INVITATION TO BID
NO. NE II-A1-2021-03

(LOT II. Relocation of Electrical Facilities affected by DPWH road widening project)

SECTION I. INVITATION FOR BID

TABLE OF FORMS

SECTION I. INVITATION TO BID

NEECO II-AREA 1's Invitation for Bid No. NE-II-A1-2021-03

The Nueva Ecija II Electric Cooperative, Inc- Area 1 (NEECO II Area 1) eligible Bidders for the following bidding activities based on Board Resolution Nos. 07-04-21 and 07-07-21, Series of 2021.

Lot I	Coop Vehicles	ABC (Php)	NON-REFUNDABLE FEES		SCHEDULE	
			BID DOCS	ACCREDITATION	PREBID CONFERENCE (Thru Zoom Meeting)	BID OPENING (Thru Zoom Meeting)
a	2 units Utility Vehicle	2,000,000.00	5,000.00	Php 5,000.00	July 19, 2021 10AM	August 2, 2021 1PM
b	1 unit Manlift	5,000,000.00	5,000.00			

Lot II	Relocation of Electrical Facilities affected by DPWH road widening project	ABC (Php)	NON-REFUNDABLE FEES		SCHEDULE	
			BID DOCS	ACCREDITATION	PREBID CONFERENCE (Thru Zoom Meeting)	BID OPENING (Thru Zoom Meeting)
A	Maturanoc, Guimba to Baloc, Sto. Domingo (Guimba-Pangasinan Road)	19,881,843.19	25,000	Php 5,000.00	July 19, 2021 2PM	August 3, 2021 10AM
B	Salvador St. to Lennec, Guimba (Guimba-Pangasinan Road)	3,908,705.27	5,000			
C	Saranay (Catman) to Banitan, Guimba (Guimba-Tarlac Road)	5,621,371.60	10,000			
D	Calipahan to Pob. Sur (Waltermart) Talavera (Talavera-San Jose Road)	6,136,000.16	10,000			
E	Bantug, Munoz to Bacal III, Talavera (Talavera-San Jose)	8,203,647.35	10,000			
F	Calipahan to San Miguel na Munti, Talavera (Talavera-San Jose Road)	15,426,545.08	25,000			

Lot III	Supply and delivery of materials for relocation of electrical facilities affected by DPWH road widening project	ABC (Php)	NON-REFUNDABLE FEES		SCHEDULE	
			BID DOCS	ACCREDITATION	PREBID CONFERENCE (Thru Zoom Meeting)	BID OPENING (Thru Zoom Meeting)
A	Line Hardwares	10,474,350.76	25,000	Php 5,000.00	July 19, 2021 2PM	August 3, 2021 10AM
B	Conductors	18,606,376.00	25,000			
C	Concrete Poles	19,936,700.00	25,000			

Bidders must be previously accredited and/or for those bidders who may want to participate can be accredited upon completion of Accreditation Process posted in Coop official website: www.neeco2area1.com. Interested bidders shall also submit Letter of Intent and pay bid docs fee for the lot they will be participating.

Bidding documents are available in electronic copy. Sealed proposals shall be submitted in two (2) sealed envelopes clearly marked as "Original Bid" and "Copy of Bid" with the name of the project to be bidded and the name of the bidder in capital letter addressed and/or submitted to the BAC Chairman during the Bid Opening which will be opened and read in the presence of Bidders or their representative. Bid proposals must include terms of payment, bid validity, warranty and delivery schedule.

Further, **a two percent (2%) of ABC bidder's bond is mandatory**, which is to be returned immediately after the bid awarding.

NEECO II – Area 1 reserves the right to reject any or all bids, to waive any formality or technicality therein, to accept the bid that is deemed most advantageous and to annul the bidding process without incurring any liability to any bidder or party. Finally, NEECO II – Area 1 assumes no obligation to compensate any bidder or party for any loss or expense incurred in the preparation of the bid or participation in the bidding process.

For further inquiries, you may call (044)-411-1007 local 110 and/or email at bac_neeco2area1@yahoo.com.ph and look for Ms. Set Pauline Feliciano.

Mr. Lorenzo Valino Jr.
BAC Chairman

Engr. Nelson M. Dela Cruz
General Manager

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GENERAL OVERVIEW

This tender document is developed for the **Relocation of Electrical Facilities affected by DPWH road widening project. It is financed by the Sub-Allotment No. SR2021-04-008192 Fund 01101101-Regular Agency Fund- General Fund- New General Appropriations- Specific Budgets of National Government Agencies and Reinvestment Fund for Sustainable CAPEX (RFSC) made available to Nueva Ecija II Electric Cooperative, Inc.-Area 1 (NEECO II AREA-1).** This ITB consists of:

- the invitation to bid;
- the necessary instruction to bidders;
- the general and special conditions of the policy/contract;
- the bid forms and pro-forma contract;
- the Price Schedules under Section VII are to be completed as applicable by the Bidder.

A checklist for the Bidders is attached to this General Overview as Annex A.

CHECKLIST OF ELIGIBILITY REQUIREMENTS

I. ELIGIBILITY REQUIREMENTS (Class "A" Documents)

A. LEGAL DOCUMENTS: FOLDER 1 (ENVELOPE 1)

1) DTI Business Name Registration/SEC Registration Certificate, whichever is appropriate under laws of the Philippines
2) Valid and Current Mayor's Permit/Municipal License (Principal Place of Business)
3) Taxpayer's Identification Number
4) BIR Value Added Tax Registration
5) Statement that the Bidder is not "Blacklisted" or banned from bidding by the government or any of its agencies, offices, corporation or LGUs, and other private corporations or electric cooperatives; including non-inclusion in the Consolidated Blacklisting Report issued by the Government Procurement Policy Board (GPPB), as provided in Section 69.4 of the IRR-A No. 9184
6) Compliance with E.O. # 398
    a. Proof of VAT Payments for the past 6 months
    b. Tax Clearance from the BIR to Prove Bidder's Full and Timely Payment of Taxes to the Government
    c. A Certification under Oath from the Bidders Responsible Officers that the Bidder is Free and Clear of All Liabilities with the Government

B. TECHNICAL DOCUMENTS: FOLDER 2 (ENVELOPE 1)

1) Statement in Matrix Form all ongoing and completed government and private contracts (service contracts, maintenance contracts, purchase orders, job orders, etc.) within the relevant period, where applicable, including contracts awarded but not yet started, if any. The Statement shall state whether each contract is:

    a. Ongoing, Completed or Awarded but not yet started; within the relevant period, where applicable. Each Contract should include the following:

        i. The name of the Contract;
        ii. Date of the Contract
        iii. Amount of the Contract and Value of Outstanding Contracts;
        iv. Date of Delivery
        v. End-user's Acceptance, if completed

    b. Similar or not similar in nature and complexity to the contract to be bid. For the procurement of goods, a contract shall be considered "similar" to the contract to be bid if it involves goods or related services of the same nature and complexity as those which are the subject of the public bidding is concerned.

