PROCUREMENT DOCUMENTS

Bidding Document for Procurement of Small Works

Procurement of: Drilling of Two Slim Wells

ICB No: GEDP-CW-3/2015 Project: Geothermal Exploratory Drilling Project, P152039 Employer: R2E2 Fund Country: Armenia

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Bidding Document

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PART 1 – Bidding Procedures

Section 1 - Instructions to Bidders

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Section I - Instructions to Bidders

A. General

- Scope of Bid
 In connection with the Invitation for Bids specified in the Bid Data Sheet (BDS), the Employer, as specified in the BDS, issues these Bidding Documents for the procurement of the Works as specified in Section VII, Works Requirements. The name, identification, and number of lots (contracts) of this bidding are specified in the BDS.
 Throughout this Bidding Document:
 - (a) the term "in writing" means communicated in written form and delivered against receipt;
 - (b) except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and
 - (c) "day" means calendar day.
- 2. Source of Funds 2.1 The Borrower or Recipient (hereinafter called "Borrower") specified in the BDS has received or has applied for financing (hereinafter called "funds") from the International Bank for Reconstruction and Development or the International Development Association (hereinafter called "the Bank") in an amount specified in the BDS, toward the project named in the BDS. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which these Bidding Documents are issued.
 - 2.2 Payment by the Bank will be made only at the request of the Borrower and upon approval by the Bank, and will be subject, in all respects, to the terms and conditions of the Loan (or other financing) Agreement. The Loan (or other financing) Agreement prohibits a withdrawal from the Loan (or other financing) account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Bank, is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the Loan (or other financing) Agreement or have any claim to the proceeds of the Loan (or other financing).

3. Corrupt and Fraudulent Practices

- 3.1 The Bank requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Section VI.
- 3.2 In further pursuance of this policy, Bidders shall permit and shall cause its agents (whether declared or not), sub-contractors, sub-consultants, service providers, or suppliers and any personnel thereof, to permit the Bank to inspect all accounts, records and other documents relating to any prequalification process, bid submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.

4. Eligible Bidders 4.1 A Bidder may be a firm that is a private entity, or a government-owned entity—subject to ITB 4.5—or any combination of them in the form of a joint venture (JV), under an existing agreement, or with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution. Unless specified in the BDS, there is no limit on the number of members in a JV.

- 4.2 A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this bidding process, if the Bidder:
 - (a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or
 - (b) receives or has received any direct or indirect subsidy from another Bidder; or
 - (c) has the same legal representative as another Bidder; or
 - (d) has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
 - (e) participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which such Bidder is involved. However, this does not limit the inclusion of the same subcontractor in more than one bid; or

- (f) or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the bid; or
- (g) or any of its affiliates has been hired (or is proposed to be hired) by the Employer or Borrower as Engineer for the Contract implementation;
- (h) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm;
- (i) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding documents or specifications of the contract, and/or the bid evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the procurement process and execution of the contract.
- 4.3 A Bidder may have the nationality of any country, subject to the restrictions pursuant to ITB 4.7. A Bidder shall be deemed to have the nationality of a country if the Bidder is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed sub-contractors or sub-consultants for any part of the Contract including related Services.
- 4.4 A Bidder that has been sanctioned by the Bank in accordance with the above ITB 3.1, including in accordance with the Bank's Guidelines on Preventing and Combating Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants ("Anti-Corruption Guidelines"), shall be ineligible to be prequalified for, bid for, or be awarded a Bank-financed contract or benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall have determined. The list of debarred firms and individuals is available at the electronic address **specified in the BDS**.

- 4.5 Bidders that are Government-owned enterprises or institutions in the Employer's Country may participate only if they can establish that they (i) are legally and financially autonomous (ii) operate under commercial law, and (iii) are not dependent agencies of the Employer. To be eligible, a government-owned enterprise or institution shall establish to the Bank's satisfaction, through all relevant documents, including its Charter and other information the Bank may request, that it: (i) is a legal entity separate from the government (ii) does not currently receive substantial subsidies or budget support; (iii) operates like any commercial enterprise, and, inter alia, is not obliged to pass on its surplus to the government, can acquire rights and liabilities, borrow funds and be liable for repayment of its debts, and can be declared bankrupt; and (iv) is not bidding for a contract to be awarded by the department or agency of the government which under their applicable laws or regulations is the reporting or supervisory authority of the enterprise or has the ability to exercise influence or control over the enterprise or institution.
- 4.6 A Bidder shall not be under suspension from bidding by the Employer as the result of the operation of a Bid-Securing Declaration.
- 4.7 Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or the contracting of works or services required; or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country.
- 4.8 A Bidder shall provide such evidence of eligibility satisfactory to the Employer, as the Employer shall reasonably request.
- 5.1 The materials, equipment and services to be supplied under the Contract and financed by the Bank may have their origin in any country subject to the restrictions specified in Section V, Eligible **Equipment and** Countries, and all expenditures under the Contract will not contravene such restrictions. At the Employer's request, Bidders may be required to provide evidence of the origin of materials, equipment and services.

5. Eligible

Materials,

Services

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B. Contents of Bidding Document

6.1 The Bidding Document consist of Parts 1, 2, and 3, which include all the Sections specified below, and which should be read in conjunction with any Addenda issued in accordance with ITB 8.

PART 1 Bidding Procedures

Section I - Instructions to Bidders (ITB)
Section II - Bid Data Sheet (BDS)
Section III - Evaluation and Qualification Criteria
Section IV - Bidding Forms
Section V - Eligible Countries
Section VI - Bank Policy-Corrupt and Fraudulent

Practices

PART 2 Works Requirements

Section VII - Works Requirements

PART 3 Conditions of Contract and Contract Forms

Section VIII - General Conditions of Contract (GCC) Section IX - Particular Conditions of Contract (PCC) Section X - Contract Forms

- 6.2 The Invitation for Bids issued by the Employer is not part of the Bidding Document.
- 6.3 Unless obtained directly from the Employer, the Employer is not responsible for the completeness of the Bidding Documents, responses to requests for clarification, the minutes of the pre-Bid meeting (if any), or Addenda to the Bidding Documents in accordance with ITB 8. In case of any contradiction, documents obtained directly from the Employer shall prevail.
- 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents and to furnish with its bid all information and documentation as is required by the Bidding Documents.

6. Sections of Bidding Document

- 7. Clarification of 7.1 A Bidder requiring any clarification of the Bidding Document shall contact the Employer in writing at the Employer's address Bidding specified in the BDS or raise its inquiries during the pre-bid **Document**, Site Visit, Pre-Bid meeting if provided for in accordance with ITB 7.4. The Employer will respond in writing to any request for clarification, Meeting provided that such request is received prior to the deadline for submission of bids within a period specified in the BDS. The Employer shall forward copies of its response to all Bidders who have acquired the Bidding Documents in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. If so specified in the BDS, the Employer shall also promptly publish its response at the web page identified in the BDS. Should the clarification result in changes to the essential elements of the Bidding Documents, the Employer shall amend the Bidding Documents following the procedure under ITB 8 and ITB 22.2.
 - 7.2 The Bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.
 - 7.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.
 - 7.4 **If so specified in the BDS**, the Bidder's designated representative is invited to attend a pre-bid meeting. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
 - 7.5 The Bidder is requested, to submit any questions in writing, to reach the Employer not later than one week before the meeting.
 - 7.6 Minutes of the pre-bid meeting, if applicable, including the text of the questions asked by Bidders, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Documents in accordance with ITB 6.3. Any modification to the Bidding Documents that may become necessary as a result of the pre-bid meeting shall be

11. Documents

Bid

Comprising the

made by the Employer exclusively through the issue of an addendum pursuant to ITB 8 and not through the minutes of the pre-bid meeting. Nonattendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.

- 8. Amendment of Bidding Document
 8.1 At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Documents by issuing addenda.
 - 8.2 Any addendum issued shall be part of the Bidding Documents and shall be communicated in writing to all who have obtained the Bidding Document from the Employer in accordance with ITB 6.3. The Employer shall also promptly publish the addendum on the Employer's web page in accordance with ITB 7.1.
 - 8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may, at its discretion, extend the deadline for the submission of bids, pursuant to ITB 22.2.

C. Preparation of Bids

- **9.** Cost of Bidding 9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
- 10. Language of Bid 10.1 The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer, shall be written in the language specified in the BDS. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified in the BDS, in which case, for purposes of interpretation of the Bid, such translation shall govern.
 - 11.1 The Bid shall comprise the following:
 - (a) Letter of Bid in accordance with ITB 12;
 - (b) completed Schedules, in accordance with ITB 12 and 14: as specified in the BDS;
 - (c) Bid Security or Bid Securing Declaration, in accordance with ITB 19.1;
 - (d) alternative bids, if permissible, in accordance with ITB 13;

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- (e) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.2;
- (f) documentary evidence in accordance with ITB 17 establishing the Bidder's qualifications to perform the contract if its Bid is accepted;
- (g) Technical Proposal in accordance with ITB 16; and
- (h) any other document required in the BDS.
- 11.2 In addition to the requirements under ITB 11.1, bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all members and submitted with the bid, together with a copy of the proposed Agreement.
- 11.3 The Bidder shall furnish in the Letter of Bid information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.
- 12. Letter of Bid and Schedules
 12.1 The Letter of Bid and Schedules shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 20.2. All blank spaces shall be filled in with the information requested.
- **13.** Alternative Bids 13.1 Unless otherwise specified in the BDS, alternative bids shall not be considered.
 - 13.2 When alternative times for completion are explicitly invited, a statement to that effect will be **included in the BDS**, as will the method of evaluating different times for completion.
 - 13.3 Except as provided under ITB 13.4 below, Bidders wishing to offer technical alternatives to the requirements of the Bidding Document must first price the Employer's design as described in the Bidding Document and shall further provide all information necessary for a complete evaluation of the alternative by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the lowest evaluated Bidder conforming to the basic technical requirements shall be considered by the Employer.

Discounts

- 13.4 When specified in the BDS, Bidders are permitted to submit alternative technical solutions for specified parts of the Works. Such parts will be identified in the BDS and described in Section VII. Works Requirements. The method for their evaluation will be stipulated in Section III. Evaluation and Qualification Criteria.
- 14.1 The prices and discounts (including any price reduction) quoted 14. Bid Prices and by the Bidder in the Letter of Bid and in the Schedules shall conform to the requirements specified below.
 - 14.2 The Bidder shall submit a bid for the whole of the works described in ITB 1.1 by filling in prices for all items of the Works, as identified in Section IV. Bidding Forms. In case of admeasurement contracts, the Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bill of Quantities.
 - 14.3 The price to be quoted in the Letter of Bid, in accordance with ITB 12.1, shall be the total price of the bid, excluding any discounts offered.
 - 14.4 The Bidder shall quote any discounts and the methodology for their application in the Letter of Bid, in accordance with ITB 12.1.
 - 14.5 Unless otherwise provided in the BDS and the Conditions of Contract, the prices quoted by the Bidder shall be fixed. If the prices quoted by the Bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, the Bidder shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data in Section IV- Bidding Forms and the Employer may require the Bidder to justify its proposed indices and weightings.
 - 14.6 If so specified in ITB 1.1, bids are invited for individual lots (contracts) or for any combination of lots (packages). Bidders wishing to offer discounts for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITB 14.4, provided the bids for all lots (contracts) are opened at the same time.

14.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of bids, shall be included in the rates and prices and the total bid price submitted by the Bidder.

15. Currencies of Bid and Payment is and Payment is and Payment is and Payment is and Payment

- 15.2 Bidders may be required by the Employer to justify, to the Employer's satisfaction, their local and foreign currency requirements, and to substantiate that the amounts included in the unit rates and prices and shown in the Schedule of Adjustment Data are reasonable, in which case a detailed breakdown of the foreign currency requirements shall be provided by Bidders.
- 16. Documents
 Comprising the Technical Proposal
 16.1 The Bidder shall furnish a Technical Proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section IV, Bidding Forms, in sufficient detail to demonstrate the adequacy of the Bidders' proposal to meet the work requirements and the completion time.
- 17. Documents
 Establishing the Qualifications of the Bidder
 17.1 In accordance with Section III, Evaluation and Qualification Criteria, to establish its qualifications to perform the Contract, the Bidder shall provide the information requested in the corresponding information sheets included in Section IV, Bidding Forms.
 - 17.2 If a margin of preference applies as specified in accordance with ITB 33.1, domestic Bidders, individually or in joint ventures, applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITB 33.1.
- 18. Period of Validity of Bids
 18.1 Bids shall remain valid for the period specified in the BDS after the bid submission deadline date prescribed by the Employer in accordance with ITB 22.1. A bid valid for a shorter period shall be rejected by the Employer as nonresponsive.

- 18.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Employer may request Bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. If a bid security is requested in accordance with ITB 19, it shall also be extended for twenty-eight (28) days beyond the deadline of the extended validity period. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request shall not be required or permitted to modify its bid, except as provided in ITB 18.3.
- 18.3 If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity, the Contract price shall be determined as follows:
 - (a) In the case of fixed price contracts, the Contract price shall be the bid price adjusted by the factor **specified in the BDS**.
 - (b) In the case of adjustable price contracts, no adjustment shall be made.
 - (c) In any case, bid evaluation shall be based on the bid price without taking into consideration the applicable correction from those indicated above.
- 19. Bid Security19.1 The Bidder shall furnish as part of its bid, either a Bid-Securing Declaration or a bid security as specified in the BDS, in original form and, in the case of a bid security, in the amount and currency specified in the BDS.
 - 19.2 A Bid Securing Declaration shall use the form included in Section IV, Bidding Forms.
 - 19.3 If a bid security is specified pursuant to ITB 19.1, the bid security shall be a demand guarantee in any of the following forms at the Bidder's option:
 - (a) an unconditional guarantee issued by a bank or financial institution (such as an insurance, bonding or surety company);
 - (b) an irrevocable letter of credit;
 - (c) a cashier's or certified check; or
 - (d) another security **specified in the BDS.**

from a reputable source from an eligible country. If the unconditional guarantee is issued by a financial institution located outside the Employer's Country, the issuing financial institution shall have a correspondent financial institution located in the Employer's Country to make it enforceable. In the case of a bank guarantee, the bid security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms, or in another substantially similar format approved by the Employer prior to bid submission. The bid security shall be valid for twenty-eight (28) days beyond the original validity period of the bid, or beyond any period of extension if requested under ITB 18.2.

- 19.4 If a bid security or Bid Securing Declaration is specified pursuant to ITB 19.1, any bid not accompanied by a substantially responsive bid security or Bid-Securing Declaration shall be rejected by the Employer as non-responsive.
- 19.5 If a bid security is specified pursuant to ITB 19.1, the bid security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the Contract and furnishing the performance security pursuant to ITB 42.
- 19.6 The bid security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required performance security.
- 19.7 The bid security may be forfeited or the Bid Securing Declaration executed:
 - (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid, , or any extension thereto provided by the Bidder; or
 - (b) if the successful Bidder fails to:
 - (i) sign the Contract in accordance with ITB 41; or
 - (ii) furnish a performance security in accordance with ITB 42.
- 19.8 The bid security or the Bid Securing Declaration of a JV shall be in the name of the JV that submits the bid. If the JV has not been constituted into a legally-enforceable JV, at the time of bidding, the Bid Security or the Bid Securing Declaration shall be in the names of all future members as named in the letter of intent mentioned in ITB 4.1 and ITB 11.2.

19.9 If a bid security is not required in the BDS, and

(a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid, or

if the successful Bidder fails to: sign the Contract in (b) accordance with ITB 41; or furnish a performance security in accordance with ITB 42;

the Borrower may, if provided for in the BDS, declare the Bidder ineligible to be awarded a contract by the Employer for a period of time as stated in the BDS.

- 20. Format and 20.1 The Bidder shall prepare one original of the documents comprising the bid as described in ITB 11 and clearly mark it Signing of Bid "ORIGINAL". Alternative bids, if permitted in accordance with ITB 13, shall be clearly marked "ALTERNATIVE". In addition, the Bidder shall submit copies of the bid in the number specified in the BDS, and clearly mark each of them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.
 - 20.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the bid where entries or amendments have been made shall be signed or initialed by the person signing the bid.
 - 20.3 In case the Bidder is a JV, the Bid shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.
 - 20.4 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the bid.

Submission and Opening of Bids D.

- 21.1 The Bidder shall enclose the original and all copies of the bid, including alternative bids, if permitted in accordance with ITB 13, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL", "ALTERNATIVE" and "COPY." These envelopes containing the original and the copies shall then be enclosed in one single envelope.
 - 21.2 The inner and outer envelopes shall:
 - (a) bear the name and address of the Bidder;

21. Sealing and **Marking of Bids**

- (b) be addressed to the Employer as **provided in the BDS** pursuant to ITB 22.1;
- (c) bear the specific identification of this bidding process specified in accordance with BDS 1.1; and
- (d) bear a warning not to open before the time and date for bid opening.
- 21.3 If all envelopes are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the bid.
- 22. Deadline for Submission of Bids
 22.1 Bids must be received by the Employer at the address and no later than the date and time specified in the BDS. When so specified in the BDS, bidders shall have the option of submitting their bids electronically. Bidders submitting bids electronically shall follow the electronic bid submission procedures specified in the BDS.
 - 22.2 The Employer may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Document in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.
- 23. Late Bids23.1 The Employer shall not consider any bid that arrives after the deadline for submission of bids, in accordance with ITB 22. Any bid received by the Employer after the deadline for submission of bids shall be declared late, rejected, and returned unopened to the Bidder.
- 24. Withdrawal, Substitution, and Modification of Bids
 24.1 A Bidder may withdraw, substitute, or modify its bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 20.2, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the bid must accompany the respective written notice. All notices must be:
 - (a) prepared and submitted in accordance with ITB 20 and ITB 21 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," "MODIFICATION;" and
 - (b) received by the Employer prior to the deadline prescribed for submission of bids, in accordance with ITB 22.

