# QUEZON II ELECTRIC COOPERATIVE INC.

**Gumian, Infanta, Quezon**

# Bidding Documents for the Project:

## Supply of Goods and Services for the Acquisition, Installation, Training and Commissioning of Supervisory Control and Data Acquisition (SCADA) of Quezon II Electric Cooperative, Inc.

Approved Budget for the Contract: 2,800,000.00

Project Location: QUEZELCO II Main Office/Comon Substation, Brgy. Comon, Infanta, Quezon (Three control locations – Brgy. Ingas, Tongohin, Infanta, Quezon and Brgy. Anoling, Gen. Nakar, Quezon)

Target Date of Completion: Within 120 calendar days upon receipt of Notice to Proceed

Source of Funding: General Fund

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# Section I. Invitation to Apply for Eligibility and to Bid

The Quezon II Electric Cooperative, Inc. (QUEZELCO II), through its Bids and Awards Committee (BAC), invites interested and qualified bidders to bid for the hereunder contract:

**Contract No. 01-2020**

**Name of Project: Supply of Goods and Services for the Acquisition, Installation, Training and Commissioning of Supervisory Control and Data Acquisition (SCADA)**
**Approved Budget for the Contract: Php2,800,000.00**
**Location: QUEZELCO II Headquarters/Comon Substation, Infanta, Quezon** (Three control locations, Brgy. Ingas, Tongohin, Infanta, Quezon and Brgy. Anoling, Gen. Nakar, Quezon)
**Source of Funding:** General Fund
**Target Date of Completion:** within 120 calendar days upon receipt of Notice to Proceed
The complete schedule of bidding activities are as follows:

| SCHEDULE | DATE & TIME | VENUE |
|---|---|---|
| Publication of Invitation to Bid | June 9,2020 | Website: www.quezelco2.com.ph<br>NEA Website: www.nea.gov.ph |
| Deadline of Submission of Eligibility Requirements (documents to be sent via courier) | June 19, 2020 | QUEZELCO II, Main office, Brgy. Gumian, Infanta, Quezon |
| Pre-bid Conference (video conference via zoom) | June 25, 2020/10:00 A.M. | Board Room, QUEZELCO II, Main office, Brgy. Gumian, Infanta, Quezon |
| Project Presentation (by schedule - video conference via zoom ) | June 26, 2020 | Board Room, QUEZELCO II, Main office, Brgy. Gumian, Infanta, Quezon |
| Deadline of Submission of Proposal (via courier) and Opening of Bids (video conference via zoom) | July 8, 2020/10:00 A.M. | Boardroom, QUEZELCO II, Main office, Brgy. Gumian, Infanta, Quezon |

**Note: Pertinent information may be downloaded at QUEZELCO II website: www.quezelco2.com.ph**

A complete set of Bidding Documents may be purchased by the interested Bidders from the above address from June 9 up to 10:00 am of June 19, 2020, upon payment in cash of a nonrefundable fee of **Php. 5,000.00.**

To qualify, interested bidders must submit **via courier** certified true copy in case of photocopied documents such as but not limited to: Company profile: Notarized statement in matrix form of all ongoing and completed

government and private contracts (supported with purchase orders, job orders, etc.) including contracts awarded but not yet started, if any **(for the last five (5) years).** Statement identifying the bidder's single largest completed contract similar to the contract to be bid within the relevant period as provided in the bidding documents with a value of at least 50% of the ABC (supported w/ contract, cert. of completion, project cost & cert. of acceptance), Copy of By-laws, Notarized statement of availability of key personnel and equipment, Notarized statement that prospective bidder is not blacklisted by any government or non-government agency; DTI Business Name registration or SEC registration certificate; Audited Financial Statements stamped received by the BIR for the immediately preceding year; Certificate of BIR Registration, Valid and current Mayor's Permit and Taxpayer's Identification Number.

All particulars relative to the bidding process shall be governed by the pertinent provisions of the Revised Procurement Guidelines and Simplified Bidding Procedures for Electric Cooperatives - IRR-RA10531 (2017) and Republic Act 9184, on a **Quality-Cost Based Evaluation procedures.**

QUEZELCO II reserves the right to accept or reject any bid to annul the bidding process and to reject all bids at any time prior to contract award without thereby incurring any liability to the affected bidder or bidders.

QUEZELCO II assumes no responsibility whatsoever to compensate or indemnify bidders for any expenses incurred in the preparation of their bids.

For further information please refer to:

**MA. LUISA A. AVILA**
BAC Chairperson
Quezon II Electric Cooperative, Inc.
Brgy. Gumian, Infanta, Quezon
Tel. No.: (042) 536-3406
Fax No.: (042) 536-4302
Cellphone No.: 09188073468
E-mail Address : quezelco2_gumian@yahoo.com
Website : www.quezelco2.com

## *Section II. Instructions to Bidders (ITB)*

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## 1. Scope of Bid

1.1. QUEZELCO II will receive Bids for the Supply of Goods and Services for the Acquisition, Installation, Training and Commissioning of Supervisory Control and Data Acquisition (SCADA) of QUEZELCO II described in Section VI hereof (hereinafter referred to as "Terms of Reference").

1.2. The name and identification specific to this bidding are described below.

| Description |
| --- |
| **SUPPLY OF GOODS AND SERVICES**<br><br>- SCADA Design, Engineering, Training, Testing; Commissioning including SCADA Software License (Master Stand-By)<br>- Remote Terminal Unit (RTU)<br>- Digital Input Module (DI)<br>- Digital Output Module (DO)<br>- Analog Input (AI)<br>- SCADA Server<br>- Server (back-up)<br>- Computer Desktop<br>- Data Panel Cabinet (Control Room)<br>- Control Panel<br>- Main Console 55" LED Monitor<br>- Interposing Relays<br>- UPS, Battery (Industrial Type)<br>- Wireless (RF) including three reclosers<br>- Wires & Cables<br>- Accessories<br>- CCTV Systems minimum of 10 cameras with at least 6TB memo |

## 2. Source of Funds

The Approved Budget Cost for the procurement of Supply of Goods and Services for the Acquisition, Installation, Training and Commissioning of Supervisory Control and Data Acquisition of QUEZELCO II shall be sourced from the General Fund of the QUEZELCO II.

## 3. Corrupt Practices

QUEZELCO II as well as bidders, supplier, contractors shall observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy:

(a) The terms are defined as follows:

(i) "corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves and/or those close to them, or induce others to do so, by misusing the position in which they are placed, and it includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; and

(ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of QUEZELCO II, and includes collusive practices among Bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive QUEZELCO II of the benefits of free and open competition.

(b) QUEZELCO II will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the Contract; and will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded Contract funded in whole or part if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing, or in executing.

## 4. Conflict of Interest

4.1 A Bidder shall not have a conflict of interest. All Bidders found to be in conflict of interest shall be disqualified. A Bidder may be considered to have conflicting interests with another Bidder in any of the events described in paragraphs (i) through (iii) below and a general conflict of interest in the circumstances set out in paragraphs (iv) through (vi) below;

(a) A Bidder has controlling shareholders in common with another Bidder; or
(b) A Bidder receives or has received any direct or indirect subsidy from any other Bidder; or
(c) A Bidder has the same legal representative as any other Bidder for purposes of this Bid; or
(d) A Bidder has a relationship directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of QUEZELCO II regarding this bidding process. This will include a firm or an organization who lends, its personnel to firms or organizations which are engaged in services for the preparation related to procurement for or implementation of the project, if the personnel would be involved in any capacity on the same project; or
(e) A Bidder submits more than one bid in this bidding process; or
(f) A Bidder participated as a consultant in the preparation of the design or technical specifications of the Goods and Services that are the subject of the Bid.

4.2 The Bidder shall not be related to the head of QUEZELCO II by consanguinity or affinity up to the third civil degree or any of QUEZELCO II's officers or employees having direct access to information that may substantially affect the result of the bidding, such as, but not limited to, the members of the PBAC, the members of the TWG, the PBAC Secretariat, and the designers of the project. For the purposes of this Clause a bidder will be regarded to comprise of the following persons:

(a) If the bidder is an individual or a sole proprietorship, to the bidder himself;
(b) If the bidder is a partnership, to all its officers and members;
(c) If the bidder is a corporation, to all its officers, directors, and controlling stockholders; and
(d) If the bidder is a joint venture, the provisions of items (a), (b) or (c) of this sub-clause shall correspondingly apply to each of the members of the said joint venture, as may be appropriate.

Failure to comply with the provisions of sub-clause 4.2 will result in the rejection of a bidder's bid.

## 5. Eligible Bidders

5.1 Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Funding Source in accordance with ITB Clause 3

5.2 Bids submitted by a joint venture of two or more firms as partners, shall comply with the following requirements;

(a) the Bid, the Form of Agreement, shall be signed so as to be legally binding on all partners;
(b) one of the partners shall be authorized to be in charge; and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners;
(c) the partner in charge shall be authorized to incur liabilities, receive payments and receive instructions for and on behalf of any or all partners of the joint venture;
(d) all partners of the joint venture shall be jointly and severally liable for adherence to these Instructions to Bidders and performance of the Contract in accordance with the Contract terms, and a relevant statement to this effect shall be included in the authorization mentioned under (b) above as well as in the Bid Form and the Form of Agreement (in case of a successful bid); and
(e) a copy of the agreement entered into by the joint venture partners shall be submitted with the bid.

5.3 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and QUEZELCO II shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

## 6. Eligible GOODS and Services

6.1 Country of origin of goods to be supplied: **America, Australia and Europe**

## 7. Documents Establishing Bidder's Eligibility and Qualification

7.1 The documentary evidence of the Bidder's qualifications to perform the contract if its bid is accepted shall establish to QUEZELCO II's satisfaction:

(a.) that the Bidder has the financial, technical, and production capability necessary to perform the contract

7.2 To establish their eligibility in accordance with this Clause Bidders shall:

(a) complete the eligibility declarations in the Bid Submission Sheet, included in Section VII: Sample Form; and

**(b) if the Bidder is an existing or intended Joint Venture in accordance with ITB Clause 4, submit a copy of the Joint Venture Agreement. The respective document shall be signed by all legally authorized signatories of all the parties to the existing or intended Joint Venture, as appropriate.**

**7.3 The documentary evidence of the Bidder's eligibility to bid shall establish to QUEZELCO II's satisfaction that the Bidder, at the time of submission of its bid, is from an eligible country as defined under ITB Clause 5.**

## 8. Content of the Bidding Documents

8.1. The Bidding Documents consist of Sections I to VII which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB Clause 10.

Section I. Invitation to Apply for Eligibility and to Bid
Section II. Instructions to Bidders
Section III. General Conditions of Contract
Section IV. Special Conditions of Contract
Section V: Schedule of Requirements
Section VI. Terms of Reference
Section VII: Sample Forms

8.2 Bidders should note that QUEZELCO II will only accept bids from SHORTLISTED Bidders that have purchased the Bidding Documents from the office indicated in the Invitation to Apply for Eligibility and Bids.

8.3 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents. Failure to furnish all information or documentation required by the Bidding Documents shall result in the rejection of the Bid.

## 9. Clarification of Bidding Documents

A prospective Bidder requiring any clarification of the Bidding Documents shall contact QUEZELCO II in writing as indicated in the address below.

Ms. Ma. Luisa A. Avila – BAC Chairperson
Quezon II Electric Cooperative, Inc. (QUEZELCO II)
Brgy. Gumian, Infanta, Quezon
Philippines
Tel. No. (042) 536-3406
Fax No. (042) 536-4302
Mobile No. 0918-8073468
E-mail: quezelco2_gumian@yahoo.com.ph
Website: www.quezelco2@yahoo.com

9.1 QUEZELCO II will respond in writing to any request for clarification, provided that such request is received no later than ten (10) calendar days prior to the deadline for submission of Bids. QUEZELCO II shall issue its response no later than seven (7) calendar days before the date of bid opening forwarding copies of its response to all Bidders who have acquired the Bidding Documents directly from it, including a description of the inquiry but without identifying its source. Should QUEZELCO II deem it necessary to amend the Bidding Documents as a result of a clarification, it shall do so following the procedure under ITB Clause 10.