2) PCAB License (Philippine Contractor's Accreditation Board) for Infrastructure Projects

C. FINANCIAL DOCUMENTS: FOLDER 3 (ENVELOPE 1)

1) Complete set of Audited Financial Statements, stamped "received" by the BIR or its duly accredited and authorized institutions, for the immediate preceding year,

showing, among others the prospective bidder's total and current assets and liabilities.

Complete set of Financial Statement includes the following:

1. Balance Sheet
2. Income Sheet
3. Statement of Changes in Equity
4. Cash Flow Statement
5. Notes to Financial Statement
6. Statement of Management Responsibility for Financial Statement

2) The prospective Bidder's computation for its Net Financial Contracting Capacity (NFCC) or a commitment from a universal or commercial bank to extend to it a credit line if awarded the contract to be bid, in an amount not lower than that set by the procuring entity, which shall be as follows:

The computation of a prospective bidder's NFCC must be atleast equal to the ABC to be bid which calculated as follows:

NFCC=[(Current assets minus current liabilities)(K)] minus the value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started, coinciding with the contract to be bid

Where:

K= 10 for a contract duration of one year or less, 15 for a contract duration of more than one year up to two years, and 20 for a contract duration of more than 2 years

CLASS "B" DOCUMENTS: FOLDER 4 (ENVELOPE 1)

1) Valid Joint venture Agreement, in case of joint venture. Each Member of the joint venture shall submit the required eligibility documents; and,
2) Letter authorizing the BAC or its duly authorized representative/s to verify any or all of the documents submitted for the eligibility check.
3) Notarized statement that each of the documents submitted in satisfaction of the eligibility requirements is an authentic and original copy, or a true and faithful reproduction or copy of the original, complete, and that all statements and information provided therein are true and correct.

D. BIDDER'S CHECKLIST: FOLDER 5 (ENVELOPE 1)

1) Eligibility and Source Statement for Bidder and Manufacturer
2) Power of Attorney
3) Letter of Authorization from the manufacturer to the Bidder/Trader to offer their material or equipment
4) Letter of Authorization from the Bidder to the Local Agent
5) Manufacturer and catalogue number of each offered item indicated
6) All additional data to be furnished by the bidder as per technical specifications
7) All deviations from the Specifications listed separately in the Form Deviation
8) All substitutions, if any, offered as an alternative Bid, clearly marked as such

II. BID PROPOSALS (ENVELOPE 2)

TECHNICAL PROPOSAL (FOLDER 1)

1) Bid Security as to form, amount and validity period
2) Authority of the Signatory
3) Confirming Statement of Delivery Schedule
4) Confirming Statement on Warranty Being Offered
5) Details of Technical Specification

FINANCIAL PROPOSAL (FOLDER 2)

1) Bid Prices in the prescribed bid form

☐ All pages and all changes initialled.
☐ Original and a Copy of all documents.

ANNEX A: BIDDER'S CHECKLIST

- ☐ Authorized signature on the Bid (Form 1).
- ☐ All pages and all changes initialled.
- ☐ Bid Security.
- ☐ Bid Summary.
- ☐ Bid Schedules completed.
- ☐ Bidder's Information.
- ☐ Eligibility and Source Statement for Bidder and Manufacturer.
- ☐ Bidders Qualification, Sales History and Financial Data.
- ☐ Power of Attorney.
- ☐ Letter of Authorization from the manufacturer to the Bidder/Trader to offer their material or equipment.
- ☐ Letter of Authorization from the Bidder to the Local Agent.
- ☐ Delivery Schedule duly signed.
- ☐ Technical Data Sheets properly filled in for each offered item and duly signed.
- ☐ Manufacturer and catalogue number of each offered item indicated.
- ☐ All additional data to be furnished by the bidder as per technical specifications.
- ☐ All deviations from the Specifications listed separately in the Form Deviations.
- ☐ All substitutions, if any, offered as an alternative Bid, clearly marked as such.
- ☐ Original and three copies of all documents.

In the absence of any of the above requirements, the bidder's offer is considered to be non-responsive with major deviation from the bidding documents.

SECTION II. INSTRUCTION TO BIDDERS

TABLE OF CLAUSES

1. SOURCE OF FUNDS

1.1 The Nueva Ecija II Electric Cooperative, Inc.- Area 1 (NEECO II-Area 1) funded through Reinvestment Fund for Sustainable CAPEX (RFSC) and the Sub-Allotment No. SR2021-04-008192 Fund 01101101-Regular Agency Fund- General Fund- New General Appropriations- Specific Budgets of National Government Agencies, the Relocation of Electrical Facilities affected by DPWH road widening project_which are made available through Board Resolution No. 07-07-21, Series of 2021.

1.2 NEECO II-Area 1 requires that bidders and contractors observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy;

a. 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 in question;

b. will recognize a contractor as ineligible, for a period determined by the NEECO II Area 1, to be awarded a contract if it at any time determines that the contractor has engaged in corrupt or fraudulent practices in competing for, or in executing, another contract.

2. SCOPE OF BID

2.1 The Nueva Ecija II Electric Cooperative, Inc.- Area 1 (hereinafter referred to as **"the Procuring Entity"**) wishes to receive Bids for the supply and delivery of goods, labor and materials, services and equipment hereof (hereinafter referred to as **"Goods"**).

2.2 All Bids are to be completed and returned to the Procuring Entity in accordance with these Instructions to Bidders.

3. ELIGIBLE BIDDERS

3.1 The Invitation to Bid is open to all accredited suppliers/contractors from eligible bidders and from eligible source countries meeting both of the following requirements:

a. a bidder (including all members of a joint venture) shall be from an eligible source of country; and

b. a bidder (including all members of a joint venture) shall not be one of the followings:

(i) a firm or an organization which has been engaged by the Procuring Entity to provide consulting services for the preparation related to procurement for or implementation of this project;

(ii) any associates/affiliates (inclusive of parent firms) of a firm or an organization mentioned in sub-paragraph (i) above;

(iii) a firm or an organization who lends, or temporarily seconds, its personnel to firms or organizations which are engaged in consulting 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.