- 24.2 Bids requested to be withdrawn in accordance with ITB 24.1 shall be returned unopened to the Bidders.
- 24.3 No bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Letter of Bid or any extension thereof.
- 25. Bid Opening
 25.1 Except in the cases specified in ITB 23 and 24, the Employer shall publicly open and read out in accordance with ITB 25.3 all bids received by the deadline, at the date, time and place specified in the BDS, in the presence of Bidders' designated representatives and anyone who choose to attend. Any specific electronic bid opening procedures required if electronic bidding is permitted in accordance with ITB 22.1, shall be as specified in the BDS.
 - 25.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening. Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding bid being substituted, and the substituted bid shall not be opened, but returned to the Bidder. No bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at bid opening. Envelopes marked "MODIFICATION" shall be opened and read out with the corresponding bid. No bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at bid opening. Only envelopes that are opened and read out at bid opening shall be considered further.
 - 25.3 All other envelopes shall be opened one at a time, reading out: the name of the Bidder and whether there is a modification; the total Bid Price, per lot (contract) if applicable, including any discounts and alternative bids; the presence or absence of a bid security, or Bid Securing Declaration, if required; and any other details as the Employer may consider appropriate. Only discounts and alternative bids read out at bid opening shall be considered for evaluation. The Letter of Bid and the Bill of Quantities are to be initialed by representatives of the Employer attending bid opening in the manner **specified in the BDS**. The Employer shall neither discuss the merits of any bid nor reject any bid (except for late bids, in accordance with ITB 23.1).

25.4 The Employer shall prepare a record of the bid opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; the Bid Price, per lot (contract) if applicable, including any discounts and alternative bids; and the presence or absence of a bid security, if one was required. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

E. Evaluation and Comparison of Bids

- **26. Confidentiality** 26.1 Information relating to the evaluation of bids and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with the bidding process until information on Contract award is communicated to all Bidders in accordance with ITB 40.
 - 26.2 Any attempt by a Bidder to influence the Employer in the evaluation of the bids or Contract award decisions may result in the rejection of its bid.
 - 26.3 Notwithstanding ITB 26.2, from the time of bid opening to the time of Contract award, if a Bidder wishes to contact the Employer on any matter related to the bidding process, it shall do so in writing.
- 27. Clarification of Bids
 27.1 To assist in the examination, evaluation, and comparison of the bids, and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its bid given a reasonable time for a response. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease in the prices or substance of the bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the bids, in accordance with ITB 31.
 - 27.2 If a Bidder does not provide clarifications of its bid by the date and time set in the Employer's request for clarification, its bid may be rejected.

28. Deviations, Reservations, and Omissions
28.1 During the evaluation of bids, the following definitions apply:
(a) "Deviation" is a departure from the requirements specified in the Bidding Document;

- (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and
- (c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.
- **29. Determination of**
Responsiveness29.1 The Employer's determination of a bid's responsiveness is to be
based on the contents of the bid itself, as defined in ITB11.
 - 29.2 A substantially responsive bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that,
 - (a) if accepted, would:
 - (i) affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or
 - (ii) limit in any substantial way, inconsistent with the Bidding Document, the Employer's rights or the Bidder's obligations under the proposed Contract; or
 - (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive bids.
 - 29.3 The Employer shall examine the technical aspects of the bid submitted in accordance with ITB 16, Technical Proposal, in particular, to confirm that all requirements of Section VII (Works Requirements) have been met without any material deviation, reservation or omission.
 - 29.4 If a bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.
- 30. Nonconformities, Errors, and Omissions
 30.1 Provided that a bid is substantially responsive, the Employer may waive any nonconformities in the bid.
 - 30.2 Provided that a bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or

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documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

- 30.3 Provided that a bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price may be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component. The adjustment shall be made using the methods specified in Section III (Evaluation and Qualification Criteria).
- 31.1 Provided that the bid is substantially responsive, the Employer shall correct arithmetical errors on the following basis:
 - (a) only for admeasurement contracts, if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
 - (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
 - (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.
 - 31.2 Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITB 31.1, shall result in the rejection of the Bid.
- 32. Conversion to Single Currency32.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted into a single currency as specified in the BDS.
- **33. Margin of Preference 33.1 Unless otherwise specified in the BDS,** a margin of preference for domestic bidders shall not apply.
- **34. Subcontractors** 34.1 Unless otherwise stated in the BDS, the Employer does not intend to execute any specific elements of the Works by sub-contractors

31. Correction of Arithmetical Errors selected in advance by the Employer.

- 34.2 The Employer may permit subcontracting for certain specialized works as indicated in Section III. When subcontracting is permitted by the Employer, the specialized sub-contractor's experience shall be considered for evaluation. Section III describes the qualification criteria for sub-contractors.
- 34.3 Bidders may propose subcontracting up to the percentage of total value of contracts or the volume of works as **specified in the BDS.**
- 35. Evaluation of Bids35.1 The Employer shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.
 - 35.2 To evaluate a bid, the Employer shall consider the following:
 - (a) the bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities for admeasurement contracts, but including Daywork¹ items, where priced competitively;
 - (b) price adjustment for correction of arithmetic errors in accordance with ITB 31.1;
 - (c) price adjustment due to discounts offered in accordance with ITB 14.4;
 - (d) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 32;
 - (e) price adjustment for nonconformities in accordance with ITB 30.3;
 - (f) the additional evaluation factors are specified in Section III (Evaluation and Qualification Criteria);
 - 35.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.
 - 35.4 If this Bidding Document allows Bidders to quote separate prices for different lots (contracts), the methodology to determine the

¹ Daywork is work carried out following instructions of the Project Manager and paid for on the basis of time spent by workers, and the use of materials and the Contractor's equipment, at the rates quoted in the Bid. For Daywork to be priced competitively for Bid evaluation purposes, the Employer must list tentative quantities for individual items to be costed against Daywork (e.g., a specific number of tractor driver staffdays, or a specific tonnage of Portland cement), to be multiplied by the bidders' quoted rates and included in the total Bid price.

lowest evaluated price of the contract combinations, including any discounts offered in the Letter of Bid, is specified in Section III. Evaluation and Qualification Criteria.

- 35.5 If the bid for an admeasurement contract, which results in the lowest Evaluated Bid Price, is seriously unbalanced or, front loaded in the opinion of the Employer, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, taking into consideration the schedule of estimated Contract payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.
- 36. Comparison of Bids36.1 The Employer shall compare the evaluated prices of all substantially responsive bids established in accordance with ITB 35.2 to determine the lowest evaluated bid.
- 37. Qualification of the Bidder37.1 The Employer shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive bid meets the qualifying criteria specified in Section III. Evaluation and Qualification Criteria.
 - 37.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17.1.
 - 37.3 An affirmative determination of qualification shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the bid, in which event the Employer shall proceed to the next lowest evaluated bid to make a similar determination of that Bidder's qualifications to perform satisfactorily.
- 38. Employer's Right to Accept Any Bid, and to Reject Any or All Bids
 38.1 The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

F. Award of Contract

39. Award Criteria 39.1 Subject to ITB 37.1, the Employer shall award the Contract to

the Bidder whose bid has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

- 40. Notification of Award
 40.1 Prior to the expiration of the period of bid validity, the Employer shall notify the successful Bidder, in writing, via the Letter of Acceptance included in the Contract Forms, that its bid has been accepted. At the same time, the Employer shall also notify all other Bidders of the results of the bidding, and shall publish in UNDB online the results identifying the bid and lot (contract) numbers and the following information:
 - (i) name of each Bidder who submitted a Bid;
 - (ii) bid prices as read out at Bid Opening;
 - (iii) name and evaluated prices of each Bid that was evaluated;
 - (iv) name of bidders whose bids were rejected and the reasons for their rejection; and
 - (v) name of the winning Bidder, and the Price it offered, as well as the duration and summary scope of the contract awarded.
 - 40.2 Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.
 - 40.3 The Employer shall promptly respond in writing to any unsuccessful Bidder who, after notification of award in accordance with ITB 40.1, requests in writing the grounds on which its bid was not selected.

- 41. Signing of
Contract41.1 Promptly upon notification, the Employer shall send the
successful Bidder the Contract Agreement.
 - 41.2 Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.
- 42. Performance Security
 42.1 Within twenty-eight (28) days of the receipt of notification of award from the Employer, the successful Bidder shall furnish the performance security in accordance with the conditions of contract, subject to ITB 35.5, using for that purpose the Performance Security Form included in Section X. Contract Forms, or another form acceptable to the Employer. If the performance security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country.
 - 42.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or to sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security. In that event the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.
- 43. Adjudicator
 43.1 The Employer proposes the person named in the BDS to be appointed as Adjudicator under the Contract, at the daily fee specified in the BDS, plus reimbursable expenses. If the Bidder disagrees with this proposal, the Bidder should so state in his Bid. If, in the Letter of Acceptance, the Employer does not agree on the appointment of the Adjudicator, the Employer will request the Appointing Authority designated in the Particular Conditions of Contract (PCC) pursuant to Clause 23.1 of the General Conditions of Contract (GCC), to appoint the Adjudicator.

Section II - Bid Data Sheet (BDS)

A. Introduction

ITB 1.1	The number of the Invitation for Bids is : GEDP-CW-3/2015 The Employer is: Renewable Resources and Energy Efficiency (R2E2) Fund, 32 Proshyan Street, 1 st lane Yerevan, Republic of Armenia
ITB 1.1	The name of the bidding process is: Drilling of Two Slim Wells The identification number of the bidding process is: GEDP-CW-3/2015 The number and identification of lots comprising this bidding process is: (one single lot/contract)
ITB 2.1	The Borrower is: Republic of Armenia
ITB 2.1	The name of the Project is: Geothermal Exploratory Drilling Project
ITB 2.1	Loan or Financing Agreement amount: US\$ 8.55 million (including exploratory/production drilling, related infrastructure and technical assistance).
ITB 4.1	Maximum number of members in the JV shall be: 3 .
ITB 4.4	A list of debarred firms and individuals is available on the Bank's external website: <u>http://www.worldbank.org/debarr.</u>

B. Bidding Documents

ITB 7.1	For <u>clarification purposes</u> only, the Employer's address is:
	Attention: Mrs. Tamara Babayan
	Street Address: 32 Proshyan Street, 1st lane
	City: Yerevan
	Country: Republic of Armenia
	Telephone: : +37410-588011
	Facsimile number: +37410-541732
	Electronic mail address: info@r2e2.am
	Requests for clarification should be received by the Employer no later

	than: 14 days prior to the Deadline for Bid Submission.
ITB 7.1	Bidding Documents and all consequent Amendments and clarifications (if any) will be posted on the free accessed websites (www.gnumner.am and www.r2e2.am) and the R2E2 Fund takes no responsibility for missing or incorrect or/and incomplete downloading of those by the prospective bidders.
ITB 7.4	A Pre-Bid meeting shall not take place. A site visit conducted by the Employer shall not be organized.

C. Preparation of Bids

ITB 10.1	The language of the bid is: English
	All correspondence exchange shall be in English language. Language for translation of supporting documents and printed literature is English .
ITB 11.1 (b)	The following schedules shall be submitted with the bid: <i>priced Bill of Quantities</i>
ITB 11.1 (h)	The Bidder shall submit with its bid the following additional documents: none
ITB 13.1	Alternative bids shall not be permitted.
ITB 13.2	Alternative times for completion shall not be permitted.
ITB 13.4	Alternative technical solutions shall be permitted for the following parts of the Works: Not Applicable
ITB 14.5	The prices quoted by the Bidder shall not be subject to adjustment during the performance of the Contract.
ITB 15.1	The prices shall be quoted by the bidder in Armenian Dram. A Bidder expecting to incur expenditures in other currencies for inputs to the Works supplied from outside the Employer's country (referred to as the "foreign currency requirements") and wishing to be paid accordingly, shall indicate up to three foreign currencies of their choice expressed as a percentage of the bid price, together with the exchange rates used in the calculations in

	the appropriate form(s) included in Section IV. Bidding Forms.
ITB 18.1	The bid validity period shall be: 121 days.
ITB 18.3 (a)	The bid price shall be adjusted by a factor which will be specified in the request for bid validity extension.
	The local currency portion of the Contract price shall be adjusted by a factor reflecting local inflation during the period of extension, and the foreign currency portion of the Contract price shall be adjusted by a factor reflecting the international inflation (in the country of the foreign currency) during the period of extension.
ITB 19.1	A Bid Security shall be required.
	The amount and currency of the bid security shall be: US\$ 75,000.
ITB 19.3 (d)	Other types of acceptable securities: None
ITB 19.9	Not Applicable
ITB 20.1	In addition to the original of the bid, the number of copies is: two hard copies and one CDRom ./ Flash card .
ITB 20.2	The first sentence is amended as follows: "The original and all hard copies of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder".
	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: a Power of Attorney.

D. Submission and Opening of Bids

ITB 22.1	Bidders shall not have the option of submitting their bids electronically.
ITB 22.1	For bid submission purposes only, the Employer's address is: <i>[insert all required and applicable information]</i>
	Attention: Mrs. Tamara Babayan
	Street Address: 32 Proshyan Street, 1 st lane
	Floor: 3, room 8
	City: Yerevan ZIP Code:
	Country: Republic of Armenia
	The deadline for bid submission is:

	Date: February 01, 2016
	Time: 15:00 (local time)
ITB 25.1	The bid opening shall take place at:
	Street Address: 32 Proshyan Street, 1 st lane
	Floor: 4, Hall
	City: Yerevan
	Country: Republic of Armenia
	Date: February 01, 2016
	Time: 15:05; (local time)

ITB 25.3	The Letter of Bid and Priced Bill of Quantities shall be initialed by three
	representatives of the Employer conducting Bid opening.

E. Evaluation and Comparison of Bids

ITB 32.1	The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is: <i>the Armenian Dram</i> The source of exchange rate shall be: the Central Bank of Armenia . The date for the exchange rate shall be: the deadline for Bid Submission .
ITB 33.1	A margin of preference <i>shall not</i> apply.
ITB 34.1	At this time the Employer does not intend to execute certain specific parts of the Works by sub-contractors selected in advance.
ITB 34.3	 Contractor's proposed subcontracting: Maximum percentage of subcontracting permitted is: 50 % of the total contract amount. b) Bidders planning to subcontract more than 10% of total volume of work shall specify, in the Letter of Bid, the activity (ies) or parts of the works to be subcontracted along with complete details of the sub-contractors and their qualification and experience. The qualification and experience of the subcontracted failing which such sub-contractors will not be permitted to participate. c) Sub-contractors' qualification and experience will not be considered for evaluation of the Bidder. The Bidder on its own (without taking into account the qualification and experience of the sub-contractor) should meet the qualification criteria.

F. Award of Contract

ITB 41	ITB Clause 41 has been supplemented with sub-clause 41.3: Precondition of contract signing: the successful bidder should possess of the appropriate license "Hydrotechnical", issued by the Ministry of Urban Development of the Republic of Armenia
ITB 43.1	The Adjudicator proposed by the Employer is:
	Leo Grutters - Adjudicator, Dispute Board Specialist Member FIDIC President's List e-mail: Lgr@leo-grutters.com; phone #: +49-172-859 1003.

The daily fee for this proposed Adjudicator shall be: A daily fee of €2200 (excluding VAT, if any which will be paid by the Employer on behalf of the adjudicator) for time spent in the performance of duties as an adjudicator, based on 8 hrs. per day. Reimbursement of all expenses incurred during the performance of duties as an adjudicator. The biographical data of the proposed Adjudicator is as follows: **Country Residence - Germany** Civil Engineer, MBA Arbitrator, Adjudicator Fellow of the Chartered Institute of Arbitrators (2008) Fellow of the Dispute Board Federation (2012) Current employment status Independent Dispute Resolution Expert Particular technical expertise Building and Civil Engineering, Electrical and Mechanical Engineering, Hydro projects, Infrastructure, Railways, Bridges, Manufacturing and Process Plant, Marine Civil Engineering, Metro railway and stations, Natural gas and LNG Facilities, Pipelines, Power / Energy, Road and Storm water Defense Works, Tunnels and Shafts, Waste Treatment and Pumping Plant Present position Various Dispute Boards on international construction projects. Selected Experience in Dispute Boards: - Road Project Poland - FIDIC Red 1999 (sole member) - Waste water treatment Plant Qatar - FIDIC Gold 2008 (party nominated) - Nuclear Power Station Finland - Bespoke Contract (party nominated) -ICC Rules - Roads Projects South Africa (2x) - Bespoke Contract (sole member) - Waste to Energy Plant Netherlands - FIDIC Yellow 1999 (party nominated) - Gas Treatment Station Australia - Bespoke Contract (party nominated) - Desalination Plant Oman - Bespoke Contract (party nominated) Selected Experience in Arbitration: - Hydro Power Station Philippines - Nuclear Power Station Finland (3x) - Roads Project Poland - Shopping Complex Czech Republic - Combined Cycle Power Station Dubai - Electrification Substations Qatar

 Industrial Roads Project Qatar Selected Experience in Claims Strategies and as Expert Witness:
– HEPP - China (2000-2003)
- Conventional Power Station - South Africa (2010-2011)
– Airport Construction - Dubai (2004 - 2005)
– Off-Shore Wind parks - Germany (2011-2012)
OR
James Perry - PS Consulting
7 rue du Printemps
75017 Paris
Franc Mob: +33 (0)6 63 25 19 97
e-mail: jperry@ps-consulting.fr
e-man. jpen y @ps-consulting.n
The daily fee for this proposed Adjudicator shall be: A daily fee of €2500 for time spent in the performance of duties as an adjudicator. Reimbursement of all expenses incurred during the performance of duties as an adjudicator.
The biographical data of the proposed Adjudicator is as follows:
17 August 1960, C USA Colorado State University, USA (Bachelor of Science, Civil Engineering) Case Western Reserve University, USA (Juris Doctor)
2003 - Present Partner, PS Consulting, www.ps-consulting.fr
2012 – Present - Founding Partner Global Construction & Infrastructure Legal Alliance (GcilA) www.gcila.org
2005 – Present - Of Counsel, François & Associés
 Co-arbitrator in an ICC Hong Kong matter concerning offshore drilling work in the South Pacific. Offshore drilling works in Southeast Asia (Arbitrator)
• Co-arbitrator in an ICC Paris matter concerning dredging works in Central America.
• FIDIC appointed DAB Member and selected chairman on a standing dispute board Construction 1999 (Red Book) in regard to a dredging and port extension project in Eastern Europe.
• Party appointed Dispute Board Member in a standing DAB in connection with the construction of a rolled - compacted concrete dam in Lebanon under a FIDIC

Section III - Evaluation and Qualification Criteria

This section contains all the criteria that the Employer shall use to evaluate bids and qualify Bidders if the bidding was not preceded by a prequalification exercise and postqualification is applied. In accordance with ITB 35 and ITB 37, no other methods, criteria and factors shall be used. The Bidder shall provide all the information requested in the forms included in Section 4 (Bidding Forms).