9.2 To clarify and address the Qualified Bidders' questions on the requirements, terms and conditions, and specifications stipulated in the bid documents, a Pre-bid Conference shall be held June 25, 2020 (video conferencing via Zoom) at QUEZELCO II Board Room, 10:00 in the morning. Qualified bidders are encouraged to participate in the pre-bid conference to ensure that they fully understand QUEZELCO II's requirement, however non-attendance of the bidder will in no way prejudice its bid. After the conference, QUEZELCO II will prepare and issue minutes of the meeting including questions raised and answers thereto to all purchasers of bid document.

## 10. Amendment of Bid Documents

10.1 At any time prior to the deadline for submission of the Bids, QUEZELCO II may amend the Bidding Documents by issuing a Bid Bulletin.

10.2 Any Bid Bulletin issued shall be part of the Bidding Documents and shall be communicated on the same day by facsimile in writing to all who have obtained the Bidding Documents directly from QUEZELCO II.

10.3 To give prospective Bidders reasonable time in which to take a Bid Bulletins into account in preparing their Bids, QUEZELCO II may, at its discretion, extend the deadline for the submission of the Bids, pursuant to ITB Sub-Clause 24.

10.4 It shall be the responsibility of all bidders who secure the Bidding Documents to ensure that they are aware of and secure any Bid Bulletins that may be issued.

**11. Language of Bid**

a. The Bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and QUEZELCO II, shall be written in English. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Bid, the English translation shall govern.

**12. Eligibility Check**

12.1 In the receipt and opening of bids the TWO (2) ENVELOPE SYSTEM with the use of the herein attached "**Annex A"** checklist will be used in the evaluation of bids.

Prospective bidders shall submit two envelopes marked as **Envelope 1** and **Envelope 2** which contains the following:

**A. Envelope 1 – contains the eligibility documents with four (4) folders:**

Folder 1 – Legal Documents
Folder 2 – Technical Documents
Folder 3 – Financial Documents
Folder 4 – Class "B" Documents

The submitted documents of each bidders shall be examined and checked to ascertain they are all present using a non-discretionary pass/fail criterion. If a bidder submits the required documents, it shall be rated **"passed"** for that particular requirements. Hence, bids that fail to include any requirements or incomplete or "insufficient" shall be mark as **"failed"** otherwise. The first envelope shall be rated as **"passed".**

**Deadline of Submission of Envelope 1 for eligibility check is on June 19, 2020**

**B. Envelope 2 – Contains bid proposals with two (2) folders showing:**

Folder 1 – Technical Proposal

1. The Bid Security in accordance with ITB Clause 21;
2. Confirming statement of delivery schedule;
3. Confirming statement on warranty being offered
4. Details of Technical specifications;

"Please refer to "SECTION VI TERMS OF REFERENCE"

5. Manpower requirements and qualifications citing education and related

experiences (curriculum vitae of the following: project manager (five (5) years experience), ECE, systems analyst or solution specialist, programmer, IT Technical Support Staff, Trainor)

6. After-sales service/parts;
7. An affidavit of consanguinity as described in ITB 4 and

Folder 2 – Financial Proposal

Bid Price in the prescribed bid form

The second envelope (ENVELOPE 2) of the Bid Proposal of the bidders that were rated failed or ineligible shall no longer be opened and should be returned to the bidders.

12.2 QUEZELCO II's eligibility check will be limited to establishing the presence of the documents listed and will not examine the substance of the documents' contents. Post-qualification of a Quality-Cost-Based Evaluation (QCBE), considers both the Technical and Financial Proposals in the ranking of consultants.

**13. Documents Comprising the Bid, Technical Proposals**

a. The Technical Proposal shall contain the following information "REFER TO SECTION VI TERMS OF REFERENCE (TOR)":

**14. Documents Comprising the Bid, Price Proposal**

14.1 The Price Proposal shall contain the following:

(a) Price Proposal Submission Sheet and the applicable Price Schedules, in accordance with ITB Clauses 17 and 17.2

**15. Bid Submission Technical and Price Proposals**

15.1 The Bidder shall submit the Technical Proposal using the appropriate Submission Sheets furnished in Section VII Sample Forms. These forms must be completed without any alterations to their format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.

15.2 The Bidder shall submit, as part of the Price Proposal, using the forms furnished in Section VII Sample Forms

**16. Alternative Bids**

16.1 The attention of bidders is drawn to the provisions of ITB Clause 31 regarding the rejection of Bids, which are not substantially responsive to the requirement of the Bidding Documents. Alternative Bids will be rejected.

**17. Bid Prices**

17.1 The bidder shall complete the appropriate Price Schedules included herein, stating the total bid cost inclusive of VAT.

17.2 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account. A Bid submitted with an adjustable price quotation shall be treated as non-responsive and shall be rejected, pursuant to ITB Sub Clause 31.

**18. Bid Currencies**

18.1 Prices shall be quoted in the following currencies:

(a) For GOODS and services that the Bidder will supply from within the Philippines, the prices shall be quoted in Philippine Pesos.

(b) For GOODS and services that the Bidder will supply from outside the Philippines, the prices shall be quoted in Philippine Peso

18.2 Payment of the contract price shall be made in Philippine Peso.

**19. Documents Establishing the GOODS' Conformity to the Bidding Documents**

19.1 The documentary evidence of conformity of the GOODS and Services to the Bidding Documents may be in the form of literature, drawings, and data, and shall consist of:

(a) a detailed description of the essential technical and performance characteristics of the GOODS;
(b) a list giving full particulars, including available sources of spare parts, special tools, etc., necessary for the proper and continuing functioning of the GOODS, following commencement of the use of the GOODS by QUEZELCO II; and
(c) an item-by-item commentary on QUEZELCO II Technical Specifications demonstrating substantial responsiveness of the GOODS and Services to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications.

19.2 Standards for workmanship, process, material, and equipment, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, **brand names,** and/or catalogue numbers, provided that it demonstrates, to QUEZELCO II's satisfaction.

**20. Period of Validity of Bids**

20.1 Bids shall remain valid for one hundred twenty (120) days after the bid submission deadline date prescribed by QUEZELCO II. A Bid valid for a shorter period shall be rejected by QUEZELCO II as non-responsive.

20.2 In exceptional circumstances, prior to the expiration of the bid validity period, QUEZELCO II may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. The Bid Security described in ITB Clause 21 should also be extended for a corresponding 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.

**21. Bid Security**

21.1. Pursuant to ITB Clause 13, the Bidder shall furnish, as part of its bid, a bid security in the amount not less than two percent (2%) of the total ABC.

21.2. The Bid Security shall be in a form of cash or cashier's check or manager's check, all from a reputable bank from the Philippines.

21.3. Any bid not accompanied by an acceptable bid security shall be rejected by QUEZELCO II as non-responsive.

21.4. Unsuccessful bidders' bid securities will be discharged or returned as promptly as possible but not later than thirty (30) days after the expiration of the period of bid validity prescribed by QUEZELCO II pursuant to ITB Clause 20.

21.5. The successful Bidder's bid security will be discharged upon the successful Bidder signing the contract, pursuant to ITB Clause 37, and furnishing the performance security, pursuant to ITB Clause 39.

21.6. The bid security may be forfeited:

(a) if a Bidder:

(i) withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form, or
(ii) does not accept the correction of errors pursuant to ITB Sub Clause 31.3; or

(b) in the case of a successful Bidder, if the Bidder fails:

(i) to sign the contract in accordance with ITB Clause 38**;**
(ii) or to furnish performance security in accordance with ITB Clause 39
(iii) For any other reason

**22. Format and Signing of Bid**

22.1 The Bidder shall prepare one original of the Technical Proposal, one original of the Price Proposal and one original Eligibility Documents as described in **ITB Clauses 12,** 13 **and** 14**, and clearly mark each "ORIGINAL - TECHNICAL PROPOSAL", "ORIGINAL – PRICE PROPOSAL" and "ORIGINAL – ELIGIBILITY DOCUMENTS". In addition, the Bidder shall submit one copy of the Technical Proposal, the Price Proposal and the Eligibility Documents, and clearly mark them "COPY - TECHNICAL PROPOSAL", "COPY – PRICE PROPOSAL" and "COPY – ELIGIBILITY DOCUMENTS". In**

**the event of any discrepancy between the original and the copies, the original shall prevail.**

22.2 The original and one copy of the bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the contract. All pages of the bid, except for unamended printed literature, shall be initialed by the person or persons signing the bid.

22.3 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

22.4 The Bidder shall furnish information as described in the Form of Bid on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.

**23. Sealing and Marking of Bid**

23.1 The Bidder shall enclose the original of the Technical Proposal, Price Proposal Eligibility Documents and Bid Document, completely signed on all pages, in one sealed envelope marked "ORIGINAL – BID PROPOSAL. Each copy of the Technical Proposal, Price Proposal, Eligibility Documents and Bid Document, shall be similarly sealed in one envelope marked "COPY – BID PROPOSAL.

23.2 All envelopes shall:

(a) bear the name and address of the Bidder;

(b) be addressed to QUEZELCO II in accordance with ITB Sub-Clause 1

(c) bear the specific identification of this bidding process indicated in the ITB Sub-Clause 1.2. And

(d) bear a warning "DO NOT OPEN BEFORE…" the time and date for the opening of Bids , in accordance with ITB Sub-Clause 24.

23.3 If all envelopes are not sealed and marked as required, QUEZELCO II will assume no responsibility for the misplacement or premature opening of the bid.

**24. Deadline for Submission of Bids**

24.1. Bids must be received by QUEZELCO II via courier on July 8, 2020 before 10:00 o'clock in the morning (official time) at the address below;

QUEZELCO II Main Office,
Brgy. Gumian, Infanta, Quezon

24.2. QUEZELCO II may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents in which case all rights and obligations of **QUEZELCO II** and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

**25. Late Bids**

25.1. Any Bid received by **QUEZELCO II** after the deadline for submission of Bids prescribed by **QUEZELCO II**, will be declared "Late" and shall not be accepted by **QUEZELCO II**.

**26. Modification and Withdrawal of Bids**

26.1 A bidder may modify its bid, provided that this is done before the deadline for the submission and receipt of bids. Where a bidder modifies its bid, it shall not be allowed to retrieve its original bid, but shall only be allowed to send another bid equally sealed, properly identified, linked to its original bid and marked as a "modification," thereof, and stamped "received" by the BAC. Bid modifications received after the applicable deadline shall not be considered and shall be returned to the bidder unopened.

26.2 A bidder may, through a letter, withdraw its bid before the deadline for the receipt of bids. Withdrawal of bids after the applicable deadline shall be subject to appropriate sanctions as prescribed in this IRR. A bidder may also express its intention not to participate in the bidding through a letter which should reach and be stamped received by the BAC before the deadline for the receipt of bids. A bidder that withdraws its bid shall not be permitted to submit another bid, directly or indirectly, for the same contract.

**27. Opening of Bids by QUEZELCO II**

27.1. QUEZELCO II will open bid envelopes **through video conference via zoom on July 8, 2020, exactly 10:00 o'clock in the morning (official time) at QUEZELCO II Main Office, Brgy. Gumian, Infanta, Quezon**.

**28. Process to be Confidential**

28.1. Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to bidders or any other persons not officially concerned with such process.

28.2. Any efforts by a bidder to influence QUEZELCO II processing of Bids or award decisions will result in the rejection of the bidder's Bid. The request for clarification and the response shall be in writing or by fax, but no change in the price or substance of the bid shall be sought, offered or permitted except as required or requested by QUEZELCO II in accordance with ITB Clause 30 or to confirm the correction of arithmetic errors discovered by

QUEZELCO II in the evaluation of the bids in accordance with ITB Sub-Clause 31.3

**29. Contacting QUEZELCO II**

29.1. Subject to ITB Clause 30 no bidder shall contact QUEZELCO II on any matter relating to its Bid, from the time of bid opening to the time the Contract is awarded

29.2. Any effort by a bidder to influence QUEZELCO II in its decision in respect of bid evaluation, bid comparison or Contract award will result in the rejection of the bidder's Bid.