4. ELIGIBLE GOODS

4.1 Any contract under which Goods are procured from countries other than the eligible source countries as required for the implementation of the project will be eligible if the combined costs of such Goods are less than fifty (50) percent of the price of the said contract.

4.2 At the Procuring Entity's request, bidders may be required to provide evidence documents of the origin of the goods.

5. QUALIFICATION OF BIDDER

5.1 Qualification of the Bidder:

To be qualified for award of Contract, bidders shall:

a. submit a written power of attorney authorizing the signatory of the bid to commit the bidder; and

b. submit documentary evidence establishing that bidder has adequate experience, financial capacity, and technical capability to undertake the Contract.

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

a. the bid, and in case of a successful 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 evidence 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 In Behalf of any or all partners of the joint venture;

d. all partners of the joint venture shall be jointly and severally liable for the execution 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.

6. ONE BID PER BIDDER

6.1 Each bidder shall submit only one bid either by itself, or as partner in a joint venture.

7. COST OF BIDDING

7.1 The bidder shall bear all costs associated with the preparation and delivery of its Bid, and the Procuring Entity will in no case be responsible or liable for those costs.

8. ASSURANCE

8.1 The successful bidder will be required to give satisfactory assurance of its ability and intention to deliver the Goods, pursuant to the Contract, within the time set forth therein.

9. CONTENTS OF BIDDING DOCUMENTS

9.1 The bidding documents are those stated below, and should be read in conjunction with any Addenda issued in accordance with Clause 11.

Section I: Invitation to Bid
Section II: Instructions to Bidders;
Section III: General Conditions of Contract;
Section IV: Special Conditions of Contract;
Section V: General Technical Conditions;
Section VI: Sample Forms; and
- a. Bid Form and Price Schedule
- b. Bid Security Form
- c. Contract Form
- d. Performance Security Form

Section VII: Technical Specifications

9.2 The bidder is expected to examine the Bidding Documents, including all instructions, forms, terms and specifications. Failure to furnish all information required by the Bidding documents or submission of a Bid not substantially responsive to the Bidding Documents will result in the rejection of the Bid.

10. CLARIFICATION OF BIDDING DOCUMENTS

10.1 Prospective Bidders requiring any further information or clarification of the Bidding Documents may notify the Procuring Entity in writing or by fax at the Procuring Entity 's mailing address indicated in the Invitation for Bids. The Procuring Entity will respond in writing to any request for information or clarification of the Bidding Documents, which it receives not later than three (3) days prior to the deadline for submission of Bids prescribed by the Procuring Entity. The Procuring Entity 's response will be sent in writing or by fax to all prospective bidders who have

received the bidding documents.

11. AMENDMENT OF BIDDING DOCUMENTS

11.1 At any time prior to the deadline for submission of Bids, the Procuring Entity may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Documents by issuing an addendum.

11.2 The addendum shall be a part of the Bidding Documents, pursuant to Clause 9.1 and shall be communicated in writing or by fax to all prospective bidders who have received the Bidding Documents, and will be binding on them.

11.3 In order to afford prospective Bidders reasonable time in which to take the addendum into account in preparing their bids, the Procuring Entity may, at its discretion, extend the deadline for the submission of Bids in accordance with Clause 24.

12. LANGUAGE OF BID

12.1 The Bid prepared by the bidder and all correspondence and documents relating to the Bid exchanged between the bidder and the Procuring Entity, shall be written in English Language.

13. DOCUMENTS COMPRISING THE BIDS

13.1 The Bid prepared by the bidder shall comprise the following components:

a. The bidder shall complete an original and a copy of the Bid Form and the appropriate Price Schedules furnished in the Bidding Documents, in accordance with Clauses 14 and 15;

b. documentary evidence establishing, in accordance with Clause 16, that the bidder is eligible to bid and that the Goods to be supplied by the bidder are eligible Goods;

c. documentary evidence establishing in accordance with Clause 17, that the bidder is qualified to perform the Contract if its Bids is accepted;

d. documentary evidence establishing, in accordance with Clause 18, that the Goods to be supplied by the bidder conform to the Bidding Documents;

e. bid security furnished in accordance with Clause 19; and

f. power of attorney.

14. BID PRICES

14.1 The bidder shall complete the appropriate Price Schedules included herein, stating the unit prices, total price per item, the total amount and the expected countries of origin of Goods to be supplied under the Contract.

14.2 (Alternative 1:) All Goods are grouped in Bid Packages. See list of Bid packages in Section VI, Specifications. Bid Packages shall not be divided into sub-packages for the purpose of bidding. Bidders are required to bid for the whole package only, otherwise the bid proposal will be considered non-responsive.

-OR-

(Alternative 2 :) The Goods are grouped in a single bid package and the bid package shall not be divided into sub-packages for the purpose of bidding. Bidders are required to bid for the whole package only, otherwise the bid proposal will be considered non-responsive.

14.3 Prices quoted in the Price Schedules should be entered separately in the following manner.

a. For Goods to be offered from within the Procuring Entity 's country:

(i) the price of the Goods, quoted ex-factory, ex-warehouse or of-the shelf, as applicable, including all customs duties and sales and other taxes already paid or payable.

(ii) the price of inland transportation, insurance and other local incidental for the delivery of the Goods to their final destination.

b. For Goods to be offered from outside the Procuring Entity's country:

(i) the price of the Goods, quoted CIF port of entry in the Procuring Entity 's country;

(ii) the price of inland transportation, insurance and other local costs incidental to delivery of the Goods from the port of entry to their final destination;

(iii) the CIF price or, when the freight and insurance are itemized separately, the FOB price shall be indicated separately, the FOB price shall be indicated separately from any applicable import duties and taxes.

(iv) if the Goods, or portion of the Goods, are exempt from taxes of duties, this should be indicated below by the bidder

14.4 Prices quoted by the bidder shall remain fixed and valid until completion of the Contract performance and will not be subject to variation on any account except as provided for in Clause 3.2 and 15.1 of the General Conditions of Contract, or if applicable, adjustment authorized in accordance with the price adjustment

provisions specified in Clause 11 of the Special Conditions of Contract.