Wherever a Bidder is required to state a monetary amount, Bidders should indicate the USD equivalent using the rate of exchange determined as follows:

- -For construction turnover or financial data required for each year Exchange rate prevailing on the last day of the respective calendar year (in which the amounts for that year is to be converted) was originally established.
- -Value of single contract Exchange rate prevailing on the date of the contract.

Exchange rates shall be taken from the publicly available source identified in the ITB 32.1. Any error in determining the exchange rates in the Bid may be corrected by the Employer

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1. Margin of Preference

Not applicable

2. Evaluation

In addition to the criteria listed in ITB 35.2 (a) - (e) the following criteria shall apply:

2.1 Adequacy of Technical Proposal

Evaluation of the Bidder's Technical Proposal will include an assessment of the Bidder's technical capacity to mobilize key equipment and personnel for the contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section VII (Works Requirements).

2.2 Multiple Contracts

Not applicable

2.3 Alternative Completion Times

Not applicable

2.4 Technical Alternatives

Technical alternatives, if permitted under ITB 13.4, will be evaluated as follows: Not applicable

2.5 Specialized Subcontractors

Not applicable

Only the specific experience of sub-contractors for specialized works permitted by the Employer will be considered. The general experience and financial resources of the specialized sub-contractors shall not be added to those of the Bidder for purposes of qualification of the Bidder.

3. Qualification

	Eligibility and Qualifica	ation Criteria			e Requirements		Documentation
No.	Subject	Requirement	Single Entity		enture (existing or		Submission
NO.	Subject	Requirement		All Parties	Each Member	One Member	300111351011
				Combined			Requirements
1	. Eligibility						
1.1	Nationality	Nationality in accordance with ITB 4.3	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments
1.2	Conflict of Interest	No conflicts of interest in accordance with ITB 4.2	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Letter of Bid
1.3	Bank Eligibility	Not having been declared ineligible by the Bank, as described in ITB 4.4, 4.5, 4.6 and 4.7	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Letter of Bid
1.4	Government Owned Entity of the Borrower country	Meets conditions of ITB 4.5	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments
1.5	United Nations resolution or Borrower's country law	Not having been excluded as a result of prohibition in the Borrower's country laws or official regulations against commercial relations with the Bidder's country, or by an act of compliance with UN Security Council resolution, both in accordance with ITB 4.7 and Section V.	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments

	Eligibility and Qualifica	ation Critoria		Compliand	ce Requirements		Documentation
					enture (existing or	r intended)	
No.	Subject	Requirement	Single Entity	All Parties Combined	Each Member	One Member	Submission
				Combined			Requirements
2	. Historical Contract Nor	n-Performance					
2.1	History of Non- Performing Contracts	Non-performance of a contract ² did not occur as a result of contractor default since 1 st January 2012.	Must meet requirement ¹²	Must meet requirements	Must meet requirement ³	N/A	Form CON-2
2.2	Suspension Based on Execution of Bid Securing Declaration by the Employer or withdrawal of the Bid within Bid validity	Not under suspension based on execution of a Bid Securing Declaration pursuant to ITB 4.6 or withdrawal of the Bid pursuant ITB 19.9.	Must meet requirement	Must meet requirement [Must meet requirement	N/A	Bid Submission Form
2.3	Pending Litigation	Bidder's financial position and prospective long term profitability sound according to criteria established in 3.1 below and assuming that all pending litigation will be resolved against the Bidder	Must meet requirement	N/A	Must meet requirement	N/A	Form CON – 2

² Non performance, as decided by the Employer, shall include all contracts where (a) non performance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Non performance shall not include contracts where Employers decision was overruled by the dispute resolution mechanism. Non performance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted.

³ This requirement also applies to contracts executed by the Bidder as JV member.

	Eligibility and Qualifica	ation Criteria			e Requirements		Documentation
No.	Subject	Requirement	Single Entity	Joint Ve All Parties	enture (existing or Each Member	intended) One Member	Submission
				Combined			Requirements
2.4	Litigation History	No consistent history of court/arbitral award decisions against the Bidder ⁴ since 1 st January 2012	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Form CON – 2

⁴ The Bidder shall provide accurate information on the letter of Bid about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the last five years. A consistent history of court/arbitral awards against the Bidder or any member of a joint venture may result in disqualifying the Bidder.

	Eligibility and Qualific	ation Criteria			ce Requirements		Documentation
No.	Subject	Dequirement	Single Entity		enture (existing or		Submission
NO.	Subject	Requirement	Single Entity	All Parties	Each Member	One Member	Submission
				Combined			Requirements
3. Fi	nancial Situation and Po	erformance					
3.1	Financial Capabilities	 (i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other 	Must meet requirement	Must meet Requirement	N/A	N/A	Form FIN – 3.1, with attachments
		financial means (independent of any contractual advance payment) sufficient to meet the cash flow requirements estimated as USD \$ <i>3 million</i> for the subject contract(s) net of the Bidders other commitments (ii) The Bidders shall also demonstrate, to the satisfaction of the Employer, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments. (iii) The audited balance sheets or, if	Must meet requirement	Must meet requirement	N/A	N/A	

	Eligibility and Qualit	fication Criteria		Complian	co Requirements		Documentation	
					Compliance Requirements Joint Venture (existing or intended)			
No.	Subject	Requirement	Single Entity	All Parties Combined	Each Member	One Member	Submission Requirements	
		not required by the laws of the Bidder's country, other financial statements acceptable to the Employer, for the last three (3) years shall be submitted and must demonstrate the current soundness of the Bidder's financial position and indicate its prospective long-	Must meet requirement	N/A	Must meet requirement	N/A		
3.2	Average Annual Turnover	term profitability. Minimum average annual turnover of US\$ 8 million, calculated as total certified payments received for contracts in progress and/or completed within the last three years, divided by three.	Must meet requirement	Must meet requirement	Must meet 40%, of the requirement	Must meet 60% of the requirement	Form FIN – 3.2	

	Eligibility and Qualif	ication Criteria			ce Requirements	r intended)	Documentation
No.	Subject	Requirement	Single Entity	All Parties Combined	enture (existing of Each Member	One Member	- Submission Requirements
4. Ex	xperience						
4.1 (a)	General Experience	Experience under drilling contracts in the role of prime contractor, JV member, sub- contractor, or management contractor for at least the last <i>five</i> years, starting 1 st January 2010.	Must meet requirement	N/A	Must meet requirement	N/A	Form EXP – 4.1
4.2 (a)	Specific Experience	 (i) A minimum number of similar⁵ contracts specified below that have been satisfactorily and substantially⁶ completed as a prime contractor, joint venture member⁷, management 	Must meet requirement	Must meet requirement ⁸	N/A	N/A	Form EXP 4.2(a)

⁵ The similarity shall be based on the physical size, complexity, methods/technology and/or other characteristics described in Section VII, Work's Requirements. Summation of number of small value contracts (less than the value specified under requirement) to meet the overall requirement will not be accepted.

⁶ Substantial completion shall be based on 80% or more works completed under the contract.

⁷ For contracts under which the Bidder participated as a joint venture member or sub-contractor, only the Bidder's share, by value, shall be considered to meet this requirement.

⁸ In the case of JV, the value of contracts completed by its members shall not be aggregated to determine whether the requirement of the minimum value of a single contract has been met. Instead, each contract performed by each member shall satisfy the minimum value of a single contract as required for single entity. In determining whether the JV meets the requirement of total number of contracts, only the number of contracts completed by all members each of value equal or more than the minimum value required shall be aggregated.

	Eligibility and Qualific	ation Criteria			e Requirements		Documentation
No.	Subject	Doguiromont	Single Entity		enture (existing or		Submission
NO.	Subject	Requirement	Single Entity	All Parties Combined	Each Member	One Member	Requirements
		contractor or sub- contractor ⁷ between 1st January 2010 and application submission deadline: two contracts, each of minimum value of US\$ 2.5 million.					
4.2 (b)		For the above and any other contracts completed and under implementation as prime contractor, joint venture member, management contractor or sub- contractor ⁹ on or after the first day of the calendar year during the period stipulated in 4.2 (a) above, a minimum construction experience in the following key activities successfully completed ¹⁰ :	Must meet requirements	Must meet requirements	N/A	Must meet the following requirements for the key activities listed below Activity 1 – At least one contract successfully completed during the past three years	Form EXP – 4.2 (b)

⁹ For contracts under which the Bidder participated as a joint venture member or sub-contractor, only the Bidder's share shall be counted to meet this requirement.

 ¹⁰ Volume, number or rate of production of any key activity can be demonstrated in one or more contracts combined if executed during same time period. The rate of production shall be the annual production rate for the key construction activity (or activities).

	Eligibility and Qualifica	ation Criteria			e Requirements		Documentation
No.	Subject	Requirement	Single Entity	Joint Ve All Parties Combined	enture (existing or Each Member	intended) One Member	Submission Requirements
) 1) Successful experience in drilling deep slim wells to depths of 1200-1500 meters or more					

5 Personnel

The Bidder must demonstrate that it will have the personnel for the key positions that meet the following requirements:

No.	Position	Total Work Experience (years)	In Similar Drilling Experience (years)
1	Rig manager	10	5
2	Tool pusher	<u>10</u>	5
3	Driller	<u>5</u>	2
4	Assistant driller	<u>3</u>	1
5	Mechanic	<u>10</u>	5

The Bidder shall provide details of the proposed personnel and their experience records in the relevant Forms included in Section IV, Bidding Forms.

6. Equipment

The Bidder must demonstrate that it will have access to the key Contractor's equipment listed hereafter:

No.	Equipment Type	Characteristics	Minimum Number required
1	Drilling Rig with crane forklift (for rig up/down and drilling operations)		1
1.1	Hook load	50 ton dynamic	
1.2	Pumping capacity	20 l/min	
1.33	Mud cooling system	Air cooling system	
1.44	Blow out preventive system	11" annular + blind rams + shear rams	
1.55	Top drive system	Recommended : 10000 lbsxft	
2	Water Tank	40 m3 + 20 m3 reserve	Total 2 tanks
3	Triplex pumps		<u>2</u>

The Bidder shall provide further details of proposed items of equipment using the relevant Form in Section IV.

Section IV - Bidding Forms

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Letter of Bid

The Bidder must prepare the Letter of Bid on stationery with its letterhead clearly showing the Bidder's complete name and address.

Note: All italicized text is for use in preparing these forms and shall be deleted from the final products.

Date: [insert date (as day, month and year) of Bid Submission] ICB No.: <u>GEDP-CW-3/2015</u> Invitation for Bid No.: [insert identification] Alternative No.: [insert identification No if this is a Bid for an alternative]

To: [insert complete name of Employer]

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB 8)___;
- (b) We meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) We have not been suspended nor declared ineligible by the Employer based on execution of a Bid Securing Declaration in the Employer's country in accordance with ITB 4.6
- (d) We offer to execute in conformity with the Bidding Documents the following Works: **Drilling of two Slim Wells**;
- (e) The total price of our Bid, excluding any discounts offered in item (f) below is: <u>[insert the total price of the bid for the two slim wells in words and figures, indicating the various amounts and the respective currencies]</u>:
- (f) The discounts offered and the methodology for their application are:
 - (i) The discounts offered are: [Specify in detail each discount offered.]
 - (ii) The exact method of calculations to determine the net price after application of discounts is shown below: [Specify in detail the method that shall be used to apply the discounts];
- (g) Our bid shall be valid for a period of [*specify the number of calendar days*] days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (h) If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Documents;

- (i) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB 4.2(e), other than alternative bids submitted in accordance with ITB 13;
- (j) We, including any of our subcontractors or suppliers for any part of the contract, have not been declared ineligible by the Bank, under the Employer's country laws or official regulations or by an act of compliance with a decision of the United Nations Security Council;
- (k) We are not a government owned entity/ We are a government owned entity but meet the requirements of ITB 4.5;¹¹
- (1) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate "none.")

- (m) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and
- (n) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.
- (o) We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any type of fraud and corruption
- (p) We accept the appointment of (insert name proposed in Bid Data Sheet) as the Adjudicator.

(Or)

We do not accept the appointment of (insert name proposed in Bid Data Sheet) as the Adjudicator, and propose instead that (insert name) be appointed as Adjudicator, whos daily fees and biographical data are attached.

Name of the Bidder* *[insert complete name of the Bidder]*

¹¹ Bidder to use as appropriate

Name of the person duly authorized to sign the Bid on behalf of the Bidder** *[insert complete name of person duly authorized to sign the Bid]*

Title of the person signing the Bid [insert complete title of the person signing the Bid]

Signature of the person named above *[insert signature of person whose name and capacity are shown above]*

Date signed *_[insert date of signing]* day of *[insert month]*, *[insert year]* *: In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder

**: Person signing the Bid shall have the power of attorney given by the Bidder to be attached with the Bid Schedules.

Schedules

Bill of Quantities

1. Bill of Quantities

A. Preamble

1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, General and Special Conditions of Contract, Technical Specifications, and Drawings.

2. The quantities of days and hours (for time related items) and materials given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities ordered and carried out, as measured by the Contractor and verified by the Project Manager and valued at the rates and prices bid in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Project Manager may fix within the terms of the Contract.

3. The rates and prices bid in the priced Bill of Quantities shall, except insofar as it is otherwise provided under the Contract, include all Constructional Plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes, and duties, together with all general risks, liabilities, and obligations set out or implied in the Contract.

4. The whole cost of complying with the provisions of the Contract shall be included in the Items provided in the priced Bill of Quantities, and where no Items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work or Supply.

5. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. Review of the relevant sections of the Contract documentation shall be made before entering prices against each item in the priced Bill of Quantities.

6. Any arithmetic errors in computation or summation will be corrected by the Employer as follows:

- (a) where there is a discrepancy between amounts in figures and in words, the amount in words will govern; and
- (b) where there is a discrepancy between the unit rate and the total amount derived from the multiplication of the unit price and the quantity, the unit rate as quoted will govern, unless in the opinion of the Employer, there is an obviously gross misplacement of the decimal point in the unit price, in which event the total amount as quoted will govern and the unit rate will be corrected.

