties;
 - Equity and subordinated debt sourced from multiple parties, with term and pricing that varies with time and by party, and with priority of payment by party or by group of parties.
- 6.2 The Consultant shall prepare an Excel spreadsheet showing all financial market-related inputs explicitly on the "Inputs" page and shall ensure that they can easily be modified to reflect future changes in market rates. All such inputs shall be disaggregated into published, market-derived data and market-derived or assumed spreads expected to be charged by capital sources for providing Project-specific capital. In addition, within the Excel-based financial model, the Consultant shall include "toggle switches" or other mechanisms to readily assign/shift risks and assumed risk premiums among the equity, sub-debt and supplier/Consultant participants, provided that a mechanism is included to assure that all relevant risks have been identified, priced, and allocated.

Deliverable: Draft Chapter #6 containing all the work performed under Task 6

Task 7: Development Impact Analysis

- 7.1 For the benefit of those interested in the Project, the Consultant shall assess the development benefits associated with the Project. The Consultant shall specifically focus on examples from the criteria below to determine which are likely to result from the Project implementation and shall develop a methodology for assessing the impact over time. Where possible, the Consultant shall make quantitative estimates although it is recognized that qualitative measures are often easier to predict.

Infrastructure: Improvement in and security of physical, financial, or social infrastructures in Costa Rica

Technology Transfer & Productivity Improvements: Introduction of advanced technologies or licenses, and improvements of processes and/or systems that stimulate greater economic productivity or allow more efficient use of resources.

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

Market-oriented Reforms: Encouraging more transparent regulatory systems and institutions, promotion of greater competition, lowering of non-tariff barriers to trade, strengthening of intellectual property rights, and modernization of international trade systems and regulations.

Deliverable: Draft Chapter #7 containing all work performed under Task 7

Task 8: Recommendation of Preferred Financial Structure

- 8.1 Using the risk allocation matrices developed in Task 4 and the financial model developed in Task 6, the Consultant shall model not less than three alternative financial structures for the Project and shall identify the conditions and circumstances under which each one might be preferred.
- 8.2 The Consultant shall, in consultation with ICE, make explicit assumptions about (1) the various aspects of costs and revenues associated with the Project that it believes most likely project the future of those parameters for Costa Rica and SIEPAC, and (2) all legal, institutional and social factors bearing in any material way on the availability or cost of financing for the Project.
- 8.3 The Consultant shall rank-order the alternative financial structures in accordance with likelihood of successful financing, and shall perform analysis of each alternative to determine the "stability" of model results for that alternative in case future reality does not conform to expectations.
- 8.4 The Consultant shall arrange a meeting in person with ICE to discuss the analysis conducted and recommendation made for financing the Project.

Deliverable: Draft Chapter #8 containing all work performed under Task 8

Task 9: Preparation of Draft Report 2

- 9.1 Upon completion of Task 8, the Consultant shall prepare a Draft Report 2 containing Chapters describing the results of Tasks 6, 7 and 8 and present to ICE in an electronic format for their comment and use.
- 9.2 The Consultant shall discuss the Draft Report 2 with ICE.
- 9.3 The Consultant shall prepare and deliver to ICE and USTDA a substantive and comprehensive report containing all work performed under Tasks 1-9 of these Terms of Reference ("Part I Report"). The Part I Report shall be organized according to the above tasks, and shall include all topics required to be included in the Draft Chapters and Draft Reports previously provided to ICE.

Deliverable: Part I Report (ten (10) printed and hardbound copies and ten (10) copies in electronic format recorded on CD)

Part II

Upon receipt of the Part I Report, ICE shall make a selection of the preferred financing scheme from the options presented by Consultant in the Part I Report. After ICE has confirmed with Consultant which financing structure it chooses to pursue, the Consultant will, in close collaboration with ICE, undertake detailed planning and preparation for the financing process. In the event that none of the options presented by the Consultant to ICE are acceptable, ICE reserves the right to request that the Consultant not perform work under Part II. The Consultant and ICE shall notify USTDA immediately if ICE requests that the Consultant not perform the work under Part II or upon knowledge of any potential modifications to the Terms of Reference, and must obtain USTDA written approval of any modifications in order for the modifications to be effective with respect to expenditure of USTDA grant funds.

Task 10: Preparation of Solicitation Guidelines

10.1 The Consultant shall, in collaboration with ICE, prepare a description of alternative mechanisms and guidelines for a solicitation for equity participants in the preferred structure, including criteria and methodology for evaluation of financing proposals.

Deliverable: Draft Chapter #10 containing all work performed under Task 10

Task 11: Discussions with Potential Financing Sources

11.1 The Consultant shall identify, undertake, and document preliminary discussions with at least four (4) potential sources of equity and institutional financing in order to determine the likely availability, tenor, rates, and terms and conditions of financing from those sources. The Consultant shall advise ICE reasonably in advance of, and shall be given the opportunity to attend (or at its option participate by live video, web conferencing or telephone) all meetings with potential financing sources.

Deliverable: Draft Chapter #11 containing all work performed under Task 11

Task 12: Preparation of Forms of Agreement

12.1 The Consultant shall prepare complete drafts of all necessary or appropriate documentation for the proposed financing structure, which may include the following: a draft Equity Term Sheet and corresponding LLC Operating Agreement or equivalent shareholder agreement, a Draft Power Purchase Agreement for ICE/third-party purchasers and/or an ICE lease agreement, an Implementation Agreement, Debt Term Sheets, or Government Counter-Guarantees.

Deliverable: Draft Chapter #12 containing all work performed under Task 12

Task 13: Final Report

- 13.1 The Consultant shall prepare a Draft Final Report which shall include the Part I Report and the results of Part II (Tasks 10, 11, and 12). The Consultant shall submit the Draft Final Report to ICE for comment.
- 13.2 After submitting the Draft Final Report to ICE, the Consultant shall travel to ICE headquarters to make an oral presentation to ICE. The Consultant shall draft and document modifications and clarifications which may be necessary pursuant to the request of ICE and in accordance with the requirements of these Terms of Reference. Upon receipt of comments from ICE, the Consultant shall revise and incorporate the relevant comments into the Final Report.
- 13.3 The Consultant shall then prepare and deliver to ICE 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. It shall be prepared in English and Spanish.
- 13.4 The Consultant shall deliver to ICE one original and nine (9) printed and bound copies and ten (10) copies in electronic format. The Consultant shall deliver the Final Report to USTDA in accordance with Clause I of Annex II of the Grant Agreement.

Notes:

- (1) The Consultant is responsible for compliance with U.S. export licensing requirements, if applicable, in the performance of the Terms of Reference.
- (2) The Consultant 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.
- (4) The Grantee is responsible for all finance-related final discussions.