15. CURRENCIES OF BID AND PAYMENT

15.1 The unit rates and the prices shall be quoted by the bidder separately in;

a. US Dollar for those inputs to the Works which the bidder expects to supply from outside the Procuring Entity 's country (referred to as "the foreign currency requirements"); and

b. Philippine Peso for those inputs to the Works which the bidder expects to supply from within the Philippines.

15.2 Payment of the contract price shall be made in the currency or currencies in which the bid price is expressed in the bid of the successful bidder.

15.3 The rates of exchange to be used by the bidder for currency conversion during bid preparation shall be the selling rates for similar transactions prevailing on the twenty eight (28) days prior to the date of bid opening, as published by Bangko Sentral ng Pilipinas.

15.4 All progress payment shall be subject to ten percent (10%) deduction for retention money.

16. DOCUMENTS ESTABLISHING ELIGIBILITY OF THE BIDDER AND THE GOODS

16.1 The bidder shall furnish, as part of its Bid, certification establishing both the bidder's eligibility to bid and that the origin of the Goods is an eligible source country, pursuant to Clause 3 and 4.

17. DOCUMENTS ESTABLISHING BIDDER'S QUALIFICATIONS TO PERFORM THE CONTRACT

17.1 The documentary evidence of the bidder's qualifications to perform the Contract, if its Bid is accepted, shall establish to the Procuring Entity's satisfaction prior to award of Contract:

(a) that, in the case of a bidder offering to supply Goods under the Contract which the bidder did not manufacture or otherwise produce, the bidder has been duly authorized by the Goods' manufacturer or producer to supply the Goods to or in the Procuring Entity 's country;

(b) that the bidder has the financial, technical and production capability necessary to perform the Contract;

(c) that, in the case of a bidder not doing business within the Procuring Entity 's

country, the bidder is, or will be (if the Contract is awarded to it), represented by an agent in that country equipped and able to carry out the maintenance, repair and spare parts stocking obligations prescribed by the Contract.

18. DOCUMENTS ESTABLISHING THE GOODS' CONFORMITY TO THE BIDDING DOCUMENTS

18.1 The documentary evidence of the Good's conformity to the Bidding Documents maybe in the form of literature drawing and data, and shall furnish:

a. a detailed description of the Goods' essential technical and performance characteristics;

b. a list, giving full particulars, including available sources and current prices, of all spare parts, special tools, etc., necessary for the proper and continuing functioning of the Goods for a period of two (2) years; and

c. a clause-by-clause commentary on the specifications, demonstrating the Goods' responsiveness to those Specifications or a statement of deviations and exceptions of the provisions of the Specifications.

18.2 For purpose of the commentary to be furnished pursuant to sub-clause (c) above, the bidder shall note that standards for workmanship, material, and equipment, and references to brand names or catalogue numbers, designated by the Procuring Entity in the Specifications, are intended to be descriptive only and not restrictive. Equipment or materials meeting the internationally accepted standards which ensure quality to or higher than the standards specified will also be accepted. The bidder may substitute other acceptable standards, brand names and/or catalogue numbers in its Bid, provided that it demonstrates to the Procuring Entity 's satisfaction that the substitution are equivalent or superior to those designated in the Specifications.
Brand names shall be specified only when specific spare parts are required or standardization is necessary.

18.2 The Bidders shall furnish evidence that the Goods offered are of acceptable quality and standards including but not limited to the number of years in production industry, and the number of units of similar capacity that have been produced and sold in which operations satisfied the end users for years.

19. BID SECURITY

19.1 The bidder shall furnish, as part of its bid, a bid security equivalent to **two percent (2%) of the Total ABC** or an equivalent amount in freely convertible currency.

19.2 The bid security is **preferably in the form of a Manager's Check.**

19.3 **Any bid not accompanied by an acceptable bid security shall be rejected outright by the Procuring Entity and will be declared as non-responsive.**

19.4 The bid securities of unsuccessful bidders will be returned as promptly as possible, after the bid awarding or expiration of the period of bid validity.

19.5 The bid security of the successful bidder will be returned when the bidder has signed the Agreement and furnished the required performance security.

19.6 The bid security maybe forfeited;

a. if the bidder withdraws its bid during the period of bid validity; or

b. if the bidder does not accept the correction of its bid price,

pursuant to Sub-Clause 29.1; or

c. in the case of a successful bidder, if it fails within the specified time limit to:

(i) sign the Agreement, or

(ii) furnish the required performance security.

20. PERIOD OF VALIDITY OF BIDS

20.1 Bids shall remain valid for ninety (90) days after the date of bid closing prescribed by the Procuring Entity, pursuant to Clause 24.

20.2 Notwithstanding Clause 20.1 above, the Procuring Entity may solicit bidder's consent to an extension of the period of bid validity. The request and the responses thereto shall be made in writing or by fax. If the bidders agree to the extension request, the validity of the bid security provided under Clause 19 shall also be suitably extended. A bidder may refuse the request without forfeiting its bid security. A bidder granting the request will not be required or permitted to modify its Bid.

21. ALTERNATIVE BIDS

21.1 Bidders shall submit Bids, which comply with the Bidding Documents. Alternative Bids will not be considered. The attention of bidders is drawn to the provisions of Clause 30.4 regarding the rejection of Bids, which are not substantially responsive to the requirement of the Bidding Documents.

22. FORMAT AND SIGNING OF BIDS

22.1 The original Bid Form and accompanying documents (as specified in Clause 13), clearly marked "Original Bid", plus three (3) copies must be received by the Procuring Entity at the date, time, and place specified pursuant to Clause 23 and 24. In the event of any discrepancy between the original and the copies, the original shall govern.

22.2 The original and all copies 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 sign on

behalf of the bidder. Written power-of-attorney accompanying the Bid shall indicate such authorization. All pages of the Bid, except for un-amended printed literature, shall be initialled by the person or persons signing the Bid. The name and position held by each person signing must be typed or printed below the signature.

22.3 The Bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the bidder, in which case such corrections shall be initialled by the person or persons signing the Bid.

23. SEALING AND MARKING OF BIDS

23.1 The bidder shall seal the original and each copy of the Bid in an inner and an outer envelope duly marking the envelopes as "original" and "copy".