B. Work and Supply Items

Mobilization and drilling operations

ltem	Description	Unit	Unit price (US\$)	Qty.	Total B1 (US\$)	F	Unit price (US\$)	Qty.	Total B2 (US\$)	Total Well B1+B2 (US\$)
1	Initial mobilization to first wellpad	Lump sum		1						
2	Rig mobilization between holes	Lump sum		0				1		
3	Demobilization	Lump sum						1		
4	Drilling Rig Day-Rates									
	a) operational day-rate	day		36				36		
	b) stand-by with crew day-rate	day		4				16		
	c) Stand-by when downhole testing hourly rate	hour		72				72		
	Total drilling services proper including mob/demob									

5 Rock bits

Item	Description	Unit	Unit Price (US\$)	Qty	Total B1	Unit Price (US\$)	Qty	Total B2	Total for 1+2 wells (US\$)
5.1	17 1/2" VG44C Bit IADC 617	ea.		1			0		
5.2	12 1/4" MX40 Bit IADC 617	ea.		2			1		
5.3	8 1/2" VG40 Bit IADC 617	ea.		4			4		
5.4	6 1/8" VG44C Bit IADC code 627	ea.		4			4		
5.5	4 1/4" VG44C Bit IADC code 627	ea.		4			4		
	Total								

6 Drilling Fluid materials

Item	Description	Unit	Unit Price (US\$)	Qty	Total B1	Unit Price (US\$)	Qty	Total B2	Total for 1+2 wells (US\$)
6.1	Bentonite	t		13			13		
6.2	Caustic Soda	kg		800			800		
6.3	Soda Ash	kg		1500			1500		
6.4	Sodium Bicarbonate	kg		1300			1300		
6.5	Chrome Lignite	kg		500			500		
6.6	Ferrochrome Lignosulphonate, 50 lbs bags	kg		1200			1200		
	Total								

7 Casing and Casing Accessories

Item	Description	Unit	Unit Price (US\$)	Qty	Total B1 (US\$)	Unit Price (US\$)	Qty	Total B2 (US\$)	Total for 1+2 wells (US\$)
7.1	13 3/8", 54.5 lb/ft, K-55, BTC Casing	mtr		12			12		
7.2	9 5/8", 36 lb/ft, K-55, BTC Casing	mtr		72			72		
7.3	7", 23 lb/ft K-55 R3, BTC Casing	mtr		276			276		
7.4	5", 15lb/ft, K-55 R3, BTC Casing	mtr		710			710		
7.5	3 1/2", 10.2 lb/ft, L80 R3, Hydrill 511 Casing (slotted)	mtr		1300			1300		
7.6	13 3/8" Float Shoe, Inner String, BT	ea.		1			1		
7.7	13 3/8" Float Collar, Inner String, BT	ea.		1			1		
7.8	9 5/8" Float Shoe, Inner String, BT	ea.		1			1		
7.9	9 5/8" Float Collar, Inner String, BT	ea.		1			1		
7.10	7" Float shoe, Inner string, BT	ea.		1			1		
7.11	7" Float collar, Inner string BT	ea.		1			1		
7.12	13 3/8 Casing Centralizer in 17 1/2"	ea.		2			2		
7.13	9 5/8" Casing Centralizer in 12 ¼"	ea.		4			4		

7.14	7" Casing Centralizer in 8 1/2"	ea.	15		15		
7.15	5" Casing Centralizer in 6 1/8"	ea.	30		30		
7.16	Liner Hanger, 3 1/2" by 5", 15 lbs casing	ea.	1		1		
7.17	Liner Hanging Setting Tool for the above	ea.	1		1		
7.18	Guide shoe 3 1/2" Hydrill 511	ea.	1		1		
	Total						

8 Cement and Cement Additives

Item	Description	Unit	Unit Price US\$	Qty	Total B1	Unit Price US\$	Qty	Total B2	Total for B1+B2 US\$
8.1	G-Cement mixture without retarder. (1100 kg or 50 kg bags)	kg		13,000			13,000		
	Total								

9 Mud logging services

ltem	Description	Unit	Unit price (US\$)	Qty.	Total B1 (US\$)		Unit price (US\$)	Qty.	Total B2 (US\$)	Total Well B1+B2 (US\$)
9.1	Initial mobilization to first wellpad	Lump sum		1						
9.2	Equpment mobilization between holes	Lump sum		0				1		
9.3	Demobilization	Lump sum						1		
9.4	Mud logging Unit Day-Rates									
	a) operational day-rate	day		36				36		
	b) stand-by with crew day-rate	day		4		Ī		16		
	c) Stand-by when downhole testing hourly rate	hour		72				72		
	Total Mud Logging services including mob/demob									

10 Completion Well Head equipment

Item	Description	Unit	Unit Price (US\$)	Qty	Total B1 (US\$)	Unit Price (US\$)	Qty	Total B2 (US\$)	Total for B1+B2 US\$
10.1	Master gate valve 7"1/16 API 2M, expanding gate, Geothermal Trim	ea.		1			1		
10.2	Spool, 6" ANSI 600 RTJ, with two 2"1/8 600 gate valve (geothermal Trim Exp)	ea.		1			1		
10.3	Casing head 6" ANSI 600 RTJ modified welding neck	ea.		1			1		
10.4.	6" ANSI 600 RTJ flange with one 2"1/8 600 gate valve (geothermal Trim Exp)	ea.		1			1		
	Total								

11 Testing equipment on rental

ltem	Description	Unit	Unit Price (US\$)	Qty	Total B1 (US\$)	Unit Price (US\$)	Qty	Total B2 (US\$)	Total for 1+2 wells (US\$)
11.1	 Well testing equipment and setup cost on each well Wellhead separator and silencer Discharge orifice plate with manometers Sampling port V notch for measuring flowrate 								
	a) mobilization/demobilization	e.a.		1			1		
	a) operational day-rate	day		30			30		
	b) stand-by	day		10			50		
	Total								

Grand Total 1+2+3+4+5+6+7+8+9+10+11= [insert sum of eleven totals above)

2. Schedule of Payment Currencies

Forinsert name of Section of the Works

Separate tables may be required if the various sections of the Works (or of the Bill of Quantities) will have substantially different foreign and local currency requirements. The Employer should insert the names of each Section of the Works.

	Α	В	С	D
Name of Payment Currency	Amount of Currency	Rate of Exchange to Local Currency	Local Currency Equivalent C = A x B	Percentage of Total Bid Price (TBP) <u>100xC</u> TBP
Local currency		1.00		
Foreign Currency #1				
Foreign Currency #2				
Foreign Currency #3				
Total Bid Price				100.00
Provisional Sums Expressed in Local Currency		1.00		
TOTAL BID PRICE (Including provisional sum)				

Form of Bid Security

Form of Bid Security (Bank Guarantee)

[Guarantor letterhead or SWIFT identifier code]

Beneficiary:

[Insert name and address of the Employer]

Invitation for Bids No: *[Insert reference number for the Invitation for Bids]*

Date: [Insert date of issue]

BID GUARANTEE No.: [Insert guarantee reference number]

Guarantor: _[Insert name and address of place of issue, unless indicated in the letterhead]

We have been informed that [insert name of the Bidder, which in the case of a joint venture shall be the name of the joint venture (whether legally constituted or prospective) or the names of all members thereof] (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its bid (hereinafter called "the Bid") for the execution of [insert description of contract] under Invitation for Bids No. [insert number] ("the IFB").

Furthermore, we understand that, according to the Beneficiary's conditions, bids must be supported by a bid guarantee.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in letters]* (*insert amount in numbers*) upon receipt by us of the Beneficiary's complying supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating either that the Applicant:

- (a) has withdrawn its Bid during the period of bid validity specified by the Applicant in the Letter of Bid, or any extension thereto provided by the Applicant; or
- (b) having been notified of the acceptance of its Bid by the Beneficiary during the period of bid validity, (i) fails to execute the Contract Agreement or (ii) fails to furnish the performance security, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee will expire: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the contract agreement signed by the Applicant and the performance security issued to the Beneficiary upon the instruction of the Applicant; and (b) if the Applicant is not the

successful Bidder, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the bidding process; or (ii) twenty-eight days after the Validity Period, which date shall be established by presentation to us of copies of the Letter of Bid and any extension(s) thereto, accompanied by the bidding document; or (c) three years after the date of issue of this guarantee.

Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758.

[signature(s)]

Note: All italicized text is for use in preparing this form and shall be deleted from the final product.

Form of Bid Security (Bid Bond)

[The Surety shall fill in this Bid Bond Form in accordance with the instructions indicated.]

BOND NO. _____

BY THIS BOND [name of Bidder] as Principal (hereinafter called "the Principal"), and [name, legal title, and address of surety], authorized to transact business in [name of country of Employer], as Surety (hereinafter called "the Surety"), are held and firmly bound unto [name of Employer] as Obligee (hereinafter called "the Employer") in the sum of [amount of Bond]¹² [amount in words], for the payment of which sum, well and truly to be made, we, the said Principal and Surety, bind ourselves, our successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has submitted a written Bid to the Employer dated the ____ day of _____, 20___, for the supply of *[name of Contract]* (hereinafter called the "Bid").

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Principal:

- (a) withdraws its Bid during the period of bid validity specified in the Form of Bid; or
- (b) having been notified of the acceptance of its Bid by the Employer during the period of Bid validity; (i) fails or refuses to execute the Contract Form; or (ii) fails or refuses to furnish the Performance Security, if required, in accordance with the Instructions to Bidders.

then the Surety undertakes to immediately pay to the Employer up to the above amount upon receipt of the Employer's first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer shall state that the demand arises from the occurrence of any of the above events, specifying which event(s) has occurred.

The Surety hereby agrees that its obligation will remain in full force and effect up to and including the date 28 days after the date of expiration of the Bid validity as stated in the Invitation to Bid or extended by the Employer at any time prior to this date, notice of which extension(s) to the Surety being hereby waived.

IN TESTIMONY WHEREOF, the Principal and the Surety have caused these presents to be executed in their respective names this _____ day of _____ 20__.

Principal: _____

Surety: _____

Corporate Seal (where appropriate)

(Signature) (Printed name and title) (Signature) (Printed name and title)

¹² The amount of the Bond shall be denominated in the currency of the Employer's country or the equivalent amount in a freely convertible currency.

Technical Proposal

Technical Proposal Forms

Personnel

(Provide the CVs of key personnel: Rig manager, Tool pusher, Driller and Assistant driller, Mechanic Provide an organizational chart for the operation)

Equipment

(Provide detailed description of the proposed drilling rig and equipment. Provide a description of the associated services: drilling fluid, casing running and tong services, cementing)

Site Organization

(Provide a layout of the equipment and camp on site. Highlight safety and security zones.)

Method Statement (*Provide operational flowchart*)

Mobilization Schedule (*Provide a rig-up, move between locations, rig-down and demobilization timetables.*)

Other relevant information: (*Certifications, QMS, HSE*)

Forms for Personnel

Form PER – 1: Proposed Personnel

Bidders should provide the names of suitably qualified personnel to meet the specified requirements for each of the positions listed in Section III (Evaluation and Qualification Criteria). The data on their experience should be supplied using the Form below for each candidate.

1.	Title of position
	Name
2.	Title of position
	Name
3.	Title of position
	Name
4.	Title of position
	Name
5.	Title of position
	Name
6.	Title of position
	Name
etc.	Title of position
	Name

Form PER – 2: Resume of Proposed Personnel

The Bidder shall provide all the information requested below. Fields with asterisk (*) shall be used for evaluation.

Name *	Date of birth			
Professional qualifications				
Name of Employer				
Address of Employer				
Telephone	Contact (manager / personnel officer)			
Fax	E-mail			
Job title	Years with present Employer			
	Professional qualifications Name of Employer Address of Employer Telephone Fax			

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From*	To*	Company, Project, Position, and Relevant Technical and Management Experience*

Forms for Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder. The Bidder shall provide all the information requested below, to the extent possible. Fields with asterisk (*) shall be used for evaluation.

Type of Equipment*						
Equipment InformationName of manufacturer,		er,	Model and power rating			
	Capacity*		Year of m	anufacture*		
Current Current location Status						
	Details of current con	mmitments				
Source	Indicate source of the equipment					
	Owned	□ Rented	□ Leased	□ Specially manufactured		

The following information shall be provided only for equipment not owned by the Bidder.

Owner	Name of owner Address of owner			
	Telephone	Contact name and title		
	Fax	Telex		
Agreements	Details of rental / lease / manufacture agreements specific to the project			

Bidder's Qualification

To establish its qualifications to perform the contract in accordance with Section III (Evaluation and Qualification Criteria) the Bidder shall provide the information requested in the corresponding Information Sheets included hereunder

Form ELI -1.1: Bidder Information Form

		Date:	
	ICB No. and title:		
	Page	of	page
Bidder's name			
In case of Joint Venture (JV), name of each me	ember:		
Bidder's actual or intended country of registration	n:		
[indicate country of Constitution]			
Bidder's actual or intended year of incorporation	:		
Bidder's legal address [in country of registrati	on]:		
Bidder's authorized representative information			
Address:			
Telephone/Fax numbers:			
E-mail address:			
1. Attached are copies of original documents	of		
□ Articles of Incorporation (or equivalent of documents of registration of the legal entited and the legal entities of the legal entites of the legal entites of the legal entits of the legal entite			
\Box In case of JV, letter of intent to form JV	or JV agreement,	in accordance with	ITB 4.1.
□ In case of Government-owned enterprise documents establishing:	or institution, in a	accordance with IT	B 4.5
 Legal and financial autonomy Operation under commercial law Establishing that the Bidder is not dependent. 	endent agency of t	he Employer	
2. Included are the organizational chart, a list ownership.	of Board of Direc	tors, and the benefi	cial

Form ELI -1.2: Information Form for JV Bidders

(to be completed for each member of Joint Venture)

	ICB No. and title:		
	Page	and the:	nages
	1 450	01	puges
Bidder's Joint Venture name:			
JV member's name:			
JV member's country of registration:			
JV member's year of constitution:			
JV member's legal address in country of constitution:			
JV member's authorized representative information			
Name:	_		
Address:	_		
Telephone/Fax numbers:	-		
E-mail address:			
1. Attached are copies of original documents of			
Articles of Incorporation (or equivalent docum documents of the legal entity named above, in ac		association), and/or r	egistration
□ In case of a Government-owned enterprise or i autonomy, operation in accordance with comm accordance with ITB 4.5.			
2. Included are the organizational chart, a list of Box	ard of Directors, and th	ne beneficial ownershi	ip.

Form CON – 2: Historical Contract Non-Performance, Pending Litigation and Litigation History

Bid	ider's Name:	
	Date:	
Joint Venture Member's Nam	ne	
ICB No. and title:		
Page	of	pages

Non-Performed Contracts in accordance with Section III,	Evaluation Criteria and Qualifications
---	--

- □ Contract non-performance did not occur since 1st January *[insert year]* specified in Section III, Evaluation Criteria and Qualifications, Sub-Factor 2.1.
- □ Contract(s) not performed since 1st January *[insert year]* specified in Section III, Evaluation Criteria and Qualifications, requirement 2.1

Year	Y Non- performed portion of contract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and US\$ equivalent)	
		Contract Identification:		
		Name of Employer:		
		Address of Employer:		
		Reason(s) for non performance:		
	Pending Litigation,	in accordance with Section III, Evaluation Criteria and Qu	ualifications	
	No pending litigation Sub-Factor 2.3.	in accordance with Section III, Evaluation Criteria and	Qualifications,	
	Pending litigation in accordance with Section III, Evaluation Criteria and Qualifications, Sub- Factor 2.3 as indicated below.			

Form CCC - Current Contract Commitments / Works in Progress

Bidders and each partner to a JV should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

Name of contract	Employer, contact address/tel/fax	Value of outstanding work (current US\$ equivalent)	Estimated completion date	Average monthly invoicing over last six months (US\$/month)
1.				
2.				
3.				
4.				
5.				
etc.				

Form FIN – 3.1: Financial Situation and Performance

Bic	lder's Name: _	
	Date:	
Joint Venture Member's Nam	ne	
ICB No. and title:		
Page	of	pages

1. Financial data

Type of Financial information	m Historic information for previous			_years,	
in					
(currency)	(amount in currency, currency, exchange rate, USD equivalent)				
			- ·		
	Year 1	Year 2	Year 3	Year4	Year 5
Statement of Financial Position	(Information	from Balanc	e Sheet)		I
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
	Information	from Income	Statement		
Total Revenue (TR)					
Profits Before Taxes (PBT)					
		Cash Flow I	nformation		·
Cash Flow from Operating Activities					

2. Sources of Finance

Specify sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.

No.	Source of finance	Amount (US\$ equivalent)
1		
2		
3		

2. Financial documents

The Bidder and its parties shall provide copies of financial statements for ______years pursuant Section III, Evaluation and Qualifications Criteria, Sub-factor 3.2. The financial statements shall:

- (a) reflect the financial situation of the Bidder or in case of JV member , and not an affiliated entity (such as parent company or group member).
- (b) be independently audited or certified in accordance with local legislation.
- (c) be complete, including all notes to the financial statements.
- (d) correspond to accounting periods already completed and audited.
- \Box Attached are copies of financial statements¹³ for the _____years required above; and complying with the requirements

¹³ If the most recent set of financial statements is for a period earlier than 12 months from the date of bid, the reason for this should be justified.

Form FIN - 3.2: Average Annual Construction Turnover

Bidder's Name:
Date:
Joint Venture Member's Name
ICB No. and title:
Pageofpages

		Annual turnover data (construction only)		
Year	Amount Currency		Exchange rate	USD equivalent
[indicate year]	[insert amo currency]	ount and indicate		
Average Annual Construction Turnover *				

* See Section III, Evaluation and Qualification Criteria, Sub-Factor 3.2.

Form FIN - 3.3: Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as specified in Section III (Evaluation and Qualification Criteria)

Source of financing	Amount (US\$ equivalent)
1.	
2.	
3.	
4.	

Form EXP - 4.1: General Experience

Bid	lder's Name: _	
	Date:	
Joint Venture Member's Nam	ne	
ICB No. and title:		
Page	of	pages

Starting Year	Ending Year	Contract Identification	Role of Bidder
		Contract name:	
		Brief Description of the Works performed by th Bidder:	e
		Amount of contract:	
		Name of Employer: Address:	
		Contract name: Brief Description of the Works performed by th	e
		Bidder: Amount of contract:	
		Name of Employer: Address:	
		Contract name:	
		Brief Description of the Works performed by th Bidder:	e
		Amount of contract:	
		Name of Employer: Address:	

Form EXP - 4.2(a): Specific Construction and Contract Management Experience

Bid	lder's Name: _	
	Date:	
Joint Venture Member's Nam	ne	
ICB No. and title:		
Page	of	pages

Similar Contract No.	Information			
Contract Identification				
Award date				
Completion date				1
Role in Contract	Prime Contractor	Member in JV	Management Contractor	Sub- contractor
Total Contract Amount			US\$ *	
If member in a JV or sub- contractor, specify participation in total Contract amount			*	
Employer's Name:				
Address:				
Telephone/fax number				
E-mail:				

Form EXP - 4.2(a) (cont.) Specific Construction and Contract Management Experience (cont.)

Similar Contract No.	Information
Description of the similarity in accordance with Sub-Factor 4.2(a) of Section III:	
1. Amount	
2. Physical size of required works items	
3. Complexity	
4. Methods/Technology	
5. Other Characteristics	

Form EXP - 4.2(b): Construction Experience in Key Activities

Bidder's Name:
Date:
Joint Venture Member's Name
Sub-contractor's Name ¹⁴ (as per ITB 34.2 and 34.3):
ICB No. and title:

Page ______ of _____ pages

Sub-contractor's Name (as per ITB 34.2 and 34.3): _____

All Sub-contractors for key activities must complete the information in this form as per ITB 34.2 and 34.3 and Section III, Qualification Criteria and Requirements, Sub-Factor 4.2.