**30. Clarification of Bids**

30.1. To assist in the examination, evaluation and comparison of Bids, QUEZELCO II may, at its discretion, ask the bidder for a clarification of its Bid. All responses to request for clarification shall be in writing, and no change in the price or substance of the Bid shall be sought, offered or permitted.

**31. Preliminary Examination of Bids**

31.1. If a bid is not substantially responsive, it will be rejected by QUEZELCO II and may not subsequently be made responsive by the Bidder by correction of the nonconformity.

31.2. QUEZELCO II will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required securities have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.

31.3. Arithmetical errors will be rectified on the following basis. 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. If there is a discrepancy between the sum of the total price per item and the total amount, the sum of the total price per item shall prevail. If there is a discrepancy between the amount in words and figures, the amount in words will prevail. If an item has no entry in the unit price or total unit price the bidder should enter zero (0) in both the unit and total column, if there is no entry QUEZELCO II will assume the item to be free of charge. If the Supplier does not accept the correction of the errors, its bid will be rejected, and its bid security may be forfeited.

31.4. Prior to the detailed evaluation, pursuant to ITB Clause 32, QUEZELCO II will determine the substantial responsiveness of each bid to the Bidding Documents. For purposes of these Clauses, a substantially responsive bid

is one which conforms to all the terms and conditions of the Bidding Documents without material deviations. Deviations from, or objections or reservations to critical provisions, such as those concerning Bid Security (ITB Clause 21), Applicable Law (GCC Clause 99), and Taxes and Duties (GCC Clause 19) will be deemed to be a material.

31.5. Provided that a bid is substantially responsive, QUEZELCO II may waive any non-conformity or omission in the Bid that does not constitute a material deviation.

**32. Evaluation and Comparison of Bids**

32.1. QUEZELCO II will evaluate and compare the bids which have been determined to be technically compliant and substantially responsive, pursuant to ITB Clause 31.

32.2. To determine the technical compliance and responsiveness of the highest rated Bid. It shall be done in three (3) stages a.)Compliance Pass (eligibility requirements) b.)Technical Responsiveness Pass c.)Financial Pass. Integration of the technical scores with the financial scores to establish the final scores and ranking of the highest Rated Responsive Bid.

*Delivery schedule.*

(i) QUEZELCO II requires that the GOODS and services under the Invitation for Bids shall be delivered (shipped) at the time specified in the Schedule of Requirements or based on their PERT_CPM.

**33. Post Qualification**

33.1. QUEZELCO II will determine to its satisfaction whether the Bidder that is selected as the Quality-Cost-Based Evaluation/ Highest Rated Bid is qualified to perform the contract satisfactorily, in accordance with the criteria. In this case the said Bidder's Bid shall be considered and declared the Quality-Cost-Based Evaluation/ Highest Rated Responsive Bid.

33.2. The determination will take into account the Bidder's financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 13, as well as such other information as QUEZELCO II deems necessary and appropriate. *Option to present/demonstrate the actual system of the winning bidder as proposed to QUEZELCO II TWG and Mgmt for validation of the actual proposal.*

33.3. An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's

bid, in which event QUEZELCO II will proceed to the next lowest calculated responsive bid/ highest rated responsive bid to make a similar determination of that Bidder's capabilities to perform satisfactorily.

**34. QUEZELCO II's Right to Accept Any Bid, and to Reject Any or All Bids**

34.1. QUEZELCO II reserves the right to accept or reject any and/or all Bids, waive any formality therein, declare a Failure of Bidding at any time prior to the contract award, or not award the contract, without thereby incurring any liability, and make no assurance that a contract shall be entered into as a result of the Bidding.

**35. Award Criteria**

35.1. Subject to ITB Clause 33, QUEZELCO II will award the contract to the successful Bidder whose bid has been determined to be the Quality-Cost-Based Evaluation Bid/Highest Rated Responsive Bid.

**36. Notification of Award**

36.1 Prior to the expiration of the period of bid validity, QUEZELCO II will notify the successful Bidder in writing by registered mail or electronically, to be confirmed in writing by registered mail, that its bid has been accepted.

36.2 Upon the successful Bidder's furnishing of the performance security pursuant to ITB Clause 38, QUEZELCO II will promptly notify the name of the winning Bidder to each unsuccessful Bidder and will discharge its bid security, pursuant to ITB Clause 21.

**37. Signing of the Contract**

37.1 At the same time as QUEZELCO II notifies the successful Bidder that its bid has been accepted, QUEZELCO II will send the Bidder the Contract Form provided in the Bidding Documents, incorporating all agreements between the parties.

37.2 Within ten (10) calendar days of receipt of the Contract Form, the successful Bidder shall sign and date the contract and return it to QUEZELCO II.

**38. Performance Security**

38.1 Within a maximum period of twenty one (21) calendar days of the receipt of the notification of contract award from QUEZELCO II and in no case later than the signing of the contract between the successful Bidder and QUEZELCO II, the successful Bidder shall furnish to QUEZELCO II the

performance security in accordance with the Conditions of Contract, and in which case the form acceptable to QUEZELCO II.

38.2 Failure of the successful Bidder to comply with the requirement of ITB Sub-Clause 37.2 or ITB Sub-Clause 38.1 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event QUEZELCO II shall initiate and complete the post qualification of the second Lowest Calculated Bid. The procedure shall be repeated until the Lowest Calculated and Responsive Bid is identified and selected for contract award. However if no bidder passed post qualification, the PBAC shall declare the bidding a failure and conduct a re-bidding with re-advertisement.

**39. Notice to Proceed**

39.1 The Notice to Proceed will constitute the formation of the Contract.

39.2 Within FIVE (5) calendar days of receipt by QUEZELCO II of the signed and notarized contract and the performance security from the Supplier, QUEZELCO II shall issue its Notice to Proceed. The date of the supplier's receipt of the Notice to Proceed will be regarded as the effective date of the contract.

39.3 If the supplier does not receive the Notice to Proceed after 5 calendar days of submission of the signed contract and performance security and QUEZELCO II has not instructed the Supplier to delay the performance of the Contract, the Supplier is to notify QUEZELCO II that it regards the contract as approved and is proceeding accordingly.

# Section III. General Conditions of Contract

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**1. Definitions**

1.1 In this Contract, the following terms shall be interpreted as indicated:

(a) "The Contract" means the agreement entered into between QUEZELCO II and the Supplier, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

(b) "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations.

(c) "The GOODS" means all of the software, hardware and other peripherals and or ground support services which the Supplier is required to supply to QUEZELCO II under the Contract.

(d) "The SERVICES " means those services under Infrastructure Projects, other activities such as design, installation, project management, commissioning, technical assistance, training, other technical services which may be required and other services ancillary to the supply delivery of goods (transportation/insurances and other incidental expenses). Services under the obligations of the Supplier/ Developer covered in this Contract.

(e) "GCC" means the General Conditions of Contract contained in this section.

(f) Highest Rated Bid means the highest rate after computation of numerical ratings of the proposals based on the given proposal.

(g) Highest Rated Responsive Bid means the highest rated bid offer after passing all the criteria and requirements in the post qualification.

(h) "SCC" means the Special Conditions of Contract.

(i) "QUEZELCO II" means the organization purchasing the GOODS, as named in the **SCC.**

(j) "The Supplier" means the individual or firm supplying the GOODS and Services under this Contract and named in the **SCC.**

(k) "The Project Site" means the place or places named in the **SCC**.

(l) "Day" means calendar day.

(m) The “Effective Date” of the contract will be the date of issue of the Notice to Proceed. All performance obligations will be calculated from this date.

**2. Corrupt Practices**

2.1. QUEZELCO II as well as bidders, supplier observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy:

a. The terms are defined as follows:

i. "corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves and/or those close to them, or induce others to do so, by misusing the position in which they are placed, and it includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; and

ii. "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the borrower, and includes collusive practices among Bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the borrower of the benefits of free and open competition.

b. Will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the Contract; and

c. will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded Contract funded by the Funding Source if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Contract funded by the Funding Source.

2.2. Further QUEZELCO II, as appropriate, will seek to impose the maximum civil, administrative and/or criminal penalties available under the applicable law on individuals and organizations deemed to be involved with corrupt or fraudulent practices.

**3. Delivery and Documents**

3.1. Delivery of the GOODS and SERVICES shall be made by the Supplier in accordance with the terms specified in the Schedule of Requirements. The

details of shipping and/or other documents to be furnished by the Supplier pursuant to Clause 2 are specified in the **SCC**.

**4. Contract Amendment**

4.1. Subject to GCC Sub Clause 4.2 and 4.3 no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

4.2. QUEZELCO II may at any time, by a written order given to the Supplier, make changes within the general scope of the Contract in any one or more of the following:

a) drawings, designs, or specifications, where GOODS to be furnished under the Contract are to be specifically manufactured for QUEZELCO II;
b) the place of delivery; and/or
c) the Services to be provided by the Supplier

4.3. If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier under this clause must be asserted within thirty (30) days from the date of the Supplier receipt of QUEZELCO II's contract amendment.

**5. Governing Language**

5.1. The Contract shall be written in the English language, the English version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in English.

**6. Joint Venture, Consortium or Association**

6.1. If the Supplier is a joint venture, consortium, or association, all of the parties shall be jointly and severally liable to QUEZELCO II for the fulfillment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of QUEZELCO II.

## 7. Eligibility

7.1. All GOODS to be supplied under the Contract shall have their origin in Eligible Countries as defined in the **SCC**. For the purpose of this Clause, origin means the country where the GOODS have been grown, mined, cultivated, produced, manufactured, or processed; or through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its imported components.

## 8. Notices

8.1. A notice shall be effective when delivered or on the notice's effective date, whichever is later.

8.2. The address for notices is specified in the **SCC**.

## 9. Governing Law

9.1. The Contract shall be interpreted in accordance with the laws of the Philippines.

## 10. Settlement of Disputes

10.1. If any dispute or difference of any kind whatsoever shall arise between QUEZELCO II and the Supplier in connection with or arising out of the Contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.

10.2. If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either QUEZELCO II or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.

10.3. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the GOODS and Services under the Contract.

10.4. Arbitration proceedings shall be conducted in accordance with the rules of procedure specified in the **SCC.**

10.5. Notwithstanding any reference to arbitration herein,

a. the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
b. QUEZELCO II shall pay the Supplier any monies due the Supplier.

**11. Scope of Supply**

11.1. The Scope of Supply shall include all such items not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Delivery and Completion of the GOODS and Related Services as if such items were expressly mentioned in the Contract.

**12. Incidental Services**

12.1. The Supplier may be required to provide any or all of the following services, including additional services:

(a) performance or supervision of on-site and/or start-up, installation of the supplied GOODS;

(b) acquisition and customization of software applications under this contract.

(c) furnishing of tools required for assembly and/or maintenance of the supplied GOODS;

(d) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied GOODS;

(e) performance or supervision or maintenance and/or repair of the supplied GOODS, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and

(f) training of QUEZELCO II's personnel, on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied GOODS.

(g) Project Management on the over-all services involved

**13. Delays in the Supplier Performance**

13.1 Delivery of the GOODS and performance of Services shall be made by the Supplier in accordance with the time schedule prescribed by QUEZELCO II in the Schedule of Requirements.

13.2 If at any time during performance of the Contract, the Supplier should encounter conditions impeding timely delivery of the GOODS and performance of Services, the Supplier shall promptly notify QUEZELCO II in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier notice, QUEZELCO II shall evaluate the situation and may at its discretion extend the Supplier time for performance, with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of Contract.