23.2 The inner and outer envelopes shall:

a. be addressed to the Procuring Entity at the following address

Mr. Lorenzo Valino Jr.
BAC Chairman
Nueva Ecija II Electric Cooperative, Inc.- Area 1
Calipahan, Talavera, Nueva Ecija; and

b. bear the words "**INVITATION TO BID No. NE II-A1-2021-03 Relocation of Electrical Facilities affected by DPWH road widening project** and the words **"DO NOT OPEN BEFORE 10:00 am of August 3, 2021"**.

23.3 In addition to the information required in sub-clauses (a) and (b) above, the inner envelope shall indicate the name and address of the bidder to enable the Bid to be returned unopened in case it is declared "Late" pursuant to Clause 25.

24. DEADLINE FOR SUBMISSIONS OF BIDS

24.1 The original Bid, together with the required copies, must be received by the Procuring Entity at the address specified in Clause 23.2 not later than **10:00 am of August 3, 2021.**

24.2 The Procuring Entity may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents in accordance with Clause 11, in which case all rights and obligations of the Procuring Entity and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

25. LATE BIDS

25.1 Any Bid received by the Procuring Entity after the deadline for submission of Bids prescribed by the Procuring Entity, pursuant to Clause 24 will be declared "Late" and rejected and returned unopened to the bidder.

26. MODIFICATION AND WITHDRAWAL OF BIDS

26.1 The bidder may modify or withdraw its Bid after the Bid's submission; provided that written notice of the modification or withdrawal is received by the Procuring Entity prior to the deadline prescribed for submission of Bids.

26.2 The bidder's modification or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with provisions of Clause 23, with the outer and inner envelopes additionally marked "MODIFICATION" or "WITHDRAWAL", as appropriate. A withdrawal notice may also be sent by fax but must be followed by a signed confirmation copy.

26.3 No Bid may be modified subsequent to the deadline for submission of Bids.

26.4 No Bid may be withdrawn in the interval between the deadline for submission of Bids and the expiration of the period of bid validity specified by the bidder on the Bid Form.

27. OPENING OF BIDS BY PROCURING ENTITY

27.1 **The Procuring Entity will open the Bids, the technical proposal first, in the presence of bidders' representatives thru Zoom Cloud Meeting Application on 10:00 am of August 3, 2021. The bidders' representatives who are present shall chat their complete name and company address in the zoom chat box evidencing their attendance. The technical proposal will then be evaluated as per Clause 30.**

27.2 Bidders found eligible technically will be informed subsequently and asked to be present during the opening of their financial proposals.

27.3 The bidders' names, bid prices, all discounts offered, modifications and bid withdrawals, and the presence or absence of the requisite bid security, and such other details as the Procuring Entity, at its discretion, may consider appropriate will be announced and recorded at the opening. Any bid price or discount, which is not read out and recorded at bid opening, will not be taken into account in bid evaluation. The bidder's representatives will be required to sign the record.

27.4 Withdrawal of a bid during the interval between the deadline for submission of bids and the expiration of the period of bid validity specified in the Form of Bid may result in the forfeiture of the bid security pursuant to Clause 17.

28. PROCESS TO BE CONFIDENTIAL

28.1 Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for award of a contract shall not be disclosed to bidders or any other persons not officially concerned with such process. Any efforts by a bidder to influence the Procuring Entity 's processing of Bids or award decisions may 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 to confirm the correction of arithmetic errors discovered by the Procuring Entity in the evaluation

of the bids in accordance with sub-clauses 30.5/30.6.

29. CLARIFICATIONS OF BIDS

29.1 To assist in the examination, evaluation, and comparison of Bids, the Procuring Entity 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.

30. PRELIMINARY EXAMINATION OF BIDS

Technical Evaluation:

30.1 The Procuring Entity will examine the bids to determine whether they are complete, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.

30.2 Prior to the detailed evaluation, pursuant to Clause 32, the Procuring Entity will determine the substantial responsiveness of each Bid to the Bidding Documents including acceptable quality of the Goods offered, pursuant to Clause 18. A substantially responsive Bid is one which conforms to all the terms and conditions of the Bidding Documents without material deviation.

30.3 A Bid determined as not substantially responsive will be rejected by the Procuring Entity and may not subsequently be made responsive by the bidder by correction of the non-conformity.

Financial Evaluation:

30.4 Check the bidder's compliance to the financial documents required by the Procuring Entity

30.5 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and total price per item that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price per item will be corrected. If there is a discrepancy between the Total Amount and the sum of the total price per item, the sum of the total price per item shall prevail and the Total Amount will be corrected.

30.6 The amount stated in the Form of Bid will be adjusted by the Procuring Entity in accordance with the above procedure for the correction of errors and, shall be considered as binding upon the bidder. If the bidder does not accept the corrected amount of bid, its bid will be rejected, and the bid security may be forfeited in accordance with Sub-Clause 19.6

31. CONVERSION TO SINGLE CURRENCY

31.1 The procuring entity will convert the amounts in various currencies in which the

Bid Price is payable to Philippine Peso at the selling exchange rates officially prescribed for similar transactions as established by Bangko Sentral ng Pilipinas on the date of bid opening.

32. EVALUATION AND COMPARISON OF BIDS

32.1 The Procuring Entity will evaluate and compare the bids previously determined to be substantially responsive, pursuant to Clause 30.

32.2 The Procuring Entity 's evaluation of a Bid will exclude and not take into account:

(a) in the case of goods partially or wholly manufactured within the Procuring Entity 's country or Goods of foreign origin already located in the Procuring Entity 's country, sales and other similar taxes which may be levied on the finished Goods if the Contract is awarded to the bidder;

(b) in the case of goods to be offered from outside the Procuring Entity 's country, customs duties and other similar import duties and taxes which be levied on the Goods if the Contract is awarded to the bidder; and

(c) any allowance for price adjustment during the period of execution of the contract, if provided in the bid.

32.3 The comparison shall be of:

(a) the ex-factory/ex-warehouse/off-the-shell price of the Goods to be offered from within the Procuring Entity 's country (such price to include all costs as well as duties and taxes paid or payable on components and raw material incorporated or to be incorporated in the Goods): and

(b) the CIF port-of-entry price of the Goods to be offered from outside the Procuring Entity's country.

32.4 The evaluation of bids shall take into account the price and other commercial features of the offer. In addition, it may also take into account other criteria, such as those in the sample listed below.

* Contractual and Commercial Deviations
* Delivery Schedule
* Operating Costs
* Functional Guarantee of the Goods
* Local Handling and Transportation

33. CONTACTING THE PROCURING ENTITY

33.1 Subject to Clause 29, no bidder shall contact the Procuring Entity on any matter relating to its Bid, from the time of bid opening to the time the contract is awarded unless initiated by the Procuring Entity.