1. Key Activity No One:

Successful experience in drilling deep slim wells to depths of 1200-1500 meters or more

	Information				
Contract Identification					
Award date					
Completion date					
Role in Contract	Prime Contractor		nber in JV □	Management Contractor	Sub- contractor
Total Contract Amount	US\$				
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year	-	the contract parti		centage cipation (ii)	Actual Quantity Performed (i) x (ii)
Year 1					
Year 2					
Year 3					
Year 4					

¹⁴ If applicable.

Employer's Name:	
Address:	
Telephone/fax number	
E-mail:	

	Information
Employer's Name:	
Address:	
Telephone/fax number	
E-mail:	

Section V - Eligible Countries

Eligibility for the Provision of Goods, Works and Services in Bank-Financed Procurement

1. In reference to ITB 4.7, and 5.1, for the information of the Bidders, at the present time firms, goods and services from the following countries are excluded from this bidding process:

Under ITB 4.7 (a) and 5.1noneUnder ITB 4.7 (b) and 5.1none

Section VI. Bank Policy - Corrupt and Fraudulent Practices

Guidelines for Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, dated January 2011, revised as of July 2014:

"Fraud and Corruption:

- 1.16 It is the Bank's policy to require that Borrowers (including beneficiaries of Bank loans), bidders, suppliers, contractors and their agents (whether declared or not), sub-contractors, sub-consultants, service providers or suppliers, and any personnel thereof, observe the highest standard of ethics during the procurement and execution of Bank-financed contracts.¹⁵ In pursuance of this policy, the Bank:
 - (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;¹⁶;
 - (ii) "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;¹⁷
 - (iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;¹⁸
 - (iv) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;¹⁹
 - (v) "obstructive practice" is

¹⁵ In this context, any action to influence the procurement process or contract execution for undue advantage is improper.

¹⁶ For the purpose of this sub-paragraph, "*another party*" refers to a public official acting in relation to the procurement process or contract execution. In this context, "*public official*" includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

¹⁷ For the purpose of this sub-paragraph, "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.

¹⁸ For the purpose of this sub-paragraph, "parties" refers to participants in the procurement process (including public officials) attempting either themselves, or through another person or entity not participating in the procurement or selection process, to simulate competition or to establish bid prices at artificial, non-competitive levels, or are privy to each other's bid prices or other conditions.

¹⁹ For the purpose of this sub-paragraph, "party" refers to a participant in the procurement process or contract execution.

- (aa) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or
- (bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 1.16(e) below.
- (b) will reject a proposal for award if it determines that the bidder recommended for award, or any of its personnel, or its agents, or its sub-consultants, subcontractors, service providers, suppliers and/or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- (c) will declare misprocurement and cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement or the implementation of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- (d) will sanction a firm or individual, at any time, in accordance with the prevailing Bank's sanctions procedures,²⁰ including by publicly declaring such firm or individual ineligible, either indefinitely or for a stated period of time: (i) to be awarded a Bank-financed contract; and (ii) to be a nominated²¹;
- (e) will require that a clause be included in bidding documents and in contracts financed by a Bank loan, requiring bidders, suppliers and contractors, and their sub-contractors, agents, personnel, consultants, service providers, or suppliers, to permit the Bank to inspect all accounts, records, and other documents relating to the submission of bids and contract performance, and to have them audited by auditors appointed by the Bank."

²⁰ A firm or individual may be declared ineligible to be awarded a Bank financed contract upon: (i) completion of the Bank's sanctions proceedings as per its sanctions procedures, including, inter alia, cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Banks, and through the application the World Bank Group corporate administrative procurement sanctions procedures for fraud and corruption; and (ii) as a result of temporary suspension or early temporary suspension in connection with an ongoing sanctions proceeding. See footnote 14 and paragraph 8 of Appendix 1 of these Guidelines.

A nominated sub-contractor, consultant, manufacturer or supplier, or service provider (different names are used depending on the particular bidding document) is one which has either been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

PART 2 – Works Requirements

Section VII - Works Requirements

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Specifications

Introduction

Armenia is located in a zone of high tectonic activity and recent volcanism. The Geofund 2: Armenia Geothermal Project, approved in 2009, provided financing to carry out comprehensive field investigation studies of the most promising geothermal sites, Gridzor and Karkar, in order to assess the feasibility of exploratory drilling at the site with the highest potential. Studies included geological field scouting, magneto-telluric (MT) sounding surveys for both sites and interpretation of their results, and 3D MT survey and interpretation of its results for the Karkar site, which was deemed to have the highest geothermal potential.

The 3D MT modeling identified the existence of a 600 m thick conductive zone lying South/South West – North/North East at a depth of around 500-1000 m below the surface and indicated that two different conceptual models (or a combination of the two) might apply for the Karkar site. One model assumes that the low resistivity is not present in the geothermal zones of interest, which would mean that the reservoir only holds moderately warm waters (less than 100°C). The second model assumes that the low resistivity may be present in geothermal zones of interest, providing for a localized high-temperature source of heat (i.e. some of the layers could hold water above 250°C). Determining whether the Karkar field holds low or high temperatures will thus require drilling exploratory wells in the fracture zone located in the western part of the basin in order to determine the nature of the low resistivity structure. The findings of these studies justify the drilling of two exploration wells. Proposed locations for the two wells were made by WesternGeco in 2011 and reviewed by the Iceland GeoSurvey (ISOR) in 2012.

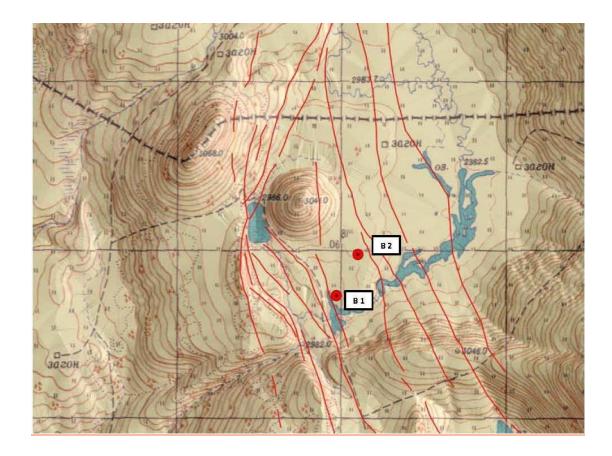
The objective of the project will be to confirm the potential of geothermal energy in the Karkar (Armenia) region by exploratory drilling of two slim holes at a maximum final depth of 1500 m with a final diameter of 4^{2} /4 cased in 3^{2} /2 perforated liner.

Location

The Karkar geothermal area is situated in southern Armenia, at 3000 meters elevation, close to the border with Nagorno-Karabakh.

The most likely fractures for the upwelling of geothermal brine are the bordering faults in the western part of the depression. The objective is to intercept the faults located between 1,200-1,500 meters depth and to identify the up-flow zones of the inferred geothermal resource. Figure 1 shows the proposed well locations.

Figure 1: Map showing the proposed well locations



The preliminary coordinates of the exploration well locations is given in table 1.

Table 1 : Geographical coordinates of the	he proposed well locations.
---	-----------------------------

Well	Latitude	Longitude	Elevation
B1	39.781N	45.944E	3000 m
B2	B2 39.792N	45.947E	3000 m

Well design and prognosis

Two identical vertical slim wells B1 and B2 with a final depth of 1500 m are to be drilled in 4"1/4 completed in 3"1/2 perforated liner.

Stratigraphy

Little is known about the stratigraphy at the proposed drilling sites, but a 1000 m deep well (B 4) was drilled about 1 km west of proposed drilling site. Even though B4 is outside the main depression, it can give information on what formations may be encountered. The following table is from well B4:

Table 2: Stratigraphical cross-section inferred from the nearby well B4

< 17 m	Alluvium and diluvium, boulder and pebble sediments
17-70 m	Basaltic Andesite, dense and massive

70-78 m	Alluvium and diluvium with debris of different rocks
78-123 m	Basaltic Andesite, massive
123-1000 m	Quartz monzonite and massive granosyenite

Potential for Losses of Circulation

The area of the drilling is close to the main fault of the main depression. This fault zone has several minor faults accompanied with the major fault, targeted at about 1500 meters. It is therefore expected that several loss zones will be encountered from the surface to total depth. A decision to cement or not the losses, if accounted before reaching production casing depth, will be made "ad hoc".

Temperature Conditions

The drilling design is of a high temperature nature, to be able to control the situation if high temperature conditions are met.

Well Architecture

The well architectures were carefully selected in order to keep as much as possible close to the standard bit/casings sizes easily accessible on the market with minimum lead time.

The proposed well architecture for wells B1 and B2 is presented in table 3 and figure 2.

DRILLIN	IG INTER	VAL	CASED INTERVAL						COMMENTS	
Diameter (")	Drilled i (n		Diameter (")	com	ased/ pleted val (m)	Range	Grade	Nominal weight (Ibs/ft)	Coupling	
17"1/2	0	15	13"3/8	0	10	3	K55	54.5	BTC	Conductor pipe
12"1/4	15	75	9"5/8	0	70	3	K55	36	BTC*	Surface casing
8"1/2	75	255	7"	0	250	3	K55	23	BTC	Anchor casing
6"1/8	255	655	5"	0	650	3	K55	15	втс	Production casing
4"1/4	655	1500	3"1/2	600	1200/ (1500)	3	L80	10.2	Hydrill** 511	Perforated liner

Table 3: B1 and B2 well architectures

*BTC Buttress coupling ** Hydrill Hydrill coupling

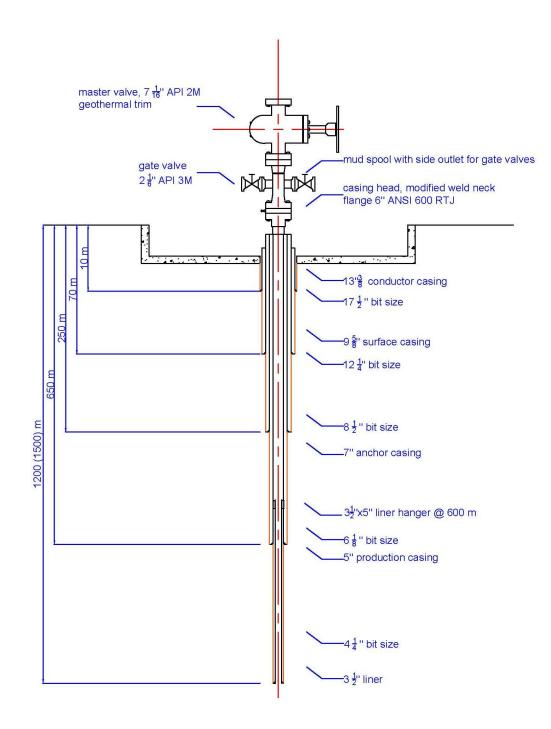


Figure 2: B1 and B2 well design

Drilling/completion/testing programme

Drilling programme

The drilling/completion/testing programme is condensed in the table 4.

Table 4: Summary of the drilling/completion/testing programme

Drilling diameter (")	Interval (m)	Drill bit type	Drilling fluid	Drilling parameters	Cased diameter (")	Interval (m)	Logging programme	Comments
17″1/2	0-15	TC IADC 617	Water based bentonite mud		13 3/8	0 - 10		Innerstring cementing class G cement d=1.9
12"1/4	15-75	TC IADC 617	Water based bentonite mud •density : 1.08 •Viscosity: 45-55 sec (55-70 sec for hi visc pill) •pH: 9-10	WOB=5-10t RPM=50-70 Q=1800 I/min	9″ 5/8	070	BGL GR CBL-VDL	Innerstring cementing class G cement d=1.9
8″1/2	75-255	TC IADC 617	Water based bentonite mud •density : 1.08 •Viscosity: 45-55 sec (55-70 sec for hi visc pill) •pH: 9-10	WOB=5-10t RPM=50-70 Q=1800 I/min	7″	0-250	BGL GR CBL-VDL Totco verticality	Innerstring cementing class G cement d=1.9
6″1/8	255-655	TC IADC 627	Water based bentonite mud •density : 1.08 •Viscosity: 45-55 sec (55-70 sec for hi visc pill) •pH: 9-10	WOB=5-10t RPM=50-70 Q=1500 I/min	5″	0-650	BGL GR CBL-VDL Totco verticality	Innerstring cementing class G cement d=1.9
4″1/4	655 1500	TC IADC 627	Water with biopolymer pills	WOB=5-10t RPM=50-70 Q=1300 I/min	3"1/2	600-1500 Perforated liner	Totco verticality GR BGL FMI/LDL HRT PLT	Step rate injection tests Pressure fall- off test PVT sampling
Nomenclature:								
TC = GR =	Tri-cone roller bit Gamma Ray					orehole geom	, ,	
GK =	Gamma	пау		FI	VII= F		u-iiiiayei	

GR =	Gamma Ray	FMI=	Formation micro-imager
PLT =	Production logging tool	LDL =	Spectral density log
CBL-VDL =	Cement bond log-Variable density log	FS=	Fluid sampling
HRT=	High resolution thermometer	PVT =	Pressure, volume, temperature analysis

It is assumed that the total drilling/completion/testing for one well will be around 60 days for a total depth of 1500 m. The provisional drilling diagram is presented in figure 3

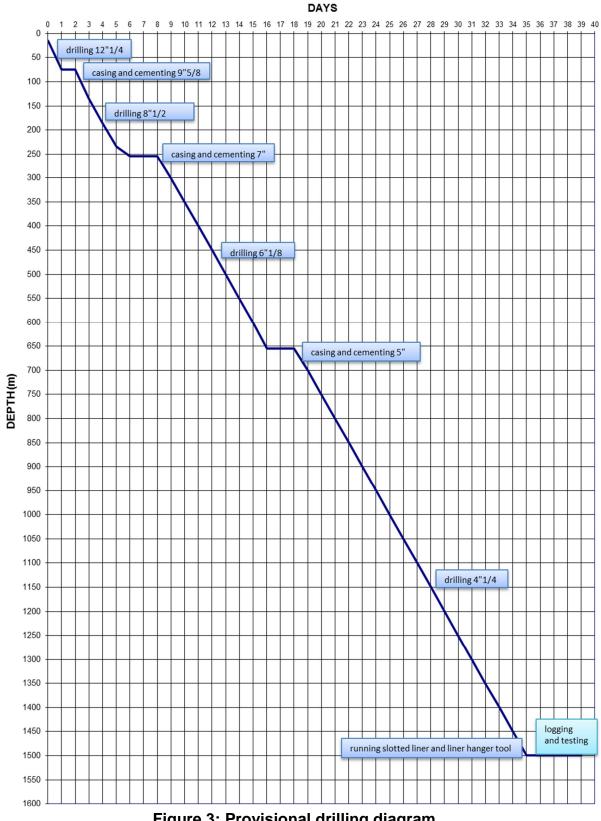


Figure 3: Provisional drilling diagram

Completion tests

The completion tests carried out on a geothermal well immediately after completion of the drilling activities provide data characteristic to the well, the formations surrounding the well, and the geothermal resource into which the well has been drilled. These tests allow for an early assessment of the likely production or injection capacity of the well, for the development of understanding of the characteristics of the geothermal resource, and benchmark information on the casing condition of the newly completed well.

The tests consist in:

- spinner test (PLT tool) to identify the location of the permeable zones within the well and to quantify the relative permeability of each of the zones identified. In addition, the spinner tool also measures and records the downhole temperature and pressures as well.
- water pumping test to obtain an 'injectivity' and thus the gross permeability of the well.
- casing condition survey (multi-finger calliper –MFC- tool), to obtain an initial graphical image of the casing in the well.

Well abandonment

In case of unsuccessful well it may be required that the well be abandoned permanently. The permanent abandonment consists in placing two cement plugs in the well and cementing the cellar. No wellhead will be maintained on site.

The configuration of the abandoned well is given in Figure 4.

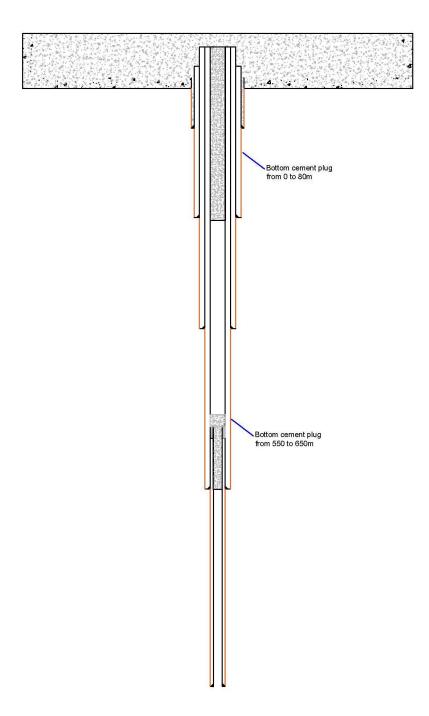


Figure 4: Abandoned well configuration

Specifications of the drilling rig and associated services

The proposed slim holes may be executed with a moderate capacity drilling rig with minimum specifications listed in table 5.

Item:	Specification
Hook load	50 ton dynamic
Mud cooling system	Air cooling system
Blow out preventive system	11" annular + blind rams + shear rams
Top drive system	Recommended : 10000 lbsxft
Tank capacity	40 m3 + 20 m3 reserve+
Water supply tanker	2x20 m3
Triplex mud pumps	2
Mud pumping capacity	1500 I/min / pump

Table 5: Drilling rig requirements

Drilling Equipment has to be inspected prior to mobilization to the drill site. The following inspections are required:

- Drill Pipes: DS-1 Service Category 4
- Bottom Hole Assembly (BHA): DS-1 Category 3-5
- BOP's: API 16A

The above inspections must be carried out before mobilisation and between changing locations on the same site. The inspection is at the expenditure of the drilling contractor. At the end of the inspection the relevant certificates shall be handed over to the drilling

supervisor.