13.3 Except as provided under GCC Clause 32, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 14, unless an extension of time is agreed upon pursuant to GCC Clause 4 without the application of liquidated damages.

**14. Liquidated Damages**

14.1 All contracts executed in accordance with the Act and this IRR shall contain a provision on liquidated damages which shall be payable by the contractor in case of breach thereof. For the procurement of Goods, Infrastructure Projects and Services, the amount of the liquidated damages shall be at least equal to one-tenth of one percent (0.001) of the cost of the unperformed portion for every day of delay. Once the cumulative amount of liquidated damages reaches ten percent (10%) of the amount of the contract, the Procuring Entity may rescind or terminate the contract, without prejudice to other courses of action and remedies available under the circumstances.

**15. QUEZELCO II's Responsibilities**

15.1 Whenever the supply of GOODS and Related Services requires that the Supplier obtain permits, approvals, and import and other licenses from local public authorities, QUEZELCO II shall, if so required by the Supplier, make its best effort to assist the Supplier in complying with such requirements in a timely and expeditious manner.

15.2 QUEZELCO II shall pay all costs involved in the performance of its responsibilities.

**16. Prices**

16.1 Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any change in price resulting from a Change Order issued in accordance with GCC Clause 4.

**17. Payment**

17.1 PROGRESS BILLING

a) *15% mobilization upon issuance of notice to proceed*
b) *35% progress billing upon sixty percent (60%) completion of the project*
c) *30% progress billing upon ninety percent (90%) completion of the project*
d) *10% balance will be given upon completion of the following:*
    *d.1. Contractor's 100% Completion Report*
    *d.2. Contractor's Commissioning and functional test report*
    *d.3. Inspection and audit Report by QUEZELCO II.*
e) *The remaining 10% will serve as retention money to be returned after one year of EC's acceptance of the completed project.*

17.2 The Supplier request(s) for payment shall be made to QUEZELCO II in writing, accompanied by an invoice describing, as appropriate, the GOODS delivered and Services performed, and by documents submitted pursuant to GCC Clause 3, and upon fulfillment of other obligations stipulated in the Contract.

17.3 Pursuant to GCC Clause 17.2, payments for each phase shall be made promptly by QUEZELCO II, but in no case later than sixty (60) days after submission of an invoice or claim by the Supplier.

17.4 The currency or currencies in which payment is made to the Supplier under this Contract shall be specified in the **SCC** subject to the following general principle: payment will be made in the currency or currencies in which the payment has been requested in the Supplier bid.

**18. Taxes and Duties**

18.1 The Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed up to the delivery of the GOODS to QUEZELCO II. However, the duty and tax exemption on importation of foreign goods under section 39 (a) of Presidential Decree No. 269 to NEA-registered electric cooperatives shall be availed.

**19. Performance Security**

19.1 Within Five (5) calendar days of receipt of the notification of Contract Award from QUEZELCO II but in no case later than the signing of the contract by both parties, the successful Bidder shall furnish to QUEZELCO II the performance security in the amount of five (5) percent of the Contract Price to be valid thirty (30) days beyond the expected arrival of the GOODS at their final destination indicated in the Schedule of Requirement.

19.2 The proceeds of the performance security shall be payable to QUEZELCO II as compensation for any loss resulting from the Supplier failure to complete its obligations under the Contract.

19.3 The performance security shall be denominated in the currency of the Contract, or in a freely convertible currency acceptable to QUEZELCO II and shall be in a form of cash, letter of credit, a cashier's or manager's check.

19.4 If the contractor decides to provide the performance security either in a form of cashier's check (CC), manager's check (MC) or letter of credit (LC) the amount shall be equivalent to five percent (5%) of Contract Price for each phase provided the sum of which is equivalent to five percent (5%) of the Total Contact Price.

19.5 The equivalent amount of performance security will be discharged by QUEZELCO II and returned to the Supplier not later than thirty (30) days following the date of completion for each phase of the Supplier's performance obligations under the Contract and the issuance of certification to that effect by QUEZELCO II, including any warranty obligations, unless otherwise specified in the **SCC**.

**20. Use of Contract Documents and Information**

20.1 The Supplier shall not, except for the purposes of performing the contract, without QUEZELCO II's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of QUEZELCO II. Any such disclosure shall be made in confidence and shall extend only in so far as may be necessary for purposes of such performance.

20.2 Any document, other than the Contract itself, enumerated in GCC Sub Clause 20 shall remain the property of QUEZELCO II and shall be returned (all copies) to QUEZELCO II on completion of the Supplier performance under the Contract if so required by QUEZELCO II.

**21. Standards**

21.1 The GOODS supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standards appropriate to the GOODS' country of origin. Such standards shall be the latest issued by the concerned institution.

**22. Insurance**

22.1 The GOODS supplied under the Contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery in the manner specified in the **SCC**.

**23. Transportation**

23.1 Where the Supplier is required under Contract to deliver the GOODS CIF or CIP, transport of the GOODS to the port of destination or such other named place of destination in the Philippines, as shall be specified in the Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.

23.2 Where the Supplier is required under the Contract to transport the GOODS to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in the Contract, shall be arranged by the Supplier, and related costs shall be included in the Contract Price.

23.3 Where the Supplier is required under Contract to deliver the GOODS CIF or CIP, no restriction shall be placed on the choice of carrier.

**24. Inspection and Tests**

24.1 QUEZELCO II or its representative shall have the right to inspect and/or to test the GOODS to confirm their conformity to the Contract specifications at no extra cost to QUEZELCO II**.**

24.2 The inspections and tests shall be conducted on the premises of QUEZELCO II, and/or at the GOODS' final destination.

24.3 QUEZELCO II may require the Supplier to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the GOODS comply with the technical specifications, codes and standards under the Contract, all costs and expenses incurred in the carrying out of such test and/or inspection shall be shouldered by the Supplier. Further, if such test and/or inspection impedes the progress of manufacturing and/or the Supplier performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.

24.4 The Supplier shall provide QUEZELCO II with a report of the results of any such test and/or inspection.

24.5 QUEZELCO II may reject any GOODS and Services or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected GOODS or parts thereof or make alterations necessary to meet the specifications at no cost to QUEZELCO II, and shall repeat the test and/or inspection, at no cost to QUEZELCO II, upon giving a notice pursuant to GCC Sub-Clause 8.

24.6 The Supplier agrees that neither the execution of a test and/or inspection of the GOODS or any part thereof, nor the attendance by QUEZELCO II or its representative, nor the issue of any report pursuant to GCC Sub-Clause 24.4, shall release the Supplier from any warranties or other obligations under the Contract.

**25. Warranty**

25.1 The Supplier warrants that the GOODS supplied under the Contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

25.2 The Supplier further warrants that all GOODS and Services supplied under this Contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by QUEZELCO II's specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied GOODS in the conditions prevailing in the country of final destination

25.3 For the procurement of Goods, in order to assure that manufacturing defects shall be corrected by the supplier, a warranty security shall be required from the contract awardee for a minimum period of three (3) months, in the case of Expendable Supplies, or a minimum period of one (1) year, in the case of Non-expendable Supplies, after acceptance by the Procuring Entity of the delivered supplies.

The obligation for the warranty shall be covered by either retention money in an amount equivalent to at least one percent (1%) of every progress payment, or a special bank guarantee equivalent to at least one percent (1%) of the total contract price. The said amounts shall only be released after the lapse of the warranty period or, in the case of Expendable Supplies, after consumption thereof: Provided, however, that the supplies delivered are free from patent and latent defects and all the conditions imposed under the contract have been fully met.

25.4 QUEZELCO II shall promptly notify the Supplier in writing of any claims arising under this warranty.

25.5 Upon receipt of such notice, the Supplier shall, within the period specified in the **SCC** and with all reasonable speed, repair or replace the defective GOODS or parts thereof, without costs to QUEZELCO II other than, where applicable, the cost of inland delivery of the repaired or replaced GOODS or parts from EXW or the port or place of entry to the final destination.

25.6 If the Supplier, having been notified, fails to remedy the defect(s) within the period specified in the **SCC**, QUEZELCO II may proceed to take such remedial action as may be necessary, at the Supplier risk and expense and without prejudice to any other rights which QUEZELCO II may have against the Supplier under the Contract and under the applicable law.

**26. Patent Rights**

26.1 The Supplier shall indemnify QUEZELCO II free and harmless against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the GOODS or any part thereof in the Philippines.

**27. Limitation of Liability**

27.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 29.1,

i. the Supplier shall not be liable to QUEZELCO II, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to QUEZELCO II, and

ii. the aggregate liability of the Supplier to QUEZELCO II, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

**28. Termination for Default**

28.1 QUEZELCO II, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate this Contract in whole or in part:

(a) if the Supplier fails to deliver any or all of the GOODS within the period(s) specified in the Contract, or within any extension thereof granted by QUEZELCO II pursuant to GCC Clause 4; or

(b) if the Supplier fails to perform any other obligation(s) under the Contract.

(c) if the Supplier, in the judgment of QUEZELCO II, has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

28.2 For the purpose of this clause:

(a) “corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

(b) fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition.

28.3 In the event QUEZELCO II terminates the Contract in whole or in part, pursuant to GCC Clause 31, QUEZELCO II may procure, upon such terms and in such manner as it deems appropriate, GOODS or Services similar to those undelivered, and the Supplier shall be liable to QUEZELCO II for any excess costs for such similar GOODS or Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

**29. Termination for Insolvency**

29.1 The Procuring Entity shall terminate the contract if the Supplier/Consultant is declared bankrupt or insolvent as determined with finality by a court of competent jurisdiction. In this event, termination will be without compensation to the Supplier/Consultant, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Procuring Entity and/or the Supplier/Consultant.

29.2 Quality-Cost-Based Evaluation Procedure (QCBE) shall be applied to determine the highest rated bid.

**30. Termination for Convenience**

30.1 The Procuring Entity may terminate the Contract, in whole or in part, at any time for its convenience. The Head of the Procuring Entity may terminate a contract for the convenience of the Government if he has determined the existence of conditions that make Project Implementation economically, financially or technically impractical and/or unnecessary, such as, but not limited to, fortuitous event(s) or changes in law and national government policies.

## 31. Assignment

31.1 The Supplier shall not assign, in whole or in part, this Contract, nor and rights or obligations under this Contract, except with QUEZELCO II's prior written consent.

## 32. Force Majeure

32.1 The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

32.2 For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of QUEZELCO II in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

32.3 If a Force Majeure situation arises, the Supplier shall promptly notify QUEZELCO II in writing of such condition and the cause thereof. Unless otherwise directed by QUEZELCO II in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

## 33. Application

33.1 These General Conditions shall apply to the extent that they are not superseded by provisions of other parts of the Contract.