33.2 Any effort by a bidder to influence the Procuring Entity in its decision in respect of bid evaluation, bid comparison or Contract award will result in the rejection of the Bidder's Bid.

34. PROCURING ENTITY'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS

34.1 The Procuring Entity reserves the right to accept or reject any Bid and to annul the bidding process and reject all Bids at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidders of the grounds for the Procuring Entity 's action.

35. POST QUALIFICATION AND AWARD

35.1 The Procuring Entity will determine to its satisfaction whether the Bidder selected as having submitted the lowest-evaluated, responsive bid is qualified to satisfactorily perform the Contract.

35.2 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 qualification submitted by the bidder, pursuant to Clause 17, as well as such other information as the Procuring Entity deems necessary and appropriate.

35.3 An affirmative determination will be pre-requisite for award of the Contract to the Bidder. A negative determination will result in rejection of the Bidder's bid.

35.4 The Procuring entity will award the Contract to the successful bidder whose Bid has been determined the lowest calculated responsive Bid, provided further that the bidder is determined to be qualified to satisfactorily perform the Contract.

36. NOTIFICATION OF AWARD

36.1 The Procuring Entity will notify the successful bidder in writing by registered letter, or by fax or email to be confirmed in writing by registered letter or by fax or email, that its Bid has been accepted and on which basis the Bid has been accepted.

36.2 The notification of award will constitute the formation of a contract, until the Contract has taken effect pursuant to Clause 37.

37. ISSUANCE OF NOTICE OF AWARD AND SIGNING OF CONTRACT

37.1 At the time of notification of award, the Procuring Entity will send the successful bidder the Notice of Award.

37.2 Within five (5) working days of receipt of such Notice of Award the successful

bidder shall affix its signature and date in the Notice of Award and return it to the Procuring Entity together with the corresponding Performance Security.

37.3 After signing of Notice of Award and posting of Performance Security of the successful bidder, the Procuring Entity will send the Contract Form provided in the Bidding Documents, incorporating all agreements between the parties.

37.4 Within five (5) working days of receipt of such Contract Form the successful bidder shall affix its signature and date in the Contract Form and return it to the Procuring Entity

37.5 Upon receipt of the signed Contract form, the Procuring Entity will issue Notice to Proceed to the successful bidder.

38. PERFORMANCE SECURITY

38.1 Within five (5) working days of the receipt of notification of award from the Procuring Entity, the successful bidder shall post the performance security, in Manager's Check form or cash, to be deposited to the Procuring Entity's bank account.

38.2 Failure of successful bidder to comply with the requirements of Clause 37 or 38 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security.

ANNEX A: BID EVALUATION PROCEDURE

Step 1 - Submittal of Bid

If a submittal is late, it should not be opened, but should be returned to the Bidder unopened.

Step 2 – Technical Bid Evaluation

During the Bid opening, preliminary examination shall begin by determining that the general conditions of the Bidding Documents have been met in the bid. The following items should be checked to determine whether the Bid is responsive.

- Bid does not show evidence of tampering.
- Bid is from a Procuring Entity of the Bidding Documents.
- Bid Addendum received.
- Bid appears to be complete.
- Bid on all items per schedule.
- Bid contains Deviation Form duly filled in
- Bidder meets the required experience and number of sales
- Bidder is a registered company

a. The Bidder and the manufacturer are both from eligible source countries as defined in list of eligible source countries.

b. The Bid contains a manufacturer's name and catalogue number for each item in the completed bid schedule.

c. The Bid contains authorization from the manufacturer to supply the goods to the Bidder for this procurement.

d. The Bid contains a listing, for each item bid, showing the manufacturer's years of manufacture and the international sales for the required number of years. This is to include dollar volume, Procuring Entity, and names and telephone numbers for Procuring Entity contact person(s).

e. The Bid contains the Technical Data Sheets with the Bidder's guaranteed data duly stamped and signed by the Bidder.

f. The Bid contains supplementary technical information to determine if each item offered meets the Technical Specifications of the Bidding Documents.

In the absence of substantial compliance with all of the above items, the bids are incomplete, shall be declared non-responsive and has to be rejected.

Step 3 – Opening of the Financial Offer

During the opening of the financial proposal, the following information is to be read and recorded:

- Name of Bidder;
- Any discount offered;
- Name of Surety Company or Bank which issued the Bid Security;
- Bid security is present in the correct amount and acceptable form
- Validity of the Bid Security
- Validity of the Bid
- Bid security receipt is issued by the Surety Company
- Net financial contracting capacity is computed
- ITR of the bidder for the past three (3) years duly marked received by the BIR is submitted
- Financial Statements of the bidder for the past three (3) years is submitted

a. The Bid contains price schedule(s) that have the unit price shown for each item in the completed bid schedule. The price schedule is to be checked for arithmetic errors in the extensions and the additions.

b. Determine that the Bidder has filled out correctly the price schedule for what he is bidding.

c. The price schedule be checked to determine that the correct quantities are shown.

d. Calculate the amounts for the applicable penalties as provided in the Technical Specifications and add amounts to the Bid prices for evaluation purposes only.

e. After the special factor, additions and conversion of schedule total to Philippine Peso, determine which remaining bid, has the lowest price for this bid schedule.

f. Compare the price of the low bid, for this bid schedule.

Step 4 - Evaluation and Comparison of Bids

All bids for this schedule are then financially evaluated to determine whether the company has the financial capability to perform the contract. Bidders who are found to be financially not sound shall be rejected.

If any item in the low bid has only minor technical deviations from the specifications, this shall be clarified with the bidder.

If any item in the low bid does not meet the technical specifications, that bid is rejected. The evaluation process then continues to the next low bid for that schedule.

This procedure to continue until the low bid, meeting the technical specifications of this Bidding

Documents for this schedule, is determined.

Step 5 - Ability to Perform and Recommend for Award

After the low bid meeting the technical specifications is determined, check on enough of his previous sales of similar materials to determine whether the Bidder has demonstrated that he is qualified to perform the Contract. If the low Bidder is found to have provided unsatisfactory materials of similar nature on other contracts, his bid is to be rejected. The evaluation process then continues to the next low bid for that schedule.

This procedure shall continue until the low Bidder qualified to perform the contract for this schedule is determined. The recommendations for the Award of Contract for this schedule to this lowest responsible and responsive Bidder is automatic.