Mud logging services

The Contractor will be responsible (either directly or through subcontracting) of the mud logging services which have to fulfil requirements for data collection and recording of the following

- Weight on hook
- Hook position (height)
- Standpipe pressure
- Wellhead pressure
- Mud temperature at inlet
- Mud temperature at the wellhead outlet
- Gas detection and alarms for H2S, CO2
- Pit volumes in all mud tank compartments
- Rotating torque (from Top drive unit and also from rotary table)
- Pump stroke rate for each of two triplex mud pumps

- Total strokes for each of two triplex pumps
- Flow line flow indicator

Calculated values:

- Flow rate into the well
- Rates of penetration both "instantaneous" over a short time interval and averaged over a meter
- Mud pit gain and loss both as a volume as a rate.
- Pump rates per pump and total
- Trip tank volumes compared to changing displacement volumes as tubulars are run into or pulled from the well.
- Depth to bottom of drillstring or casing in the well
- Weight on bit
- Overpull
- Lag time
- Annular velocities

The contractor will be responsible for the collection of cutting samples every 1m in plastic bags of 250 ml and hand-over to the Project Manager.

Drilling of Two Slim Wells (DTSW)

DTSW shall include all the services, equipment and materials that are directly related to the "rotation of the drill".

Table 6 contains a detailed matrix of responsibilities for the DTSW and the Employer.

Drilling services to be provided by the DTSW under the integrated drilling services contract include:

- Drilling rig with crew (including blow-out preventers, drill string, top drive and solids control equipment)
- Drilling fluid services
- Cementing equipment and services
- Casing running services
- Bottom hole assembly elements: Stabilizers, roller reamers, drilling jars, shock subs, specialized drilling tools

These services shall not be quoted separately in the Bill of Quantities (BoQ), they shall be factored into the DTSW's day-rate instead. Items in the BoQ provided by the Drilling Contractor shall include:

Mobilization and drilling operations

1. Initial mobilization to first wellpad, lump sum

- 2. Rig mobilization between holes, lump sum
- 3. Demobilization, lump sum
- 4. Drilling Rig Day-Rates
 - a) operational day-rate, daily rate
 - b) stand-by with crew day-rate, daily rate
 - c) stand-by when downhole testing, hourly rate

Consumable Materials

- 5. Rock Bits, unit price
- 6. Drilling Fluid Materials, unit price
- 7. Casing and Casing Accessories, unit price
- 8. Cement and Cement Additives, unit price
- 9. Completion well head equipment
- 10. Well testing equipment and other additional material and setup, unit price

Box 1: Material requirements

Rock bits

Bits shall be from a reputable manufacturer, with special features like gauge and leg protection to maintain longer performance.

Cement material

Cementing material for high temperature is needed. A technically accepted blend for the cementing job is required. The type that is class G cement + 40% silica flour. This cement should be used without any additional additives except for possible retarder.

Drilling Fluids

The DTSW contractor shall make, maintain and use drilling mud with water loss, weight, viscosity and other general characteristics in accordance with the mud program described in the drilling program.

Casings

Casing accessories shall include all necessary items for cementing using the stab-in method, all centralizers and the liner hanger.

Wellhead

The wellhead design consists of a master valve (Mastervalve 7"1/16 API 2M) and an expansion spool. The expansion spool has 6" ANSI RTJ. On the top of the Master valve is a 6" ANSI RTJ flange with a 2"1/6 gate valve.

ANSI=American National Standards Institute RTJ=Ring Time Joint

All the goods, materials and equipment to be supplied should be unused, new and of current models.

ITEM	Table 6 Matrix of responsib					
TIEIVI	DESCRIPTION		SHED BY:	AT THE COST OF:		
Δ	DRILLING LOCATION	EMPL	CONT.	EMPL	CONT.	
A. 1.	Required licenses, permits clearance to enter and/or leave					
1.	drilling location.	х		х		
2.	Importation/exportation licenses and permit.	X		^	Х	
2. 3.	Construction of roads, drill site, sediment controls, drilling	^			^	
э.	cellar, and camp site location (if needed).	х		х		
4.	If needed, rig matting board as required for substructure,					
	pumps, generator building, mud tanks and all walkways to		Х		Х	
	rig components and all walkways to well site.					
5.	Levelling of well site location and filling reserve pits after					
	removal of rig, equipment and materials.		Х		Х	
6.	Perimeter security fencing for Sites and camp (if at a					
	separate location), as deemed necessary by Employer		Х		Х	
B.	WELLSITE LOCATION UTILITIES					
1.	Onsite camp facilities for all Drilling Personnel.		Х		Х	
2.	Contractor Drilling Personnel transportation.		Х		Х	
3.	All wiring and lighting for rig and camp site.		Х		Х	
4.	Drilling water source – water will be trucked by two 2x20					
	m3 tankers on site	Х		Х		
5.	Water supply source to all drilling sites.		Х		Х	
6.	Drilling water pump operation and maintenance on location					
	and at water source.		Х		Х	
7.	Soakage ponds and other water disposal requirements	Х		Х		
8.	Potable water supply		Х		Х	
9.	If needed, potable water treatment equipment.		Х		Х	
10.	Potable water storage tank.		Х		Х	
11.	Catering at (Camp and) well site for:					
	- Contractor's Drilling Personnel		Х		Х	
	- Employer's and Third Party Personnel.		Х	Х		
12.	Fuel.		Х		Х	
13.	Fuel storage tanks		Х		Х	
14.	Electricity/generators for onsite needs and rig (incl.		Х		Х	
	maintenance).					
15.	Cell phone, radio and Satellite communication equipment					
	at rig site					
	- for Employers use	Х		Х		
	- for Contractor's use		Х		Х	
16.	Wiring of and interconnection of all cabling and networks at					
	the well site to enable appropriate electronic		Х		Х	
	communication between the drilling rig and					
	parties/services involved in providing the Drilling Services					
	(i.e. data feeds to the COMP Site Supervisor, mud					
	engineers, cementing contractor and others)					
17.	Safety and First Aid Equipment including facilities to		Х		Х	
	administer first aid					
10						
18.	Portable radios (walkie talkie) and at least eight (8) station		V		V	
	rig intercom for rig and drilling site buildings.		Х		Х	

Table 6 Matrix of responsibilities

ITEM	DESCRIPTION	FURNIS	HED BY:	AT THE COST OF:		
		EMPL	CONT.	EMPL	CONT.	
19.	Crane(s), forklift(s) and trucks for all rig up /down		Х		Х	
	and drilling operations					
20	Top Drive		Х		Х	
C.	MATERIALS AND SUPPLIES					
1.	All well equipment including casing, tubing, casing and		Х	Х		
	tubing accessories, production wellhead including CHF,					
	master valve, side valves, expansion/adaptor spool.					
2.	Cement and additives.		Х	Х		
3.	Mud chemicals, foamer, corrosion inhibitor.		Х	Х		
4.	Drill bits, rock bits, core heads.		Х	Х		
5.	Stabilizers, roller reamers, drilling jars, shock subs,					
	specialized drilling tools		Х		Х	
6.	Greases, oil, lubricants, welding rods, oxygen and acetylene					
	for Contractor's equipment.		Х		Х	
7.	Casing and tubing thread dopes.		Х		Х	
8.	Thread dopes		Х		Х	
D.	DRILLING EQUIPMENT & SERVICES					
1.	Contractor's equipment as set detailed in "Technical		Х		Х	
	specification in [[reference to relevant Section in bidding					
	documents]].					
2.	Maintenance and spare parts for all Contractor's		Х		Х	
	equipment.					
3.	Replacement of consumable spare parts:		V		V	
	- shaker screens		X		X	
	- solids control equipment (Contractor)		X		X	
	- pump liners and valve seats		X X		X	
	- mud system valve rubbers - initial provision of rubber products for BOP equipment		X		X X	
	- Replacement during contract period of rubber products		Λ		^	
	for BOP equipment		х	х		
	To bor equipment		Λ	^		
4.	Third Party Inspection of Contractor's drill string, subs, drill		Х		Х	
ч.	string handling tools and fishing tools, travelling / crown		Λ		~	
	blocks, substructure and mast, prior to spudding first well.					
5.	Third Party Inspection of Contractor's drill string, subs, drill		Х		Х	
	string handling tools and fishing tools, travelling / crown					
	blocks, substructure and mast as specified in the					
	Contractor's preventative maintenance programme					
6.	Third Party Inspection of Contractor's drill string, subs, drill		Х	Х		
	string handling tools and fishing tools, travelling / crown					
	blocks, substructure and mast in addition to those					
	inspections prescribed in the Contractor's preventative					
	maintenance programme and as deemed necessary by					
	Employer's Representative					
7.	Repair of the Contractor's drill string, (except for normal		Х	Х		
	wear & tear)					
8.	Repair and/or replacement of damaged parts for Contractor		Х	Х		
	furnished fishing tools (except for normal wear & tear).					
9.	Contractor's Drilling Personnel.		Х		Х	
Ε.	SPECIAL SERVICES & EQUIPMENT					

ITEM	DESCRIPTION	FURNIS	HED BY:	AT THE COST OF:		
		EMPL	CONT.	EMPL	CONT.	
1.	Conventional deviation surveying equipment and service (0		Х		Х	
	- 8°) – standard Totco.					
2.	If required directional drilling equipment and tools.		Х	Х		
3.	Electric well logging equipment and services.	Х		Х		
4.	Mud logging equipment and services.		Х		Х	
5.	Mud Engineering.		Х		Х	
6.	Rig mud Laboratory.		Х		Х	
7.	Cementing equipment and services.		Х		Х	
8.	Casing and tubing running services.		Х		Х	
9.	Standard well testing equipment; separator, test tank, etc.		Х	Х		
10.	Specialized Certified pressure pipeline Welding and cutting					
	services (excluding the contractor's standard rig		Х		Х	
	equipment).					
11.	Handling of casing, mud and cementing materials within the					
	well site.		Х		Х	
12.	Certified Scaffolding services for BOP stack if Aerated					
	drilling utilized		Х	Х		
F.	TRANSPORTATION					
1.	Transportation of Contractor's rig, equipment, materials					
	and all associated services and costs for initial mobilization		Х		Х	
	from point of origin to the first well site (to be included in					
	Mobilisation Fee Lump Sum).					
2.	Transportation of Contractor's rig, equipment and materials					
	between well sites.		Х		Х	
3.	Transportation of Contractor's rig, equipment, material and					
	all associated services and costs for Demobilisation from		Х		Х	
	Employer's designated landing to point of origin or another					
	demobilisation point as stated in this Agreement.					
4.	Transportation of Contractor's running supplies and					
	material during operations between point of origin and well		Х		Х	
	sites.					
5.	Transportation of Contractor's Drilling Personnel between					
	home base and Employer's Project Location - mobilisation,		Х		Х	
	crew rotation and demobilization.					
6.	Transportation of Employer's equipment and consumables,					
	including 3 rd party service providers' equipment, between		Х	Х		
	well sites.					
7.	Transportation of Employer's personnel.	Х		Х		
8.	Transportation of catering supplies to camp and well site		Х		Х	

Drawings

Relevant drawings are shown in the Specifications.

Supplementary Information

1.1. Description of primary contracts

1.1.1. Project management unit (R2E2)

The Executing Agency for the Karkar geothermal exploratory drilling project is R2E2 which will administer the geothermal project. The role of the R2E2 will be to coordinate and maintain effective project management, procurement, contract negotiation, contract administration and project budget oversight and control.

Figures 2 and 3 below present the suggested contracting and reporting structure for the project. Each component is described in detail in the next sections.

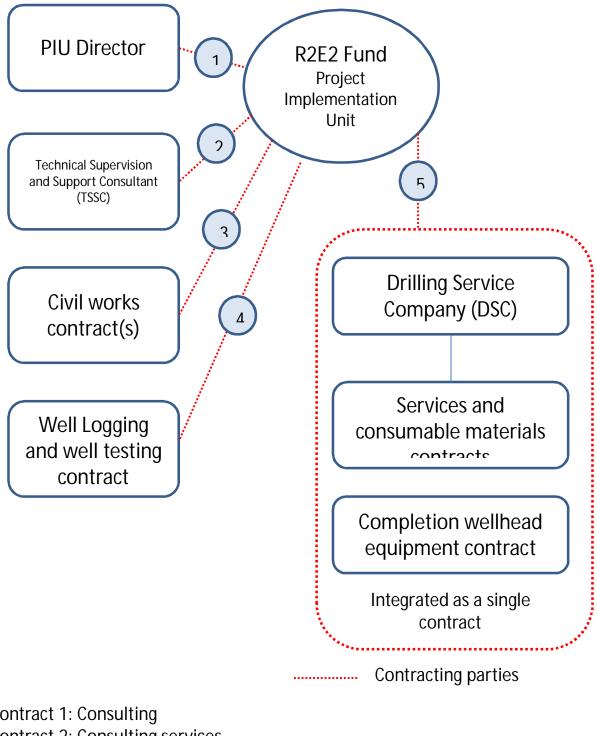


Figure 5: Suggested contracting structure

Contract 1: Consulting

Contract 2: Consulting services

Contract 3: Works

Contract 4: Non-consulting services

Contract 5: Integrated as a small works contract with the DSC

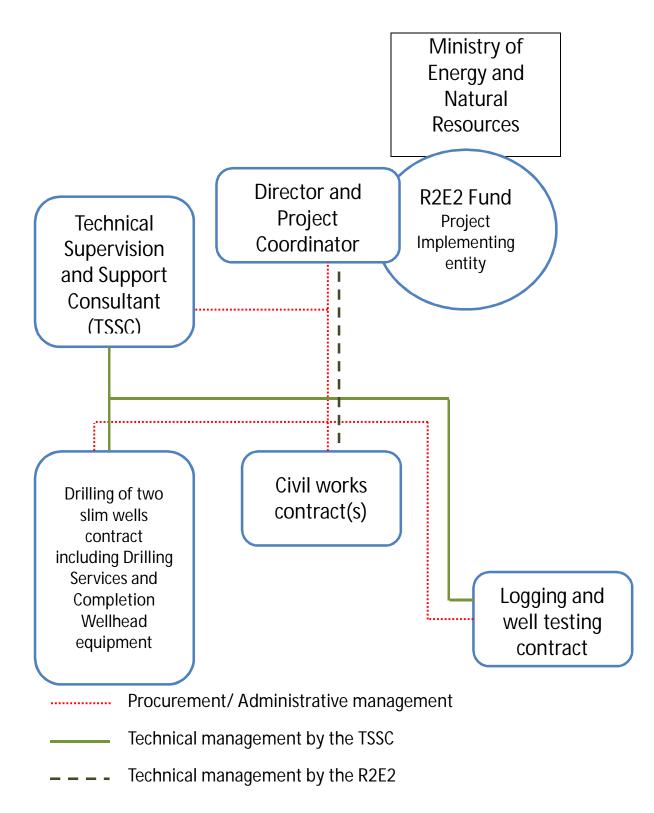


Figure 6: Suggested reporting structure

1.1.2. Technical Supervision and Support Consultant

The R2E2 will contract a Technical Supervision and Support Consultant (TSSC) to perform the technical management of the physical drilling operations. The TSSC will provide overall program coordination and technical management of the drilling operations. The TSSC will thus directly manage the DTSW and the two additional specialty contracts -i.e. the well testing and logging contract and the completion wellhead equipment contract.

The TSSC will have a consulting role, with no scope for material or equipment supply. In addition, the TSSC will not be responsible for contract procurement or the administration of contracts inclusive of invoice approval for the various contractors. These procurement and administrative tasks will be performed by the R2E2. The TSSC will, however, be responsible for the technical aspects of the procurement process for the DTSW and the additional specialty contracts and will provide the direct technical management of the contracts that are entered directly by the R2E2. The TSSC will take a lead role in the technical evaluation of the specialty contractors' proposals.

In its role, the TSSC will be responsible for on-site drilling supervision and will have the authority to make decisions on any technical issues on behalf of the R2E2, including but not limited to introducing changes in the drilling program, requesting operational changes and modifying procedures during the execution of the work.²² It is then essential that the drilling supervisor(s) on site²³ is fully authorized to make quick decisions as drilling progresses in order to prevent costly delays in the project. Moreover, all communication channels must be well defined and clearly mapped out at the beginning of the project in order to ensure that the R2E2 and TSSC can perform their fiduciary and technical obligations respectively in a coordinated manner.

1.1.3. Civil works contracts

Technical management of the civil works would be the responsibility of the R2E2.

Given the accessibility restrictions imposed by the weather conditions at the site, the civil works will need to be completed before the start of the drilling operation. Since the information on the drilling rig selected for the project may not be available at that time, the designs could be prepared based on a standard estimated solution, having the flexibility to include minor amendments to the final design, specifically for the well pad.

Road upgrades

In order to secure the mobilization of the rig and associated equipment, the current road will be upgraded. This applies for the section from the main asphalt road to the drilling site.

²² Specific responsibilities of the drilling supervisor will also include, among others: monitoring that rig up, drilling, and well completion are carried out according to the contract; certifying all materials and equipment used in the drilling activities, certifying book keeping for drilling materials, conducting daily operations meetings with the drilling contractor; approving all the contractor's reports; and approving any deviation from the drilling program.

 $^{^{23}}$ The drilling supervisor on site needs to have wide experience on geothermal drilling activities, with emphasis on drilling in high temperature geothermal systems. He will need to be accessible 24 hours at the drilling location. Therefore, a living quarter would need to be provided, which could be procured together with the drilling service.

Well pad

A standard design will be prepared by the Designer contracted by R2E2. These works will be carried out by the civil works contractor.. If minor modifications to the well pad were needed, these could be carried out by the civil contractor before the rig arrives to the site.

Water supply

Water supply is the responsibility of the Drilling Service Company.