# *Section IV. Special Conditions of Contract (SCC)*

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## SCC 1. Definitions (GCC Clause 1)

**GCC 1.1 (j) The Supplier is** *to be inserted at time of contract award*

**GCC 1.1 (j) The Project Site is:**

QUEZELCO II Main Office/Comon Substation, Brgy. Comon, Infanta, Quezon (Three control locations – Brgy. Ingas, Tongohin, Infanta, Quezon and Brgy. Anoling, Gen. Nakar, Quezon)

## SCC 2. Delivery and Documents (GCC Clause 3)

**GCC** 3.1

The delivery terms applicable to the Contract are delivered to QUEZELCO II Main Office, Bgry. Gumian, Infanta, Quezon, Philippines

**GCC 3.1**

For good supplied from within the Philippines and or by domestic Supplier:

Upon delivery of the GOODS to the Project Site, the Supplier shall notify QUEZELCO II and present the following documents to QUEZELCO II:

i.) Original and four copies of the Supplier invoice showing GOODS' description, quantity, unit price, and total amount;
ii.) Original and four copies delivery receipt;
iii.) Original and four copies of the Manufacturer's and/or Supplier warranty certificate;
iv.) Delivery receipt detailing number and description of items received signed by the authorized receiving personnel;
v.) Certificate of Acceptance/Inspection Report signed by QUEZELCO II's representative at the Project Site;

For the purposes of this Clause QUEZELCO II's representatives at the Project Site are the Project Technical Group:

Yvette S. Astrera – Vice Chairperson BAC
Evangeline M. Sollestre – Audit Manager
Engr. Vincent Villaruel – Member TWG
Prudencio M. Rutagines – SCADA Engineer/Member BAC
Engr.Vic James B.Yabes – IT Officer

## SCC 3. Notices (GCC Clause 8)

**GCC** 8.1

**QUEZELCO II's Address for Notices is:**

Quezon II Electric Cooperative, Inc. (QUEZELCO II)
Ma. Luisa A. Avila – BAC Chairperson
Brgy. Gumian, Infanta, Quezon Philippines
Tel. No.: 042-536-3406
Fax No.: 042-536-4302
Mobile Number: 0918-8073468
Email Address: quezelco2_gumian@yahoo.com
Website : www.quezelco2.com.ph

**The Supplier Address for Notices is:**

*Insert address including, name of contact, fax and telephone number*

## SCC 4. Settlement of Disputes (GCC Clause 10)

**GCC 10.4**

In the case of a dispute between QUEZELCO II and the Supplier, the dispute shall be referred to adjudication or arbitration in accordance with Republic Act 876 ("Arbitration Law") of the Philippines.

## SCC 5. Liquidated Damages (GCC Clause 15)

**GCC** 15.1

The applicable rate is one tenth (1/10) of a percent per day of delay.

## SCC 6. Payment (GCC Clause 17)

**GCC** 17.1

For good supplied from within the Philippines and or by domestic Supplier:

PROGRESS BILLING

a) *15% mobilization upon issuance of notice to proceed*
b) *35% progress billing upon sixty percent (60%) completion of the project*
c) *30% progress billing upon ninety percent (90%) completion of the project*
d) *10% balance will be given upon completion of the following:*
    *d.1. Contractor's 100% Completion Report*
    *d.2. Contractor's Commissioning and functional test report*
    *d.3. Inspection and audit Report by QUEZELCO II.*
e) *The remaining 10% will serve as retention money to be returned after one year of EC's acceptance of the completed project.*

**GCC 17.4**

The currency of payment shall be Philippine Peso.

## SCC 7. Insurance (GCC Clause 22)

**GCC** 22.1

The Supplier is liable for the GOODS until acceptance at the Project Site.

## SCC 8. Warranty (GCC Clause 25)

**GCC** 25.3

The warranty period shall be one (1) year from date of acceptance of the hardware requirements and software requirements based on conditions of the license.

**GCC 25.5 & 25.6**

Any errors/defects identified during the warranty period must be corrected within 15 days.

# *Section V: Schedule of Requirements*

The delivery schedule expressed as days stipulates hereafter a delivery date which is the date of delivery to the project site.

| Description | Quantity |
|---|---|
| - SCADA Design; Engineering; Training; Testing; Commissioning including SCADA Software License (Master Stand-By) | 1 Lot |
| - Remote Terminal Unit (RTU | 1 Set |
| - Digital Input Module (DI) | 1 Set |
| - Digital Output Module (DO) | 1 Set |
| - Analog Input (AI) | 1 Set |
| - SCADA Server | 1 Set |
| - Server (back-up) | 1 Set |
| - Computer Desktop | 3 Sets |
| - Data Panel Cabinet (Control Room) | 1 Set |
| - Control Panel | 1 Set |
| - Main Console 55” LED Monitor | 2 units |
| - Interposing Relays | 1 Set |
| - UPS, Battery (Industrial Type) | 1 Set |
| - Wireless (RF) including three reclosers | 1 Set |
| - Wires & Cables | 1 Set |
| - Accessories | 1 Set |
| - CCTV Systems minimum of 10 cameras with at least 6TB memo | 1 Set |
| | |

# *Section VI: Terms of Reference (TOR)*

## 1. Introduction

### 1.1. General Overview

1.1.1. This document describes the requirements for a new Supervisory Control and Data Acquisition (SCADA) system for this new system shall be installed at Quezon II Electric Cooperative, Inc.

1.1.2. All exceptions and/or clarifications shall be indicated in a Table of Compliance and shall be reference to the specific paragraph of this specification.

### 1.2. Standards

1.2.1 IEEE Std C37.1-1994, IEEE Standard Definition, Specification, and Analysis of Systems Used for Supervisory Control, Data Acquisition, and Automatic Control

1.2.2 North American Electric Reliability Corporation (NERC), Critical Infrastructure Protection (CIP)

1.2.3 MultiSpeak Version 3.0

### 1.3. Organization of Proposal

Prospective bidders shall follow the following proposal format:

1.3.1. SECTION 1 – SCADA SPECS MATRIX SUMMARY. This section shall demonstrate an understanding of the task at hand and include a narrative describing the proposed solution.

1.3.2. SECTION 2 – TECHNICAL PROPOSAL. This section shall detail the proposed project implementation, architecture, table of compliance, project schedule, training plan, and maintenance plan.

1.3.3. SECTION 3 – TECHNICAL DESCRIPTION. This section shall describe the base SCADA software and all proposed applications.

1.3.4. SECTION 4 – COMMERCIAL PROPOSAL. This section shall include the price list, terms and conditions, list of deliverables, software product license, and payment schedule.

1.3.5 SECTION 5 – QUALIFICATIONS. This section shall detail the Bidders qualifications for the project, including: quality control program, case studies, installed systems/projects, customer testimonials/satisfactions.

### 1.4. Vendor Requirements

The Vendor shall be able to fulfill the following qualification requirements:

1.4.1. Vendor shall state the number of years of experience in the design and manufacture of systems of the type specified. (Minimum of five (5) years).

1.4.2. Vendor shall be ISO 9001:2000 certified. A copy of certification shall be provided with vendor's proposal.

1.4.3. Vendor shall provide customer reference projects with a similar configuration and functionality to the system proposed. The list of reference projects shall include at least the following information: customer name, contact name and phone number.

1.4.4. Vendor shall provide support services with a 24/7 availability.

1.4.5. Vendor shall state whether there are any anticipated changes in ownership or major corporate policy changes in the next 12 months.

1.4.6. Vendor shall state whether there are or there have been any legal claims or litigation actions against him regarding the performance of projects.

1.4.7. Vendor shall provide documentation with their proposal that demonstrates that their personnel having unescorted physical access to the SCADA system have an appropriate level of personnel risk assessment, training, and security awareness in accordance with NERC CIP-004-001.

### 1.5. Vendor's Responsibilities

The Vendor shall be responsible for the following:

1.5.1. Design, assemble, manufacture, factory test, deliver, install and commission a complete, new SCADA system according to the present specifications.

1.5.2. Provide training courses at the Vendor's or Purchaser's facilities.

1.5.3. Provide on-site supervision of installation and commissioning of the system.

1.5.4. Provide technical support and assistance during the commercial operation of the system.

### 1.6. Purchaser's Responsibilities

The Purchaser shall be responsible for the following:

1.6.1 Provide air conditioned environment in the control room.

1.6.1.1 Provide power sources and communication wiring to the equipment locations.

1.6.1.2P rovide a project person for the coordination of all project activities with Vendor's project manager.

## 2. System Configuration

### 2.1 SCADA Master Station

2.1.1 **Dual Redundant Master Station** The master station consist of a redundant configuration with dual host computers (SCADA servers), with separate operator workstations (SCADA clients), and terminal servers, all interconnected by a high-speed local area network (LAN). The network supports the TCP/IP protocol which will be used by the SCADA system for all network communications. The active host computer maintains the standby computer in a fully synchronized state via the network. In the event of a failure of the active machine, the standby computer will automatically assume control of all peripherals and communication lines with no action required from the system operator.

2.1.2 It must be ISO 9001:2008 Certified (Quality Management System)

2.1.3 The SCADA System is design for Distribution Utilities with proven track records in foreign countries and in the Philippines.

2.1.4 The SCADA System has proven track records in the Distribution Utilities in the Philippines for five years or more.

2.1.5 It must have a **One Family of Software including OMS/DMS** installed and successfully commissioned for Distribution Utilities reference & future expansion. Third party Software is not allowed. A showcase of installed/commissioned SCADA system are ready for visitation for reference.

## 2.2 Configuration

2.2.1 The host server(s) and all workstations consist of standard PC architecture machines utilizing Intel or equivalent processors.

2.2.2 The SCADA host software and the operator interface software shall run directly in the operating system's own windowing environment. X-Windows sessions or other emulations are not acceptable.

2.2.3 For communication with serial-data peripheral equipment, commonly available terminal servers will be provided to off-load serial communication processing from the host computers.

## 2.3 Communication

2.3.1 The SCADA system supports the protocols used by the purchaser's existing and/or proposed RTUs. In addition, the system will have the following open protocols as options:

DNP3.0 Level 2 (serial and TCP/IP)
MODBUS RTU/TCP
IEC 61850 (optional)

2.3.2 The above protocols must be run in native mode, i.e. there will be no need for an external protocol converter (hardware unit) or internal converter (third party software driver), nor will there be any need for any kind of front-end processor.

2.3.3 The master station database editor allows the user to define key parameters for each communication line: baud rate, time allowed for an RTU to respond, the number of retries, accumulator poll interval, interval between scans, and protocol-specific configuration parameters. The communication software maintains communication statistics for each RTU. These statistics will be available as database points so that they can be incorporated in user-defined displays, reports, and alarms.

## 2.4 System Sizing

2.4.1 The system software will be capable of accommodating all QUEZELCO II distribution network components in its database quantity of status and control points, analog input points, text points, communication lines, RTUs, IEDs, reports, graphic symbols. No software upgrades or additional licenses will be required to increase the number of aforementioned items to be integrated into the system.

2.4.2 The size of the World Coordinate system map will be up to a minimum of 1 billion x 1 billion drawing units.

2.4.3 The system will be able to fully process a continuous alarm throughput of 100 alarms per second for at least 60 seconds. Both the World Coordinate map and the displays on all workstations shall be updated and responsive to controls throughout the alarm burst.

2.4.4 The system software must provide documentation of 99.98% system availability in accordance with IEEE Std C37.1-1994.

# 3 System Hardware

## 3.1 Hardware Platform

3.1.1 The hardware platform encompasses all of the physical hardware devices utilized by the SCADA system including host servers, operator workstations (local and remote), storage devices, communication interfaces, printers, GUI devices (LCD Flat Panels) and LANs to which all the hardware devices shall connect.

3.1.2 The system will be implemented with industry standard general purpose devices and interfaces. The proposed hardware devices shall be available from at least two different commercial sources (brands) on the market.

3.1.3 All materials and equipment furnished for permanent installation in the work conforms to applicable standard specifications and shall be new, unused, and undamaged.

## 3.2 Host Servers

3.2.1 The system supplier will provide the Master Station server hardware and peripherals built by a leading computer industry manufacturer. The servers will be wholly designed, manufactured, warrantied, and assembled by the computer manufacturer. Composite component computer frames assembled with multi-vendor cards by second source manufacturers will not be accepted.

3.2.2 The host servers run the latest Microsoft Windows Server 2012 64-bit operating system (OS). Other OS such as UNIX, Linux, OS2, and VMS will not be considered.

3.2.3 The host servers shall utilize Gigabit Ethernet network interface cards (NIC).

3.2.4 The host servers and associated communication equipment will be delivered rack-mounted in cabinets with perforated walls for easy ventilation.

3.2.5 The Vendor will provide an option for running the SCADA server application on a VMware platform.

3.2.6 The Vendor will provide at least three (3) customer references where the SCADA server application is running on a VMware platform.

## 3.3 Workstation Consoles

3.3.1 The system supplier shall provide workstation console hardware and peripherals built by a leading computer industry manufacturer. The computer manufacturer shall be the same as for the host servers.