Note:

"Low bid" is hereby defined as the Bid on a complete bid schedule that has the lowest total price after considering all factors and/or reference up to that point in the evaluation procedure.

SECTION III. GENERAL CONDITIONS OF CONTRACT

TABLE OF CLAUSES

1. DEFINITIONS

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

(a) "The Contract" means the agreement entered into between the Procuring Entity 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 equipment, machinery and/or other materials which the Supplier is required to supply to the Procuring Entity under the Contract;

(d) "Services" means services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other such obligations of the Supplier covered under the Contract;

(e) "The Procuring Entity " means the Nueva Ecija II Area 1 Electric Coop., Inc.

(f) "The Supplier" means the individual or firm supplying the Goods under this Contract;

2. APPLICATION

These General Conditions shall apply as part of the Contract which shall include the following documents and the priority of these documents shall be as follows:

a) Contract Agreement
b) Notification of Award
c) Special Conditions of Contract
d) General Conditions of the Contract
e) Bidding Documents
f) Forms and Schedules
g) Supplier's Bid

3. COUNTRY OF ORIGIN

3.1 All Goods and Services supplied under the Contract shall have their origin from the eligible source countries, as defined in Section II, Clause 3.

3.2 For purposes of this Clause 3, "origin" means the place where the Goods were mined, grown or produced, or from which the services are supplied. Goods are produced when, through manufacturing, processing, or substantial and major assembling of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its

components.

3.3 The origin of Goods and Services is distinct from the nationality of the Supplier.

4. STANDARDS

4.1 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 standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution.

5. USE OF CONTRACT DOCUMENTS AND INFORMATION

5.1 The Supplier shall not, without the Procuring Entity '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 the Procuring Entity in connection therewith, to any person other than a person employed by the Supplier in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.

5.2 The Supplier shall not, without the Procuring Entity 's prior written consent make use of any document or information enumerated in para. 5.1 except for purposes of performing the Contract.

5.3 Any document, other than the Contract itself, enumerated in para. 5.1 shall remain the property of Procuring Entity and shall be returned (in all copies) to the Procuring Entity on completion of the Supplier's performance under the Contract if so required by the Procuring Entity.

6. PATENT RIGHTS

6.1 The Supplier shall indemnify the Procuring Entity 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.

7. PERFORMANCE SECURITY

7.1 Within five (5) working days after the Supplier's receipt of notification of award of the Contract, the Supplier shall furnish performance security to the Procuring Entity in the amount specified in the Special Conditions of Contract.

7.2 The proceeds of the Performance Security shall be payable to the Procuring Entity as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract. The performance security shall be to the account of the Supplier who signed the Contract. The performance security shall also guarantee the enforcement of the warranty provision in Clause 15 of this section.

7.3 The Performance Security, which should be callable on demand shall be denominated in the currency of the Contract and shall be in one of the following forms:

(a) A bank guarantee or irrevocable Letter of Credit, issued by a bank in the Philippines or a bank abroad which has a jointly and severally liable correspondent bank in the Philippines, acceptable to the Procuring Entity, and in the form provided in the Bidding Documents or another form acceptable to the Procuring Entity. The Procuring Entity may request that said bank guarantee or irrevocable Letter of Credit be confirmed by a reputable bank acceptable to the EC.

Or

(b) A cashier's check, certified check, or cash.

7.4 The performance security will be discharged by the Procuring Entity and returned to the Supplier not later than thirty (30) days following the date of completion of the Supplier's performance obligations, including any warranty obligation, under the Contract.

8. INSPECTIONS AND TESTS

8.1 The Procuring Entity or its designated third party inspector shall, at all reasonable times, be allowed free and ready access to the Supplier's premises and those of his sub-contractors for the purpose of inspecting the specified goods and obtaining information as to the progress of the work.

8.2 The Procuring Entity or its designated third party inspector shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract. The Special Conditions of Contract and/or the Technical Specifications shall specify what inspections and tests the Procuring Entity requires and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing of the identity of any representatives retained for these purposes.

8.3 The inspections and tests may be conducted on the premises of the Supplier or its sub-contractor(s), at point of delivery and/or at the good's final destination. Where conducted on the premises of the Supplier or its sub-contractor(s), all reasonable facilities and assistance-including access, drawings and production data-shall be furnished two weeks before such tests take place to the inspectors at no charge to the Procuring Entity

8.4 Should any inspected or tested Goods fail to conform to the Specification, the Procuring Entity may reject them, and the lot they represent, and the Supplier shall replace the rejected Goods within the life of the Contract or not later than ninety (90) days from receipt of notice of rejection, whichever comes first, or all alterations necessary to meet specification requirements free of cost to the Procuring Entity

8.5 The Procuring Entity 's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival in the Philippines shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the

Procuring Entity or its representative prior to the Goods shipment from the country of origin.

8.6 Test Certificates for all Goods shall be prepared by the Supplier, signed by both the Supplier and the Procuring Entity or third party inspectors. Also in case of no attendance of the tests by the Procuring Entity or third party inspector, test certificates signed by the Supplier are to be submitted to the Procuring Entity.

8.7 Nothing in Clause 8 shall in any way release the Supplier from any warranty or other obligations under this Contract.

9. PACKING AND MARKING

9.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Special Conditions of Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

9.2 The packing, marking and documentation within and outside the package shall comply strictly with such special requirements as shall be expressly provided for in the Contract and, subject to Clause 18, in any subsequent instructions ordered by the Procuring Entity.

9.3 Proposal for packing and marking should be approved by the Procuring Entity.

10. DELIVERY AND DOCUMENTS

10.1 Delivery of the Goods shall be made by the Supplier in accordance with the terms specified by the Procuring Entity in its Schedule of Requirements and Special Conditions of Contract.

10.2 For purposes of the Contract, "FOB", "CIF" and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of the International Rules for the Interpretation of the Trade Terms published by the International Chamber of Commerce, Paris, and commonly referred to as INCOTERMS.

11. INSURANCE

11.1 The Goods supplied under the Contract shall be fully insured in the currency of the contract against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the Special Conditions of Contract.

12. TRANSPORTATION

12.1 Where the Supplier is required to effect delivery under any other terms, for

example, by post or another address in the source country, the Supplier shall be required to meet all transport and storage expenses until delivery.