1.1.4. Integrated drilling services contract

Refer to the specifications

1.1.5. Logging and well testing contract

"Logging and well testing" contract, would include:

- Geophysical borehole logging (well logging)
- Production / flow tests (pump if needed, chemical sampling, data recording, data analysis)²⁴

This service should include an onsite geologist and a logging expert for carrying out the down hole logging work during the exploratory drilling

Box 2: Responsibilities of the geologist and the logging expert

The main responsibilities of the geologist at the drill site will be:

- analyzing the drill cuttings (cores), including formation and alteration, in order to estimate temperature, pressure and stability of the formations
- collecting all the drilling data to be delivered by the drilling contractor as specified in the drilling program
- write daily reports on formation and alteration seen, and short notes on the drilling procedures.

The main responsibilities of the logging expert at the drill site are:

- being available to run pressure and temperature logs (P &T) for problem-solving and well bore analysis.
- carrying out well logging before (and after if necessary) each stage is cased off. This
 may include other logging services than P & T, such as Caliper logs, cement bond log,
 Neutron logs (n-n), Gamma, etc²⁵

²⁴ Well testing requirements will be dependent on the reservoir conditions and well productivity. **Production / flow testing** is conducted after the well has thermally recovered, which happens 4 to 8 weeks after completion of drilling, and lasts between 1 and 2 weeks. It requires flowing the well, logging P&T and sampling geothermal liquid in order to evaluate the production potential and the reservoir properties, such as temperature, pressure, enthalpy, etc. This production testing complements the information obtained through the **rig well testing**, which is the injection testing of the Well and logging of P&T conducted while the drilling rig is still fully operational and it is still standing on the Well. The drilling contractor assists the logging personnel in carrying out this rig well testing.

²⁵ It is expected that only temperature and pressure (and possibly spinner if available) will be required. However, this decision should be provided in detail in the final drilling program to be agreed between the PMU and the drilling contractor.

- advice on problem-solving and interpretation of data to assess the well bore situation
- design and carry out injection testing after total depth has been reached analyze the data and provide injectivity index

The drilling company is required to supply the standard well testing equipment (i.e. separator, pipes, weir box, etc), but the tools needed for sampling of data and fluids (i.e. Webre separator, Kuster K-10 PT tool and Digital Data Logging Unit) are supplied by the company executing the flow test. The drilling company shall also do the installation of the well test equipment.

PART 3 – Conditions of Contract and Contract Forms

Section VIII. General Conditions of Contract

These General Conditions of Contract (GCC), read in conjunction with the Particular Conditions of Contract (PCC) and other documents listed therein, should be a complete document expressing fairly the rights and obligations of both parties.

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General Conditions of Contract

A. General

- **1. Definitions** 1.1 Boldface type is used to identify defined terms.
 - (a) The Accepted Contract Amount means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.
 - (b) The Activity Schedule is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump sum contract. It includes a lump sum price for each activity, which is used for valuations and for assessing the effects of Variations and Compensation Events.
 - (c) The Adjudicator is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in GCC 23.
 - (d) Bank means the financing institution **named in the PCC**.
 - (e) Bill of Quantities means the priced and completed Bill of Quantities forming part of the Bid.
 - (f) Compensation Events are those defined in GCC Clause 42 hereunder.
 - (g) The Completion Date is the date of completion of the Works as certified by the Project Manager, in accordance with GCC Sub-Clause 53.1.
 - (h) The Contract is the Contract between the Employer and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in GCC Sub-Clause 2.3 below.
 - (i) The Contractor is the party whose Bid to carry out the Works has been accepted by the Employer.
 - (j) The Contractor's Bid is the completed bidding document submitted by the Contractor to the Employer.
 - (k) The Contract Price is the Accepted Contract Amount stated in the Letter of Acceptance and thereafter as adjusted in accordance with the Contract.
 - (1) Days are calendar days; months are calendar months.
 - (m) Dayworks are varied work inputs subject to payment on a

time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.

- (n) A Defect is any part of the Works not completed in accordance with the Contract.
- (o) The Defects Liability Certificate is the certificate issued by Project Manager upon correction of defects by the Contractor.
- (p) The Defects Liability Period is the period named in the PCC pursuant to Sub-Clause 34.1 and calculated from the Completion Date.
- (q) Drawings means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Employer in accordance with the Contract, include calculations and other information provided or approved by the Project Manager for the execution of the Contract.
- (r) The Employer is the party who employs the Contractor to carry out the Works, **as specified in the PCC**.
- (s) Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.
- (t) "In writing" or "written" means hand-written, typewritten, printed or electronically made, and resulting in a permanent record;
- (u) The Initial Contract Price is the Contract Price listed in the Employer's Letter of Acceptance.
- (v) The Intended Completion Date is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the PCC. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.
- (w) Materials are all supplies, including consumables, used by the Contractor for incorporation in the Works.
- (x) Plant is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.
- (y) The Project Manager is the person **named in the PCC** (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Project Manager) who is responsible

for supervising the execution of the Works and administering the Contract.

- (z) PCC means Particular Conditions of Contract.
- (aa) The Site is the area **defined as such in the PCC**.
- (bb) Site Investigation Reports are those that were included in the bidding documents and are factual and interpretative reports about the surface and subsurface conditions at the Site.
- (cc) Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.
- (dd) The Start Date is **given in the PCC**. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.
- (ee) A Subcontractor is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.
- (ff) Temporary Works are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.
- (gg) A Variation is an instruction given by the Project Manager which varies the Works.
- (hh) The Works are what the Contract requires the Contractor to construct, install, and turn over to the Employer, **as defined in the PCC**.
- 2. Interpretation 2.1 In interpreting these GCC, words indicating one gender include all genders. Words indicating the singular also include the plural and words indicating the plural also include the singular. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.
 - 2.2 If sectional completion is **specified in the PCC**, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
 - 2.3 The documents forming the Contract shall be interpreted in the

following order of priority:

- (a) Agreement,
- (b) Letter of Acceptance,
- (c) Contractor's Bid,
- (d) Particular Conditions of Contract,
- (e) General Conditions of Contract, including Appendix,
- (f) Specifications,
- (g) Drawings,
- (h) Bill of Quantities, and
- (i) any other document **listed in the PCC** as forming part of the Contract.
- **3. Language and** 3.1 The language of the Contract and the law governing the Contract are **stated in the PCC**.
 - 3.2 Throughout the execution of the Contract, the Contractor shall comply with the import of goods and services prohibitions in the Employer's country when

(a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country; or

(b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's Country prohibits any import of goods from that country or any payments to any country, person, or entity in that country.

- 4. Project4.1Except where otherwise specifically stated, the Project Manager
shall decide contractual matters between the Employer and the
Contractor in the role representing the Employer.
- 5. Delegation 5.1 Otherwise specified in the PCC, the Project Manager may delegate any of his duties and responsibilities to other people, except to the Adjudicator, after notifying the Contractor, and may revoke any delegation after notifying the Contractor.
- 6. Communications6.1 Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.
- **7. Subcontracting** 7.1 The Contractor may subcontract with the approval of the Project Manager, but may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the

Contractor's obligations.

- 8. Other The Contractor shall cooperate and share the Site with other 8.1 contractors, public authorities, utilities, and the Employer **Contractors** between the dates given in the Schedule of Other Contractors, as referred to in the PCC. The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification.
- 9. Personnel and 9.1 The Contractor shall employ the key personnel and use the Equipment equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of key personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
 - 9.2 If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.
 - 9.3 If the Employer, Project Manager or Contractor determines, that any employee of the Contractor be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Works, then that employee shall be removed in accordance with Clause 9.2 above.
- **10. Employer's** 10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this and Contract states are Contractor's risks. **Contractor's**
- 11. Employer's 11.1 From the Start Date until the Defects Liability Certificate has **Risks** been issued, the following are Employer's risks:
 - The risk of personal injury, death, or loss of or damage to (a) property (excluding the Works, Plant, Materials, and Equipment), which are due to
 - use or occupation of the Site by the Works or for the (i) purpose of the Works, which is the unavoidable result of the Works or
 - negligence, breach of statutory duty, or interference (ii) with any legal right by the Employer or by any person employed by or contracted to him except the

Risks

Contractor.

		(b)	The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in the Employer's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.	
has been issued, the risk of loss o		the Completion Date until the Defects Liability Certificate been issued, the risk of loss of or damage to the Works, t, and Materials is an Employer's risk except loss or damage to		
		(a)	a Defect which existed on the Completion Date,	
		(b)	an event occurring before the Completion Date, which was not itself an Employer's risk, or	
		(c)	the activities of the Contractor on the Site after the Completion Date.	
12. Contractor's Risks	12.1	From the Starting Date until the Defects Liability Certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Employer's risks are Contractor's risks.		
13. Insurance	13.1	and end dedu	Contractor shall provide, in the joint names of the Employer the Contractor, insurance cover from the Start Date to the of the Defects Liability Period, in the amounts and ctibles stated in the PCC for the following events which ue to the Contractor's risks:	
		(a)	loss of or damage to the Works, Plant, and Materials;	
		(b)	loss of or damage to Equipment;	
		(c)	loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and	
		(d)	personal injury or death.	
	13.2	Cont appro- for c	ties and certificates for insurance shall be delivered by the ractor to the Project Manager for the Project Manager's oval before the Start Date. All such insurance shall provide compensation to be payable in the types and proportions of encies required to rectify the loss or damage incurred.	
	13.3	If th	e Contractor does not provide any of the policies and	

certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

- 13.4 Alterations to the terms of an insurance shall not be made without the approval of the Project Manager.
- 13.5 Both parties shall comply with any conditions of the insurance policies.
- 14. Site Data 14.1 The Contractor shall be deemed to have examined any Site Data referred to in the PCC, supplemented by any information available to the Contractor.
- 15. Contractor to Construct the Works in accordance with the Specifications and Drawings.
- 16. The Works to Be Completed by the Intended Completion Date
 16.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.
- 17. Approval by
the Project
Manager17.1 The Contractor shall submit Specifications and Drawings
showing the proposed Temporary Works to the Project Manager,
for his approval.
 - 17.2 The Contractor shall be responsible for design of Temporary Works.
 - 17.3 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
 - 17.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.
 - 17.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Project Manager before this use.

18. Safety 18.1 The Contractor shall be responsible for the safety of all activities on the Site.

19. Discoveries 19.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Project Manager of

such discoveries and carry out the Project Manager's instructions for dealing with them.

- 20. Possession of the Site20.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the PCC, the Employer shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.
- 21. Access to the Site21.1 The Contractor shall allow the Project Manager and any person authorized by the Project Manager access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.
- 22. Instructions, Inspections and Audits22.1 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.
 - 22.2 The Contractor shall keep, and shall make all reasonable efforts to cause its Subcontractors and subconsultants to keep, accurate and systematic accounts and records in respect of the Works in such form and details as will clearly identify relevant time changes and costs.
 - 22.3 The Contractor shall permit and shall cause its Subcontractors and subconsultants to permit, the Bank and/or persons appointed by the Bank to inspect the Site and/or the accounts and records relating to the performance of the Contract and the submission of the bid, and to have such accounts and records audited by auditors appointed by the Bank if requested by the Bank. The Contractor's and its Subcontractors' and subconsultants' attention is drawn to Sub-Clause 25.1 which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under Sub-Clause 22.2 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).
- 23. Appointment of the Adjudicator
 23.1 The Adjudicator shall be appointed jointly by the Employer and the Contractor, at the time of the Employer's issuance of the Letter of Acceptance. If, in the Letter of Acceptance, the Employer does not agree on the appointment of the Adjudicator, the Employer will request the Appointing Authority designated in the PCC, to appoint the Adjudicator within 14 days of receipt of such request.
 - 23.2 Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new

Adjudicator shall be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority **designated in the PCC** at the request of either party, within 14 days of receipt of such request.

- 24. Procedure for Disputes24.1 If the Contractor believes that a decision taken by the Project Manager was either outside the authority given to the Project Manager by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within 14 days of the notification of the Project Manager's decision.
 - 24.2 The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.
 - 24.3 The Adjudicator shall be paid by the hour at the **rate specified in the PCC**, together with reimbursable expenses of the types **specified in the PCC**, and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision shall be final and binding.
 - 24.4 The arbitration shall be conducted in accordance with the arbitration procedures published by the institution named and in the place **specified in the PCC.**
- 25. Corrupt and Fraudulent Practices25.1 The Bank requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Appendix to the GCC.
 - 25.2 The Employer requires the Contractor to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.

B. Time Control

26. Program 26.1 Within the time stated in the PCC, after the date of the Letter of Acceptance, the Contractor shall submit to the Project Manager for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works. In the case of a lump sum contract, the activities in the

Program shall be consistent with those in the Activity Schedule.

- 26.2 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.
- 26.3 The Contractor shall submit to the Project Manager for approval an updated Program at intervals no longer than the period stated in the PCC. If the Contractor does not submit an updated Program within this period, the Project Manager may withhold the amount stated in the PCC from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted. In the case of a lump sum contract, the Contractor shall provide an updated Activity Schedule within 14 days of being instructed to by the Project Manager.
- 26.4 The Project Manager's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Project Manager again at any time. A revised Program shall show the effect of Variations and Compensation Events.
- 27.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.
 - 27.2 The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.
- 28. Acceleration 28.1 When the Employer wants the Contractor to finish before the Intended Completion Date, the Project Manager shall obtain priced proposals for achieving the necessary acceleration from the Contractor. If the Employer accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both the Employer and the Contractor.
 - 28.2 If the Contractor's priced proposals for an acceleration are

27. Extension of the Intended Completion Date

accepted by the Employer, they are incorporated in the Contract Price and treated as a Variation.

29. Delays 29.1 The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.

Manager

- 30. Management Meetings 30.1 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
 - 30.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.
- **31. Early Warning** 31.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.
 - 31.2 The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Project Manager.

C. Quality Control

- 32. Identifying Defects32.1 The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.
- **33. Tests** 33.1 If the Project Manager instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay

for the test and any samples. If there is no Defect, the test shall be a Compensation Event.

- 34. Correction of Defects34.1 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the PCC. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
 - 34.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.
- 35. Uncorrected Defects35.1 If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected, and the Contractor shall pay this amount.

D. Cost Control

- **36. Contract Price** 36.1 The Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item.
- 37. Changes in the Contract Price37.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change. The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the prior approval of the Employer.
 - 37.2 If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.
- **38. Variations** 38.1 All Variations shall be included in updated Programs produced by the Contractor.
 - 38.2 The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.

- 38.3 If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.
- 38.4 If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.
- 38.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.
- 38.6 If the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in Sub-Clause 39.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work.
- 39. Cash Flow Forecasts39.1 When the Program, is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.
- **40. Payment Certificates** 40.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.
 - 40.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
 - 40.3 The value of work executed shall be determined by the Project Manager.
 - 40.4 The value of work executed shall comprise the value of the quantities of work in the Bill of Quantities that have been completed.
 - 40.5 The value of work executed shall include the valuation of Variations and Compensation Events.
 - 40.6 The Project Manager may exclude any item certified in a

previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

- 41. Payments 41.1 Payments shall be adjusted for deductions for advance payments and retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 28 days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payments are made.
 - 41.2 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
 - 41.3 Unless otherwise stated, all payments and deductions shall be paid or charged in the proportions of currencies comprising the Contract Price.
 - 41.4 Items of the Works for which no rate or price has been entered in shall not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

42. Compensation Events

- 42.1 The following shall be Compensation Events:
 - (a) The Employer does not give access to a part of the Site by the Site Possession Date pursuant to GCC Sub-Clause 20.1.
 - (b) The Employer modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.
 - (c) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.
 - (d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.
 - (e) The Project Manager unreasonably does not approve a

subcontract to be let.

- (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
- (g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
- (h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- (i) The advance payment is delayed.
- (j) The effects on the Contractor of any of the Employer's Risks.
- (k) The Project Manager unreasonably delays issuing a Certificate of Completion.
- 42.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
- 42.3 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.
- 42.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor's not having given early warning or not having cooperated with the Project Manager.
- **43. Tax** 43.1 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 28 days

before the submission of bids for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of GCC Clause 44.

- **44. Currencies** 44.1 Where payments are made in currencies other than the currency of the Employer's country **specified in the PCC**, the exchange rates used for calculating the amounts to be paid shall be the exchange rates stated in the Contractor's Bid.
- 45. Price 45.1 Prices shall be adjusted for fluctuations in the cost of inputs only if provided for in the PCC. If so provided, the amounts certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. A separate formula of the type specified below applies to each Contract currency:

$$P_c = A_c + B_c Imc/Ioc$$

where:

 P_c is the adjustment factor for the portion of the Contract Price payable in a specific currency "c."

 A_c and B_c are coefficients **specified in the PCC**, representing the nonadjustable and adjustable portions, respectively, of the Contract Price payable in that specific currency "c;" and

Imc is the index prevailing at the end of the month being invoiced and Ioc is the index prevailing 28 days before Bid opening for inputs payable; both in the specific currency "c."

- 45.2 If the value of the index is changed after it has been used in a calculation, the calculation shall be corrected and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.
- **46. Retention** 46.1 The Employer shall retain from each payment due to the Contractor the proportion **stated in the PCC** until Completion of the whole of the Works.
 - 46.2 Upon the issue of a Certificate of Completion of the Works by the Project Manager, in accordance with GCC 51.1, half the total amount retained shall be repaid to the Contractor and half when the Defects Liability Period has passed and the Project Manager

has certified that all Defects notified by the Project Manager to the Contractor before the end of this period have been corrected. The Contractor may substitute retention money with an "on demand" Bank guarantee.

- 47. Liquidated Damages47.1 The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the PCC for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount defined in the PCC. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.
 - 47.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in GCC Sub-Clause 41.1.
- 48. Bonus48.1 The Contractor shall be paid a Bonus calculated at the rate per calendar day stated in the PCC for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.
- 49. Advance Payment
 49.1 The Employer shall make advance payment to the Contractor of the amounts stated in the PCC by the date stated in the PCC, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Employer in amounts and currencies equal to the advance payment. The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest shall not be charged on the advance payment.
 - 49.2 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.
 - 49.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor,

following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.