3.3.2 The workstations shall run the latest version Microsoft Windows 10 64-bit operating system.

3.3.3 The workstation consoles shall utilize Gigabit Ethernet network interface cards (NIC).

3.3.4 The system shall be able to support any number of workstation consoles without any need for upgrading the system hardware and software.

# 4 System Functional Requirements

**4.1 The SCADA Software must be *ONE Family of System Software*.**

(MUST BE A FAMILY OF ONE SCADA SYSTEM SOFTWARE, THIRD-PARTY or OTHER SOFTWARE IS NOT ALLOWED)

Features & Details but not limited to the following:

- SOFTWARE:
  SCADA SERVER MANAGER
  SCADA EXPLORER
  SMARTVIEW

- NO OF POINTS:
  Min. 10,000.00 to 100,000

- FEATURES:
  MASTER & STANDBY
  EVENT DATA RECORDING
  COMMAND SEQUENCE
  IED WIZARD
  REPLICATOR –
  CONTROL PANEL
  ADD-ON EXCEL

- PROTOCOL:
  DNP 3
  MODBUS
  SNMP

- *OMS* ***(For Future Expansion)***
  CIS INTERFACE
  CUSTOMER OUTAGE PORTAL/CALL HANDLER
  AVL
  CONNECTIVITY IMPORT GIS
  WEB-SURV
  AMR

- *DMS – FLISR* ***(For Future Expansion)***
  GAURANTEES
  SWITCH ORDER

  2 SUBSTATION: RTU PANEL / RTU / HARDWARE / ACCESSORIES
  COMMUNICATION: FIBER / WIRELESS

## 4.2 Data Acquisition

4.2.1 Monitor analog values such as Volts, Amps, Watts, Power Quality and VARs at each substation. Convert these values to a digital format. Transmit changed values back to the Master Station. Convert these values into engineering units. Display these values on single line diagrams and

provide alarm limit checking. Provide historical storage at user definable interval and retention periods.

4.2.2 The SCADA system shall be capable of providing health monitoring of the host server, Ethernet switch, and terminal servers by means of SNMP, and the health monitoring points integrated into the SCADA database and accessible by the world map.

4.2.3 The system shall accumulate kilowatt-hour pulses from pulse initiators at each substation. Provide a freeze of counts by RTU on a user definable interval. Transmit the counts back to the Master Station. Convert the counts into interval and hourly deltas.

## 4.3 Supervisory Control

4.3.1 The system shall utilize a Select Before Operate (SBO) procedure that is fully compliant with IEEE Std C37-.1-1994, 7.4.1 Operations Security Features.

4.3.2 The system shall require secure handshaking with the RTU before any controls are executed. In such cases, control of a point requires the following exchange of messages:

- Master to RTU - control point selection
- RTU to Master - point address check back
- Master to RTU - control execution
- RTU to Master - execute acknowledge

4.3.3 If the scan task does not receive proper acknowledgement of either the select request or the execute command, a check back failure alarm should be raised. If the acknowledgements are correct, but the expected status change does not occur within the point's control response timeout, a control failure alarm should be raised. An optional multiple status change validation feature should be available to handle cases where a control causes multiple status changes to occur.

## 4.4 Communication

4.4.1 The software subsystem for the proposed protocols shall implement all features of the RTUs and IEDs that are required by the purchaser. As a minimum, the following functions shall be included:

4.4.1.1 Rapid polling of RTUs for exceptions

4.4.1.2 Select Before Operate control execution

4.4.1.3 Variable control durations for momentary controls

4.4.1.4 Detect and report multiple changes of state between poll cycles, if the RTU does not buffer changes but instead reports a "multiple change detect" bit

4.4.1.5 Automatic interleaving of multiple priority messages, e.g. automatic "fast scan" after a control and "error scan" after a communication error

4.4.1.6 Scheduled accumulator freezes and polls

4.4.1.7 Scheduled integrity (general interrogation) polls

4.4.1.8 Time synchronization of the RTUs

4.4.1.9 Sequence of events data uploading and processing

4.4.2 When a user-definable error retry count expires for an RTU, the system shall declare the RTU failed by means of a status point and an accompanying alarm. On RTU failure, the system shall mark all

points that are telemetered by the RTU as “telemetry failed”. For each point, this telemetry failed quality code shall not clear until a value is subsequently received from the point.

4.4.3 The user shall be able to define alternate communication ports (or IP addresses) that can be used to reach the RTUs. On a series of communication errors with an RTU, the system shall switch ports after a user-definable port retry count expires. A separate port status point for each RTU shall be maintained to indicate which port is currently being used to poll each RTU. If the communication line is looped, it shall be possible to determine between which two RTUs a break exists by examining the values of the port status points.

4.4.4 For each RTU, the system shall maintain communication statistics in the form of analog points that may be viewed on displays, printed in reports, or stored in historical data files. Such statistics shall include percentage of successful communication, number of timeouts and number of security errors.

## 4.5 Data Processing

4.5.1 The system shall provide support for multiple status changes that result from control commands. For each control point, it shall be possible to specify a list of up to 30 status points that may change as a result of a command. If not all the expected transitions occur within the control point response time-out, the system shall generate an alarm for the control point as well as an additional alarm for each associated point that did not undergo the expected transitions.

4.5.2 The system shall scan every analog input in the RTUs at predefined scanning intervals. Any failure to complete a scan shall be marked with a data quality flag. Also the system shall scan each analog input every second and compare that input to the previously reported input. When the difference between these values exceeds its reporting band, the analog value shall be reported (report-by-exception).

4.5.3 The system shall be capable of checking the analog values for at least three sets of limits: warning, emergency and reasonability. Each of these three sets of limits shall be provided with an upper limit, a lower limit and a dead band.

4.5.4 To allow the removal of noise readings around the zero mark of the engineering scale, a range of engineering values inside the point value range shall be specified which shall clamp the input value to zero. For example, if the zero clamp dead band is 3.0, any input value which is converted to between +3.0 and -3.0 engineering units will be clamped to zero.

4.5.5 The system shall provide a rate-of-change for analog input values by computing the difference between the new and previous value and dividing this by the difference between the current time and the time the point was last updated. The rate-of-change shall be checked against the limits for rate-of-change.

4.5.6 The system shall be able to process accumulators received from the RTUs. The system shall send a command to freeze the accumulators either to all RTUs or to selected RTUs. However, this freeze command shall not reset the accumulators in the individual RTUs. Upon receiving the accumulator readings at the master station, the system shall automatically calculate the difference from the last reading. The system shall retrieve the hourly accumulators every hour from the RTUs and shall convert them to engineering units. The system shall also be able to retrieve accumulators at user-definable intervals from 15 to 30 minute intervals.

## 4.6 Authentication and Access-Control

4.6.1 The system shall have the ability to temporarily disable a user account without deleting it.

4.6.2 The system shall have the ability to deny remote access for a user account.

4.6.3 User account passwords shall be a minimum 128-bit encrypted and neither stored nor transmitted in plaintext. The system shall allow for selection of password length greater than twelve (12) characters, and have password complexity settings for inclusion of alpha, numeric, and mixed case character requirements in the password. The system shall allow the password frequency of change to be set to 1, 30, 90, 180, or 365 days. It shall also allow setting the password to never expire.

4.6.4 The system shall allow a settable number of failed login attempts by an account, and a blocked timeout period of time to block the user login if the number of failed login attempts is exceeded.

4.6.5 The system shall allow for an inactivity timeout setting to be enabled, whereas after a settable amount of time of inactivity the account is logged out.

4.6.6 Account activity logging shall be configurable for login success and failures. The logging mechanisms shall be configurable for the remote Syslog protocol.

## 4.7 User Rights

4.7.1 Each user account shall be assigned a set of user rights that determines the actions that the user may take. This shall provide individual control over various operating and editing functions. These user rights shall include the ability to: acknowledge, block, unblock, and silence alarms; edit database, maps, reports, analog limits, and notes; manual set, control, and tag/un-tag points.

4.7.2 The proposed system shall be able to handle an unlimited number of user accounts with their corresponding user rights and privileges.

## 4.8 Areas of Responsibility

4.8.1 The SCADA software shall be able to be partitioned into 128 areas (or zones) of responsibility. The user shall have the ability to assign any combination of the 128 zones to each database point (telemetered or calculated) and/or to each login account.

4.8.2 The user shall be able to create any number of zone groups containing various combinations of the 128 zones and to give each zone group a name.

4.8.3 An operator shall be able to manipulate only those points whose zones overlap those of his login account.

## 4.9 Tag Management

4.9.1 The system shall allow operators to inhibit control of devices by means of a secure, multi-level tagging feature. This feature shall allow operators to apply up to eight tags to each point, each tag being stored with a date/time stamp and optional operator-entered description.

4.9.2 Each point shall be able to be provided with a visual attribute showing that the point has one or more tags on each display where that point is shown. If a point is tagged, the display shall show the symbol that corresponds to the highest-level tag on the point.

4.9.3 It shall be possible to specify that the tag dialog remembers the last choice of action, tag type, tag number and tag description.

4.9.4 The system shall provide the capability to configure a custom set of tag types that are mapped to the following four basic types of tags: Inhibit ON and OFF controls, Inhibit ON control only, Inhibit OFF control only, Information only (no control inhibit).

4.9.5 The system shall permit no means of bypassing the control inhibit caused by a tag. This applies to any and every application supplied by the vendor or written by the purchaser using the vendor's API.

4.9.6 A group tag function shall be provided that allows an operator to define a tag, select multiple points and apply the same tag to all selected points.

## 4.10 World Map Display

4.10.1 The operator interface software shall provide a single world coordinates based graphical view of the system, arranged schematically or geographically as defined by the user. It shall be possible to navigate freely in this world map, scrolling in two dimensions (panning) and zooming in or out to view any location at any desired degree of magnification.

4.10.2 The world map display system shall be able to accommodate a coordinate space of up to 1 billion by 1 billion world units.

4.10.3 The operator interface shall be graphics based and shall be capable of importing DWG or DXF file formats. The operator interface software shall include the ability to merge multiple imported maps into one SCADA display and to edit the imported graphics.

4.10.4 The world map display shall be implemented in a multilayered structure. When a map is imported from a DWG or DXF file, the layers that are contained in the DWG/DXF file should be preserved. There should be no upper limit on the number layers that may be contained in the world map.

4.10.5 It shall be possible to resolve the world map coordinates for Lat/Lon by establishing the latitude and longitude limits of the map. Data integrated into the world map via Lat/Lon coordinates shall be correctly located on the world map.

4.10.6 The system shall support an unlimited number of graphical layers which can be de-cluttered either automatically (based on zoom level) or manually by the operator.

4.10.7 The operator shall have the ability to override the automatic de-cluttering and manually either turn a layer on or off regardless of the current zoom level. By organizing layers in a hierarchical system of folders, it shall be possible to easily turn entire folders of layers on or off. The system of folders shall be preserved when the map is re-imported from an updated DWG/DXF file.

4.10.8 A user-extendable library of ready-to-use symbols, colors and text styles shall be provided. It shall be possible to import and export library items such as Pmacros (interactive graphics) and symbols for sharing with other users.

4.10.9 Methods of navigation within the world map display shall include the ability to continuously pan and zoom, to jump to other displays at pre-defined locations and magnification levels and to snap to a view that is defined by rubber band mouse operation, i.e. a view selection rectangle.

4.10.10 The user shall be able to specify the number of alarm lines for the unacknowledged alarms to be displayed in an alarm banner at the bottom of any display. The alarm banner shall not resize when the operator zooms in or out on the world map display. The operator shall be able to temporarily resize the alarm banner by dragging the frame separator, showing more or less alarm lines. The operator shall be able to toggle the alarm banner on or off. It shall also be possible to acknowledge and/or block the alarms that are displayed in the alarm banner via a pop-up menu.

4.10.11 The user shall be able to represent status points with animated GIF (Graphics Interchange Format) files. Animated GIFs are a popular way to display the change of state of a device, or motion such as a pump in operation. The operator shall be able to set the blink rate to control the speed of the GIF file.

4.10.12 When the curser is moved over a database point on the world map, a popup tool tip will display the point name, description, current value, and date and time the point was last updated.

4.10.13 It shall be possible to use bitmaps (image files) rather than symbols to represent status points, station points, and pushbuttons. The displayed bitmaps should scale as the user will zoom in and out. The supported bitmap file types shall include GIF, JPG and BMP.

4.10.14 For any analog point on the world map, the user shall be able to select displaying the values of Avg, Min, Max, Min Time, and Max Time for Current and Previous: 15 Min., Hour, Day, and either Week or Month. These values shall be automatically recorded for all analog points within the system and available for display on the world map.

4.10.15 The user shall have the ability to create any number of views within the world map display. The views may be accessed via a scrollable list box or via pushbutton (poke points) on the world map display. For ease of navigation in the views list box, it shall be possible to organize the views in a hierarchical system of folders. Both the folders and the views themselves shall be preserved when the map is re-imported from an updated DWG/DXF file.

4.10.16 It shall be possible to operate the world map display on SEL-3332 computing platform for substation automation application.

## 4.11 IED Control Panel Templates

4.11.1 The system shall support Intelligent Electronic Device (IED) control panel templates that graphically represent IED's within the database. The template will allow dynamic elements and database values to be superimposed over a graphic representation of the IED faceplate. The template shall support multiple pages of IED information.

4.11.2 The user shall be able to copy and paste a template instance on the world map, and reassign the template to a new IED, with all database values automatically updated to the new IED. When edit changes are made to the template, all instances of the template on the world map will be updated.

4.11.3 The user shall be able to create custom templates using the same editing tools available for editing the world map. The user shall be able to import and export templates for sharing with other system users.

4.11.4 The vendor shall provide in their proposal a complete list of all templates that are currently available for the system. Any associated costs for adding templates to the system will be detailed and listed as options in the price proposal.

## 4.12 Full Graphics Editor

4.12.1 A full graphics editor shall be provided as an integral part of the database and display building tools. Access to the editing capabilities shall be available at all local and remote consoles, however it shall be password-protected.

4.12.2 A copy of the world map and supporting libraries shall reside on each workstation console, such that when viewed in live mode, only dynamic data such as point values and alarms shall be retrieved from the host server in order to minimize network traffic and make feasible dial-up connections even with large displays.

4.12.3 The system shall allow the reservation of the world map and associated resources so that only the user implementing the reservation can edit those resources. If another user attempts to edit a

reserved world map, they will be notified that it is reserved and the username and workstation of the user holding the reservation.

4.12.4 The system shall allow the publishing and updating of the world map and associated resources. When the world map is published or at a user settable time interval, all client workstations will be notified that a new world map is available.

4.12.5 The full graphics editor shall allow the user to create any number of layers and displays of the world map. The editor shall allow the user to assign zoom levels to each layer for automatic decluttering. The editor shall allow the user to specify an image file for any display that is to be used as a background for the display. The image file formats that can be used for this shall include JPG, GIF and BMP.

4.12.6 The full graphics editor shall contain easy-to-use tools for re-layering, re-coloring and re-styling (text) as well as duplication (copy/cut and paste), stretch and re-size. It shall include a Find and Replace function that finds all instances of a text string anywhere on the world map, and allows automatic replacement by another text string.

4.12.7 The full graphics editor utility shall provide topological support. It shall perform consistency checks between the graphical display and the topology database. Connectivity shall be dynamically calculated based on topology and current status of breakers and switches, and displayed with user-defined color-coding.

## 4.13 Drawing Tools

4.13.1 The proposed system shall include drawing tools as part of a full graphics editor to allow the user to add to and/or modify the drawings that were imported via DWG/DXF file. The editor shall support at least 99 undo and redo editing changes.

4.13.2 The system should include an initial ready-to-use set of such libraries. On import of a DWG/DXF file, the colors, text styles and symbols that are contained in the DWG/DXF file should be imported into the libraries, where they may be customized or just used as is.

4.13.3 The proposed system shall provide the capability to display a telemetered or calculated analog value in the form of a numeric string, horizontal or vertical bar graph (the length of a bar graph reflects the value of the analog point), or in an analog gauge. Both numeric strings and bar graphs shall be color-coded to reflect any violation of alarm limits. Analog gauges shall have the capability to represent a meter or dial type gauge. The user-definable properties of gauges shall include: angle start, angle length, dial color, dial direction, label properties, limits properties, major/minor divisions, needle properties, and the radius.

## 4.14 Notes

4.14.1 The displays shall support a system of “post-it” notes that allows operators to add and remove note icons on any display. Clicking on a note icon shall cause a pop-up window to appear to show free-form notes on any topic. The notes can be entered and modified in this window.

4.14.2 The system shall also support notes that are specific to database points. Such notes shall be accessible from a pushbutton in the point dialog box that appears when the point is selected. When a point has some notes, the pushbutton icon in the dialog box shall be highlighted.

4.14.3 Point-specific notes shall also be accessible from the alarms display. When a point-related alarm is selected, a pushbutton in the tool bar should highlight if there are notes for the selected point. Clicking on this pushbutton shall bring up the point’s notes.

## 4.15 Database Editor

4.15.1 The database editor shall provide a graphical tree-like representation of the complete database and shall support easy navigation throughout the database to the desired items to be edited. Database items to be edited in this way shall include Stations, Communication Lines, Communication Channels, RTUs, IEDs, as well as all the individual database points (analog values, status indications, accumulators, etc).

4.15.2 The database editor shall operate as a "client" program which communicates with a "server" program running on the host computer. However, the database editor shall be able to run on any computer that is connected to the host server via the network. With this arrangement, it shall be possible to manage the database maintenance from any suitably configured PC on the network without being necessary to go to the control room to do it.

4.15.3 The database editor shall include features which will make it easy to create and modify the database such as:

- using the Station Cloning feature to create an entire new station and all its points, based on an existing station;
- copying, cutting and pasting in the Windows environment;
- using a model feature to create points and other database items that are based on previously created ones;
- using a Station Rename feature to copy a portion of an existing display, and to reassign all those dynamic points to points in a different station, all in one operation;
- editing or modifying the database on an MS Excel spreadsheet and importing it into the system real-time database;
- deleting existing database points;
- deleting an entire station with all associated points

4.15.4 All changes and updates of the database shall be completed and validated while the system is in online operation. Under no circumstances shall the real-time system operation be interrupted or disturbed by the database editing and maintenance process.

## 4.16 IED Wizard Templates

4.16.1 The system shall support Intelligent Electronic Device (IED) wizard templates for automating the creation of points for IEDs on the system.

4.16.2 The user shall be able to select from a list of available templates, define the IED name, communication line, IED address, and communication statistics for total message count, good message count, bad message count received from the IED.

4.16.3 The template shall contain all available points for the given IED and allow the user to select the points to be included in the database. All of the telemetry and control addresses and RTU-to-IED mapping shall be automatically generated.

4.16.4 The Vendor shall provide an application that allows the user to create new IED templates and edit existing templates.

4.16.5 It shall be possible to create IED templates for IEC 61850 devices.

4.16.6 The vendor shall provide in their proposal a complete list of all templates that are currently available for the system. Any associated costs for adding templates to the system will be detailed and listed as options in the price proposal.

## 4.17 Alarms

4.17.1 Alarms and operational events shall be continuously synchronized in real-time to the standby host server, in the case of a dual-redundant system configuration.

4.17.2 The proposed system shall be able to handle a minimum of 100 alarms or events per second per operator consoles regardless of the other workload.

4.17.3 The system shall provide at least **ten (10) alarm priority levels**. Alarms with priority zero - the lowest, shall be considered to be pre-acknowledged. Such alarms shall neither sound any audio alarm signals nor cause points to flash on the display.

4.17.4 For each analog point, the user shall be able to define three sets of nested upper and lower alarm limits, with a separate dead band for each limit. In addition, analog points shall be able to generate an alarm when a rate of change is exceeded, either in the increasing or decreasing direction, or both. Each alarm limit shall support a separate alarm priority.

4.17.5 The system shall provide the operator with a visible "telemetry failure" indication when the value of any displayed point is not currently being updated by the system because of an RTU or communication line failure. Any points that are calculated using, as inputs, the values of other telemetry failed points, shall also be marked telemetry failed.

4.17.6 The user shall be able to specify any Windows sound file (*.WAV) to be used for the audio alarm signal. The system shall allow the user to browse for sounds and to test play the selected sounds. The system shall allow different sounds for each alarm type and a different set of sounds for each workstation.

4.17.7 The system shall provide summary lists for all unacknowledged, acknowledged, blocked, suppressed and for all alarms. The user shall be able to perform alarm filtering based on certain parameters or filters. The filtering of alarm summary lists shall be performed from a template where the operator can enter the filtering parameters and obtain the filtered lists.

## 4.18 Reports

4.18.1 The system shall support a report generation capability that will allow the user a high level of flexibility in the definition, formatting and scheduling of on-demand and periodic reports. The reports shall include data from both the real-time database and historical database. The system will allow the user to schedule reports for automatic printing or saving to hard disk files for subsequent transfer to CD or tape.

4.18.2 A report editor shall be available to allow the user to define reports by specifying a database table, a set of desired data fields and the selection criteria for retrieving records from the database table.

4.18.3 A graphical report in the form of scheduled prints of selected views of the world map shall also be provided.

4.18.4 The system shall include a scheduling facility that will allow the operator to define the schedules and destinations for all reports. It shall be possible to direct a scheduled report to multiple printers, one or more of which can be directories on disk.

## 4.19 Data Collection and Storage

4.19.1 The system will provide a historical data collection facility that allows the user to define the points that are to be sampled, the sample frequency and how long to retain the sample data. In each dataset, the oldest samples should be overwritten by the newest.

4.19.2 The historical data software shall be capable of sampling at intervals as low as 1 second. There should be no upper bound on the duration of samples within each dataset, and thus no upper bound on the amount of historical data that can be stored other than the limitation imposed by available disk space.

4.19.3 The historical data software shall allow the user to specify recording of statistics in the sample records. The statistics shall include time averages, summations, maximums and minimums, and times of maximums and minimums and shall be based on user-definable observation intervals.

4.19.4 The system shall also allow the user to create "secondary" datasets that extract information from primary datasets. For example, a primary dataset could contain 15-second samples for several days. A secondary dataset could extract daily maximums and minimums, as well as the times of the maximums and minimums and record these for ten years.

## 4.20 Data Trending

4.20.1 The proposed system shall provide the ability to store and view any data value from the database in a trend graphical format. The system shall bring up pixel-resolution trend graphs of historical data. Sample rates as low as 1 second must be supported.

4.20.2 Trend graphs shall be displayed in separate windows that can be moved, re-sized and minimized to an icon. The trend graph window shall include tools that allow the user to configure and customize the graph display.

4.20.3 A trend graph window shall have the ability to plot at least ten (10) points from the historical database. The trend graph displays shall be interactive allowing the operator to quickly adjust the time frame, duration and resolution of the graph.

4.20.4 In cases where there are more samples in the dataset than can be displayed in the graph window, it shall be possible to scroll back in time. It shall be possible to see the numeric values and time-stamp of the traces at any time position in the graph by manipulating a time cursor inside the trend graph.

4.20.5 The user shall be able to display trend comparison graphs from left to right, for at least ten (10) comparison trends. In trend comparison graphs, the time origin at the extreme left of the graph is a fixed time of the day; however, it may be a different day for each trend. The purpose of this is to allow the user to observe the build-up of the current day's trace, e.g. a load curve, against that of other days in the past, typically the days that contained the last week peak or the current month peak, etc. The trend comparison graph shall have an option to set a start time and day of the week so that the trend graph is automatically launched.