- 50. Securities
 50.1 The Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount specified in the PCC, by a bank or surety acceptable to the Employer, and denominated in the types and proportions of the currencies in which the Contract Price is payable. The Performance Security shall be valid until a date 28 days from the date of issue of the Certificate of Completion in the case of a Bank Guarantee, and until one year from the date of issue of the Completion Certificate in the case of a Performance Bond.
- 51. Dayworks51.1 If applicable, the Dayworks rates in the Contractor's Bid shall be used only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.
 - 51.2 All work to be paid for as Dayworks shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.
 - 51.3 The Contractor shall be paid for Dayworks subject to obtaining signed Dayworks forms.
- 52. Cost of Repairs52.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

- **53. Completion** 53.1 The Contractor shall request the Project Manager to issue a Certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the whole of the Works is completed.
- **54. Taking Over** 54.1 The Employer shall take over the Site and the Works within seven days of the Project Manager's issuing a certificate of Completion.
- **55. Final Account 55.1** The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable

under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate.

- 56. Operating and Maintenance Manuals56.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the PCC.
 - 56.2 If the Contractor does not supply the Drawings and/or manuals by the dates **stated in the PCC** pursuant to GCC Sub-Clause 56.1, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount **stated in the PCC** from payments due to the Contractor.

- **57. Termination** 57.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
 - 57.2 Fundamental breaches of Contract shall include, but shall not be limited to, the following:
 - (a) the Contractor stops work for 28 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Project Manager;
 - (b) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 28 days;
 - (c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
 - (d) a payment certified by the Project Manager is not paid by the Employer to the Contractor within 84 days of the date of the Project Manager's certificate;
 - (e) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;
 - (f) the Contractor does not maintain a Security, which is required;
 - (g) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as **defined in the PCC**; or
 - (h) if the Contractor, in the judgment of the Employer, has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Client may, after giving fourteen (14) days written notice to the Contractor, terminate the Contract and expel him from the Site.
 - 57.3 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under GCC Sub-Clause 56.2 above, the Project Manager shall decide whether the breach is fundamental or not.
 - 57.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.
 - 57.5 If the Contract is terminated, the Contractor shall stop work

immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

- 58. Payment upon Termination
 58.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as **specified in the PCC.** Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable to the Employer.
 - 58.2 If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Project Manager shall issue a certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.
- **59. Property** 59.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer if the Contract is terminated because of the Contractor's default.
- 60. Release from Performance60.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.

61. Suspension of Bank Loan or Credit61.1 In the event that the Bank suspends the Loan or Credit to the Employer, from which part of the payments to the Contractor are being made:

- (a) The Employer is obligated to notify the Contractor of such suspension within 7 days of having received the Bank's suspension notice.
- (b) If the Contractor has not received sums due it within the 28 days for payment provided for in Sub-Clause 40.1, the Contractor may immediately issue a 14-day termination notice.

APPENDIX TO GENERAL CONDITIONS Bank's Policy- Corrupt and Fraudulent Practices

Guidelines for Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, dated January 2011:

"Fraud and Corruption:

- 1.16 It is the Bank's policy to require that Borrowers (including beneficiaries of Bank loans), bidders, suppliers, contractors and their agents (whether declared or not), sub-contractors, sub-consultants, service providers or suppliers, and any personnel thereof, observe the highest standard of ethics during the procurement and execution of Bank-financed contracts.²⁶ In pursuance of this policy, the Bank:
 - (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;²⁷;
 - (ii) "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;²⁸
 - (iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;²⁹
 - (iv) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;³⁰
 - (v) "obstructive practice" is

²⁶ In this context, any action to influence the procurement process or contract execution for undue advantage is improper.

For the purpose of this sub-paragraph, "another party" refers to a public official acting in relation to the procurement process or contract execution. In this context, "public official" includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

For the purpose of this sub-paragraph, "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.

²⁹ For the purpose of this sub-paragraph, "parties" refers to participants in the procurement process (including public officials) attempting either themselves, or through another person or entity not participating in the procurement or selection process, to simulate competition or to establish bid prices at artificial, non-competitive levels, or are privy to each other's bid prices or other conditions.

³⁰ For the purpose of this sub-paragraph, "party" refers to a participant in the procurement process or contract execution.

- (aa) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or
- (bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 1.16(e) below.
- (b) will reject a proposal for award if it determines that the bidder recommended for award, or any of its personnel, or its agents, or its sub-consultants, subcontractors, service providers, suppliers and/or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- (c) will declare misprocurement and cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement or the implementation of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- (d) will sanction a firm or individual, at any time, in accordance with the prevailing Bank's sanctions procedures,³¹ including by publicly declaring such firm or individual ineligible, either indefinitely or for a stated period of time: (i) to be awarded a Bank-financed contract; and (ii) to be a nominated³²;
- (e) will require that a clause be included in bidding documents and in contracts financed by a Bank loan, requiring bidders, suppliers and contractors, and their sub-contractors, agents, personnel, consultants, service providers, or suppliers, to permit the Bank to inspect all accounts, records, and other documents relating to the submission of bids and contract performance, and to have them audited by auditors appointed by the Bank."

³¹ A firm or individual may be declared ineligible to be awarded a Bank financed contract upon: (i) completion of the Bank's sanctions proceedings as per its sanctions procedures, including, inter alia, cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Banks, and through the application the World Bank Group corporate administrative procurement sanctions procedures for fraud and corruption; and (ii) as a result of temporary suspension or early temporary suspension in connection with an ongoing sanctions proceeding. See footnote 14 and paragraph 8 of Appendix 1 of these Guidelines.

³² A nominated sub-contractor, consultant, manufacturer or supplier, or service provider (different names are used depending on the particular bidding document) is one which has either been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

Section IX. Particular Conditions of Contract

A. General		
GCC 1.1 (d)	The financing institution is: the World Bank Scaling Up Renewable Energy in Low Income Countries Program (SREP)	
GCC 1.1 (s)	The Employer is Renewable Resources and Energy Efficiency (R2E2) Fund 32 Proshyan Street, 1 st lane Yerevan, Republic of Armenia.	
GCC 1.1 (v)	The Intended Completion Date for the whole of the Works shall be 120 days from Start Date for the two slim wells.	
GCC 1.1 (y)	The Project Manager is [insert name of the company selected for the Technical Supervision].	
GCC 1.1 (aa)	The Site is located at Site is located at: Karkar geothermal site, in the South-East of Armenia, Access road to the site, from Tsghuk community of Syunik province to Karkar geothermal area (Yerevan – Meghry road) and is defined in drawings No. Figure 1	
GCC 1.1 (dd)	The Start Date shall be 21 days after Contract Signing. Following Completion of the first well, the Project Manager shall notify the Contractor of the Employer's decision to undertake the second well drilling or not and the Contractor shall act accordingly or begin demobilization accordingly.	
GCC 1.1 (hh)	The Works consist of drilling of two slim wells (with diameter of 3.5 inches) on the Karkar site to a maximum depth of 1,500 meters in order to confirm the nature of the low resistivity layer located at 500-1,000 m, and to measure the temperature just below it.	
GCC 2.2	Sectional Completions are: two months from Start Date for the first slim well and three months from Start Date for the second slim well.	
GCC 2.3(i)	The following documents also form part of the Contract: none	
GCC 3.1	The language of the contract is English.	
	The law that applies to the Contract is the law of the Republic of Armenia.	
GCC 5.1	The Project manager <i>may not</i> delegate any of his duties and responsibilities.	
GCC 8.1	Schedule of other contractors: N/A	

GCC 13.1	The minimum insurance amounts and deductibles shall be:			
	 (a) for loss or damage to the Works, Plant and Materials: minimum insurance: in the amount of contract price, maximum deductible: AMD2,500,000. 			
	(b) For loss or damage to Equipment: minimum insurance: AMD 500.0 mln., maximum deductible: AMD2,500,000.			
	 (c) for loss or damage to property (except the Works, Plant, Materials, and Equipment) in connection with Contract minimum insurance: AMD 500.0 mln., maximum deductible: AMD 500,000. 			
	(d) for personal injury or death:			
	(i) of the Contractor's employees: AMD125 million per person with no limit on number of occurrences.			
	(ii) of other people: AMD125 million per person with no limit on number of occurrences			
GCC 14.1	Site Data are: [N/A]			
GCC 20.1	The Site Possession Date(s) shall be: same as Start Date			
GCC 23.1 &	Appointing Authority for the Adjudicator: Chairperson of FIDIC World			
GCC 23.2	Trade Center II, Geneva Airport PO Box 311 Geneva 1205 Switzerland.			
GCC 24.3	Daily rate and types of reimbursable expenses to be paid to the Adjudicator: [insert hourly fees and reimbursable expenses].			
GCC 24.4	Any dispute, controversy, or claim arising out of or relating to this Contract, or breach, termination, or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules as at present in force.			
	The place of arbitration shall be: Tbilisi, Georgia			
B. Time Control				
GCC 26.1	The Contractor shall submit for approval a Program for the Works within 14 days from the date of the Letter of Acceptance.			
GCC 26.3	The period between Program updates is 30 days.			
	The amount to be withheld for late submission of an updated Program is AMD5,000,000.			
C. Quality Control				

GCC 34.1	The Defects Liability Period is: 365 days.		
D. Cost Control			
GCC 44.1	The currency of the Employer's country is: Armenian Drams (AMD)		
GCC 45.1	The Contract <i>is not</i> subject to price adjustment in accordance with GCC Clause 45.		
GCC 46.1	The proportion of payments retained is: 5 percent.		
GCC 47.1	The liquidated damages for the whole of the Works are 0.10% per day. The maximum amount of liquidated damages for the whole of the Works is 10% of the final Contract Price.		
GCC 48.1	N/A		
GCC 49.1	The Advance Payments shall be: 20 percent of the Contract Price and shall be paid to the Contractor no later than 14 days after submission of Advance Payment Guarantee for the same amount.		
GCC 50.1	The Performance Security amount is <i>denominated in the types and proportions of the currencies in which the Contract Price is payable, or in a freely convertible currency acceptable to the</i> Employer.		
	Bank Guarantee: 10% of the Contract Price.		
	[A Bank Guarantee shall be unconditional (on demand) (see Section X, Contract Forms).]		
E. Finishing the Contract			
GCC 56.1	The date by which operating and maintenance manuals are required is <i>date of the Certificate of Completion</i> .		
	The date by which "as built" drawings are required is 30 days after date of the Certificate of Completion.		
GCC 56.2	The amounts to be withheld for failing to produce "as built" drawings or operating and maintenance manuals by the date required in GCC 56.1 are AMD7,500,000 for "as built" drawings and AMD2,500,000 for operating and maintenance manuals respectively; these amounts may be cumulated in case the Contractor fails to produce the mentioned document/s by the date required .		
GCC 57.2 (g)	The number of days by which the Contractor delays the completion of the		

	Works, constituting a fundamental breach of the Contract is: 100 days.
GCC 58.1	The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, is <i>10%</i> .

Section X - Contract Forms

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.

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Letter of Acceptance

[on letterhead paper of the Employer]

.....[date].....

To: [name and address of the Contractor]

You are requested to furnish the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose the of the Performance Security Form included in Section X. Contract Forms, of the Bidding Document.

[Choose one of the following statements:]

We accept that ______ [insert the name of Adjudicator proposed by the Bidder] be appointed as the Adjudicator.

[*or*]

We do not accept that ______[insert the name of the Adjudicator proposed by the Bidder] be appointed as the Adjudicator, and by sending a copy of this Letter of Acceptance to _______[insert name of the Appointing Authority], the Appointing Authority, we are hereby requesting such Authority to appoint the Adjudicator in accordance with ITB 43.1 and GCC 23.1.

Authorized Signature:

Name and Title of Signatory:

Name of Agency:

Attachment: Contract Agreement

Contract Agreement

THIS AGREEMENT made theday of, between, between, *[name of the* Employer]...... (hereinafter "the Employer"), of the one part, and [*name of the Contractor*].....(hereinafter "the Contractor"), of the other part:

WHEREAS the Employer desires that the Works known as[*name of the Contract*].... .should be executed by the Contractor, and has accepted a Bid by the Contractor for the execution and completion of these Works and the remedying of any defects therein,

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.

- (i) the Letter of Acceptance
- (ii) the Letter of Bid
- (iii) the addenda Nos _____(if any)
- (iv) the Particular Conditions
- (v) the General Conditions of Contract, including appendix;
- (vi) the Specification
- (vii) the Drawings
- (viii) Bill of Quantities; and
- (ix) any other document **listed in the PCC** as forming part of the Contract,

3. In consideration of the payments to be made by the Employer to the Contractor as specified in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of [name of the borrowing country]. on the day, month and year specified above.

Signed by:

for and on behalf of the Employer

Signed by:

in the

for and on behalf the Contractor

in the

presence of:

Witness, Name, Signature, Address, Date

presence of: Witness, Name, Signature, Address, Date

Performance Security (Bank Guarantee)

(Bank Guarantee)

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: [insert name and Address of Employer]

Date: _[Insert date of issue]

PERFORMANCE GUARANTEE No.: [Insert guarantee reference number]

Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

We have been informed that _ [insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture] (hereinafter called "the Applicant") has entered into Contract No. [insert reference number of the contract] dated [insert date] with the Beneficiary, for the execution of _ [insert name of contract and brief description of Works] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]* (_____) *[insert amount in words]*,¹ such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the Day of, $2...^2$, and any demand for payment under it must be received by us at this office indicated above on or before that date.

¹ The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, less provisional sums, if any, and denominated either in the currency(cies) of the Contract or a freely convertible currency acceptable to the Beneficiary.

² Insert the date twenty-eight days after the expected completion date as described in GC Clause 53.1. The Employer should note that in the event of an extension of this date for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

Advance Payment Security

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: [Insert name and Address of Employer]

Date: [Insert date of issue]

ADVANCE PAYMENT GUARANTEE No.: [Insert guarantee reference number]

Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

We have been informed that [insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture] (hereinafter called "the Applicant") has entered into Contract No. [insert reference number of the contract] dated [insert date] with the Beneficiary, for the execution of [insert name of contract and brief description of Works] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum *[insert amount in figures]* () *[insert amount in words]* is to be made against an advance payment guarantee.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]* () *[insert amount in words]*¹ upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:

(a) has used the advance payment for purposes other than the costs of mobilization in respect of the Works; or

(b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to

¹ The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency(ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Employer.

above has been credited to the Applicant on its account number [insert number] at [insert name and address of Applicant's bank]..

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Applicant as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, less provisional sums, has been certified for payment, or on the *[insert day]* day of *[insert month]*, 2 *[insert year]*,² whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

² Insert the expected expiration date of the Time for Completion. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

Invitation for Bids

REPUBLIC OF ARMENIA GEOTHERMAL EXPLORATORY DRILLING PROJECT Grant No.: P152039

Contract Title: Drilling of Two Slim Wells Reference No. GEDP-CW-3/2015

1. The Republic of Armenia *has applied for* financing from the World Bank toward the cost of the Geothermal Exploratory Drilling Project, and intends to apply part of the proceeds toward payments under the contract for Drilling of Two Slim Wells.

2. The Renewable Resources and Energy Efficiency (R2E2) Fund now invites sealed bids from eligible bidders for drilling two slim wells (with diameter of 3.5 inches) on the Karkar Site to a maximum depth of 1,500 meters in order to confirm the nature of the low resistivity layer located at 500-1,000 m and to measure the temperature just below it, to be performed within a four months duration. In order to qualify for the Contract a Bidder must have experience in similar drilling services and adequate resources, as detailed in the Bidding Document.

3. Bidding will be conducted through the International Competitive Bidding procedures as specified in the World Bank's <u>Guidelines: Procurement of Goods, Works and Non-Consulting</u> <u>Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers</u> January 2011, revised on July, 2014 ("Procurement Guidelines"), and is open to all eligible bidders as defined in the Procurement Guidelines. In addition, please refer to paragraphs 1.6 and 1.7 setting forth the World Bank's policy on conflict of interest.

4. Interested eligible bidders may obtain further information from **Renewable Resources and Energy Efficiency (R2E2) Fund 32 Proshyan Street, 1st lane Yerevan, Republic of Armenia Attention: Mrs. Tamara Babayan Telephone: +37410-588011 Facsimile number: +37410-541732 Electronic mail address: info@r2e2.am and inspect the bidding documents during office hours (09:00 to 17:00) at the same address.**

5. A complete set of bidding documents in English may be purchased by interested eligible bidders upon the submission of a written application to the address below and upon payment of a nonrefundable fee of US\$ 100. The method of payment will be by direct deposit to HSBC Bank Armenia Account Number 001-007855-004. The document will be sent by courier service. Bidding Documents and all consequent Amendments and clarifications (if any) will be posted on the free accessed websites (www.gnumner.am and www.r2e2.am) and

the R2E2 Fund takes no responsibility for missing or incorrect or/and incomplete downloading of those by the prospective bidders.

6. Bids must be delivered to the address below on or before 15:00; February 01, 2016 (local time). Electronic bidding will not be permitted. Late bids will be rejected. Bids will be publicly opened in the presence of the bidders' designated representatives and anyone who choose to attend at the address below on 15:05; February 01, 2016 (local time).

7. All bids must be accompanied by a *Bid Security* of *US\$* 75,000.

8. The address referred to above is:

Renewable Resources and Energy Efficiency (R2E2) Fund 32 Proshyan Street, 1st lane Yerevan, Republic of Armenia Attention: **Mrs. Tamara Babayan** Telephone: : +**37410-588011** Facsimile number: +**37410-541732**

Electronic mail address: info@r2e2.am