## 4.21 Interface to Microsoft Excel

4.21.1 The system shall support current and historical database access from clients running MS Excel. It shall be possible to directly connect to the SCADA host from within MS Excel by defining the Host name and valid user account with username and password. The client application shall support redundant Host and automatically reconnect to the active Host upon failover. All current and historical tables and fields shall be accessible through this interface.

4.21.2 For current data, the user shall be able to select a database table, data fields within the table, and logic criteria (<, >, =, AND, OR) for point selection. In addition, the user shall be able to browse for points and drag-drop them into the point selection dialog. The user shall be able to select the MS Excel worksheet, start row, and start column for where the data will be populated, and to

include the column headings from the database table. The user shall be able to optionally define a time interval at which the current data is automatically updated on the worksheet.

4.21.3 For Historical data, the user shall be able to select points contained within an historical dataset. The user shall be able to define a time type by defining the start and finish date and time, or the number of previous days, hours, and minutes. The use shall be able to select data condition codes to be included with the samples. The user shall be able to select the MS Excel worksheet, start row, and start column for where the data will be populated, and to include the column headings from the database table.

4.21.4 It shall be possible to save current and historical queries as defined above as reports available in the world map operator interface.

### 4.22 MultiSpeak Interoperability

4.22.1 The system shall be compatible to MultiSpeak Version 3.0 for and or CIM:

4.22.1.1 Interface 3 SCADA-LM

4.22.1.2 Interface 8 EA-SCADA

4.22.1.3 Interface 9 OA-SCADA/SCADA-OA

4.22.1.4 Interface 23 SCADA-DGV

4.22.1.5 Interface 24 GIS-SCADA

4.22.2 For each interface the vendor shall provide certified interoperability test results.

## 5 System Implementation

### 5.1 Project Schedule

5.1.1 We shall submit a schedule with the proposal as identified in the Bid Submittal Instructions.

5.1.2 Prior to contract execution, Vendor will submit a detailed schedule showing each major and minor project task, including critical dates and tasks for the QUEZELCO II. This schedule shall be consistent to the schedule made part of the Bid Proposal, only with added detail.

5.1.3 The schedule shall be subject to review and approval by the QUEZELCO II

### 5.2 System Testing

5.2.1 Vendor will prepare test documentation and test logs. The purpose of these tests is to demonstrate that the functional, performance, availability and other requirements in this specification are met.

5.2.2 The test procedure document shall be prepared by the Vendor and will follow a consistent format and be submitted to the Purchaser for review.

5.2.3 Discrepancies found during the testing shall be documented and maintained in a problem log file. The subsequent correction shall be described and representatives of the Purchaser and Vendor shall verify proper operation.

### 5.3 Shipping and Installation

5.3.1 All equipment deliveries shall be F.O.B. destination prepaid and allowed to the Purchaser's facilities.

5.3.2 The Vendor shall provide all plans and procedures necessary for the system installation and integration. This includes all Vendor supplied equipment, including third party or subcontractor equipment the Vendor is providing or has made part of its system. This also includes hardware recommended by the Vendor for purchase by the Purchaser to support the system. The Purchaser shall have the opportunity to review all installation plans and procedures prior to installation.

5.3.3 The Purchaser will prepare all sites for the installation of equipment in accordance with the Vendor-furnished instructions.

5.3.4 The Vendor shall be responsible for starting up the system. The purpose of system startup shall be for the Vendor to verify that all system functions that were demonstrated during FAT now operate properly under actual field conditions. This shall include all application programs.

## 5.4 Support Plan

5.4.1 The system shall be covered by warranty for the first year of operation.

5.4.2 The Vendor shall provide 24x7 technical supports for this system.

5.4.3 The Vendor shall provide software patch management in accordance with NERC CIP standards. All Vendor software patches will be tested against all software applications provided in this proposal, on a comparable hardware platform, and the results of those test made available to the Purchaser within 30 days of patch release.

5.4.4 The Vendor shall provide remote diagnostics support from Vendor's facilities via a dial-in or VPN connection at Purchaser facilities.

5.4.5 The Vendor shall provide online access to software updates, manuals, and knowledge base.

5.4.6 The Purchaser shall have the option to accept or decline the support plan prior to the warranty period ending. The Vendor shall properly inform the Purchaser 30/60/90 days before expiration of the warranty period that there is a need to address continuation of a support plan.

5.4.7 The vendor shall have a lifetime licensed software.

## 5.5 Training

5.5.1 The Vendor shall make available to the Purchaser, training on the operation, maintenance, failover/startup, recovery, application software, database and display maintenance. The class training shall be conducted at the Vendor's facilities unless otherwise agreed to by both parties.

5.5.2 Training course outlines shall be included in the Vendor's bid. Each course outline shall include, in addition to the subject matter, a short review of the prerequisite subjects, how this course fits into the overall training program, and its objective.

5.5.3 Persons with sufficient training experience shall conduct training. These trainers shall have sufficient expertise on the subject of the training.

5.5.4 The Purchaser's staff shall receive individual copies of the training materials and pertinent documents prior to the scheduled start of the course.

5.5.5 A suggested training plan and schedule suitable to the needs of the Purchaser shall be provided as part of the proposal. The plan and schedule shall include a description of the training classes.

## 5.6 Documentation

5.6.1 The documentation requirements shall apply to all items described in this specification. This includes all items provided by subcontractors or suppliers of the Vendor unless specifically noted otherwise.

5.6.2 The Vendor shall provide a complete documentation list/inventory and shall update it periodically during the project to reflect what documentation has been delivered.

5.6.3 The software documentation shall provide, through a set of logically coordinated documents, a comprehensive and detailed description of all software necessary for the operation and maintenance of the proposed system. It shall describe the system's overall functions, subsystems, databases, macros, libraries and procedures. The requirements in this section do not apply to Original Equipment Manufacturer (OEM) provided software, e.g., operating systems). For OEM provided software, the standard OEM manuals shall be provided.

5.6.4 A complete printed set of all documentation - standard and project specific - shall be provided to the Purchaser.

**Bill of Quantities**

- SCADA Software License (Master Stand-By) 1 – Lot
- Remote Terminal Unit (RTU) 1 – Lot
- Digital Input Module (DI) 1 – Lot
- Digital Output Module (DO) 1 – Lot
- Analog Input (AI) 1 – Lot
- SCADA Server 1 – Lot
- Server (back-up)
- Computer Desktop 3 – Sets
- Data Panel Cabinet (Control Room) 1 - Unit
- Control Panel
- Main Console 55" LED Monitor 2 – Units
- Interposing Relays 1 – Lot
- UPS, Battery (Industrial Type) 1 - Lot
- Wireless (RF) including three re-closers 1 – Lot
- Wires & Cables 1 – Lot
- Accessories 1 – Lot
- CCTV Systems minimum of 10 cameras with at least 6TB memo 1 - Lot
- SCADA Design; Engineering; Training; Testing; Commissioning 1 – Lot

**THE TECHNICAL WORKING GROUP**

**VINCENT E. VILLARUEL, REE**
**Member**

**NANETTE M. PEÑAMANTE**
**Member**

**VON ERWIN G. AZAGRA, PEE**

**Chairman**

# *Section VII: Sample Forms*

## Bid Form

Date: _____
IFB No.: _____

To: Quezon II Electric Cooperative, Inc. (QUEZELCO II)
Brgy. Gumian, Infanta, Quezon

Gentlemen and/or Ladies:

Having examined the bidding documents including Bid Bulletin Numbers 01-2020, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver Supply of Goods and Services for the Acquisition, Installation, Training and Commissioning of Supervisory Control and Data Acquisition (SCADA) in conformity with the said bidding documents for the sum of **TWO MILLION EIGHT HUNDRED THOUSAND PESOS (Php2,800,000.00)** or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Bid.

We undertake, if our Bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements.

If our bid is accepted, we undertake to provide a performance security in the form, in the amounts, and within the times specified in the Bidding Documents.

We agree to abide by this Bid for the Bid Validity Period specified in Clause 20 of the ITB and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

We certify/confirm the above-stated and that we comply with the eligibility requirements as per ITB Clause 5 and all other filled-out forms as required in this bidding documents.

Dated this _____ day of _____ 2020.

_____ _____
*[signature]* *[in the capacity of]*

Duly authorized to sign Bid for and on behalf of _____

## PRICE SCHEDULE

**Name of Bidder** _____ **IFB Number** _____
**Page**_____**of**_____

| Description | Quantity | Price |
|---|---|---|
| - SCADA Design; Engineering; Training; Testing; Commissioning including SCADA Software License (Master Stand-By) | 1 Lot | |
| - Remote Terminal Unit (RTU | 1 Set | |
| - Digital Input Module (DI) | 1 Set | |
| - Digital Output Module (DO) | 1 Set | |
| - Analog Input (AI) | 1 Set | |
| - SCADA Server | 1 Set | |
| - Server (Back-up) | 1 Set | |
| - Computer Desktop | 3 Sets | |
| - Data Panel Cabinet (Control Room) | 1 Set | |
| - Control Panel | 1 Set | |
| - Main Console 55” LED Monitor | 2 units | |
| - Interposing Relays | 1 Set | |
| - UPS, Battery (Industrial Type) | 1 Set | |
| - Wireless (RF) including three reclosers | 1 Set | |
| - Wires & Cables | 1 Set | |
| - Accessories | 1 Set | |
| - CCTV Systems minimum of 10 cameras with at least 6TB memo | 1 Set | |
| **TOTAL BID PRICE** | | |

Signature of Bidder _____

Note: 1. Each component indicated in Section VII – Technical Specification should be quoted 1 Lot.

# Contract Form

THIS AGREEMENT made the _____ day of _____ 2020 between *Quezon II Electric Cooperative, Inc.(QUEZELCO II)* of the Philippines (hereinafter called "the Entity") of the one part and *[name of Supplier]* of *[city and country of Supplier]* (hereinafter called "the Supplier") of the other part:

WHEREAS the Entity invited bids for certain goods and ancillary services, viz., Supply of Goods and Services for the Acquisition, Installation, Training and Commissioning of Supervisory Control and Data Acquisition (SCADA) and has accepted a bid by the Supplier for the supply of those goods and services in the sum of _____ **(bid amount)** (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

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

2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:

(a) the Bid Form and the Price Schedule submitted by the Bidder;
(b) the Schedule of Requirements;
(c) the Technical Specifications;
(d) the General Conditions of Contract;
(e) the Special Conditions of Contract; and
(f) the Entity's Notification of Award.

3. In consideration of the payments to be made by the Entity to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Entity to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the Contract

4. The Entity hereby covenants to pay the Supplier in consideration of the provision of the goods and services 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 their respective laws the day and year first above written.

Signed, sealed, delivered by _____ the _____ (for the Entity)

Signed, sealed, delivered by _____ the _____ (for the Supplier).

## Affidavit of Consanguinity Form

[See Clause 4 of the Instructions to Bidders.]

WHEREAS *[name of the Bidder]* who are established and reputable supplier of Supply of Goods and Services for the Acquisition, Installation, Training and Commissioning of Supervisory Control and Data Acquisition (SCADA) do hereby solemnly swear that

None of our authorized officers, employed staff, sub-contractors, consultants or any other party forming or having any direct or indirect relationship with *[name of the Bidder]* are related to the head of QUEZELCO II by consanguinity or affinity up to the third civil degree or and to the same degree, any of QUEZELCO II's officers or employees having direct access to information that may substantially affect the result of the bidding, such as, but not limited to, the members of the Bids and Awards Committee, the members of the Technical Working Group, the Bids and Awards Committee Secretariat, the members of any Project Management Office initiating the procurement, and the designers of the project.

We understand and accept that any false statement in this respect will render *[name of the Bidder],* and its authorized officers liable for prosecution to the full extent of the law.

Signed by

_____
As authorized official of the bidder

Name_____, _____CTC/Passport Number

Before me a notary public of _____, on this _____day of _____, 2020.

Witnessed by my hand and Notarial Seal on the date and place first mentioned.