12.2 In all of the above cases, transportation of the Goods after delivery at the designated point of delivery shall be the responsibility of the Procuring Entity.

12.3 Ocean transportation shall be by vessels registered in eligible source countries, as defined in Clause 3 of the Instructions to Bidders, or belonging to shipping conferences in which shipping lines from such member countries hold the major share.

13. INCIDENTAL SERVICES

13.1 As specified in the Special Conditions of Contract, the Supplier may be required to provide any or all of the following services:

(a) Performance or supervision of on-sight assembly and/or start-up of the supplied Goods;

(b) Furnishing of tools required for assembly and/or maintenance of the supplied Goods;

(c) Furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;

(d) 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

(e) Conduct of training of the Procuring Entity 's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance and/or repair of the supplied Goods.

13.2 Prices charged by the Supplier for the preceding incidental services, if not included in the Contract Price for the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged by the Supplier to other parties for similar services.

14. SPARE PARTS

14.1 As specified in the Special Conditions of Contract, the Supplier may be required to provide any or all of the following materials and notifications pertaining to spare parts manufactured or distributed by the Supplier:

(a) Such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under the Contract; and

(b) In the event of termination of production of the spare parts:

(i) advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and

(ii) following such termination, furnishing at no cost to the Procuring Entity, the blue prints, drawings, and specifications of the spare parts, if and when requested.

15. WARRANTY

15.1 The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise, in the Contract. The Supplier further warrants that the Goods supplied under this Contract shall have no defect arising from design, materials or workmanship or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions obtaining in the country of final destination.

15.2 This warranty shall remain valid for 12 months after the Goods or any portion thereof as the case maybe, have been delivered to the final destination and commissioned indicated in the Contract or for 18 months after the date of shipment to the port of entry in the Philippines, whichever period concludes earlier, unless specified otherwise in the Special Conditions of Contract or in the Technical Specifications.

15.3 The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty.

15.4 Upon receipt of such notice, the Supplier shall repair or replace within 30 days of such notification the defective Goods or part thereof, without costs to the Procuring Entity other than, where applicable, the cost of inland delivery of the repaired or replace Goods or parts from the port of entry to the final destination.

15.5 If the Supplier, having been notified, fails to remedy the defect(s) within 30 days of such notification, the Procuring Entity may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Procuring Entity may have against the Supplier under the Contract.

16. PAYMENT

16.1 The method and conditions of payment to be made to the Supplier under the Contract shall be specified in the Special Conditions of Contract.

16.2 The currency in which payment is made to the Supplier under this Contract shall be specified in the Special Conditions of Contract.

16.3 No payment shall be due while the Supplier is in default in respect to any of the provisions of the contract. On the event that the Supplier is in default, the Procuring Entity reserve the right to instruct Procuring Entity designated bank to withhold any or all payments.

17. PRICES

17.1 Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not, with the exception of any price adjustments authorized by the Special Conditions of Contract, vary from the prices quoted by the Supplier in its bid.

18. CHANGE ORDERS

18.1 The Procuring Entity may at any time, by a written order given to the Supplier pursuant to Clause 31, General Conditions of Contract, 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 the Procuring Entity;

(b) the method of shipment or packing;

(c) place of delivery; or

(d) the Services to be provided by the Supplier.

18.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any part of the work under the Contract whether changed or not changed by the order, an equitable adjustment shall be made to the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Procuring Entity 's change order.

19. CONTRACT AMENDMENTS

19.1 Subject to Clause 18, no variation or modification of the terms of the Contract shall be made except by written amendments signed by the parties.

20. ASSIGNMENT

20.1 The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Procuring Entity 's prior written consent.

21. SUBCONTRACTS

21.1 The Supplier shall notify the Procuring Entity in writing of all subcontracts awarded under the Contract if not already specified in his bid. Such notification, in his original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.

21.2 Subcontracts must comply with the provisions of Clause 3.

22. DELAYS IN THE SUPPLIER'S PERFORMANCE

22.1 Delivery of the Goods and performance of Services shall be made by the Supplier in accordance with the time schedule specified by the Procuring Entity in its Schedule of Requirements.

22.2 A delay by the Supplier in the performance of its delivery obligations, for which either no amendment to the contract or no extension of the performance security was made, shall render the Supplier liable to any or all of the following sanctions:

22.2.1 forfeiture of its performance security,

22.2.2 imposition of liquidated damages,

22.2.3 and/or termination of the Contract for default.

22.3 If at any time during performance of the Contract, the Supplier or its sub-contractor(s) should encounter conditions impending timely delivery of the Goods and performance of the Services, the Supplier shall promptly notify the Procuring Entity in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after the receipt of the Supplier's notice, the Procuring Entity shall evaluate the situation and may at its discretion extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.

23. LIQUIDATED DAMAGES

23.1 Subject to Clause 25, if the Supplier fails to secure acceptance from the Procuring Entity for the delivery of any or all of the Goods or performance of the Services within the delivery period(s) specified in the Contract, the Procuring Entity shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to one tenth of one percent (0.1 %) of the delivered price of the Goods or Services that were delivered early or delayed, for each day outside of the Contract schedule for deliveries, up to a maximum deduction of Ten (10%) percent of the Contract Price of the Goods or Services involved. Once the maximum is reached, the Procuring Entity may consider termination of the Contract.

24. TERMINATION FOR DEFAULT

24.1 The Procuring Entity may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or in part:

(a) If the Supplier fails to deliver any or all of the Goods within the time period(s) specified in the Contract, or any extension thereof granted by the Procuring Entity pursuant to Clause 22; or

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

24.2 In the event the Procuring Entity terminate the Contract in whole or in part, pursuant to para. 24.1, the Procuring Entity may procure, upon such terms and in such manner as it deems appropriate, Goods similar to those undelivered, and the Supplier shall be liable to the Procuring Entity for any additional cost of Goods for such similar Goods. However, the Supplier shall continue performance of the Contract to the extent not terminated.

25. FORCE MAJEURE

25.1 Notwithstanding the provisions of Clause 22, 23, 24, 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.

25.2 For purposes of this clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but not restricted to wars or revolution, fires, floods, epidemics, quarantine restrictions and freight embargoes.

25.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Procuring Entity in writing of such condition and the cause thereof. Unless otherwise directed by the Procuring Entity 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.

26. TERMINATION FOR INSOLVENCY

26.1 The Procuring Entity may at any time terminate the Contract by giving written notice to the Supplier, without compensation to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent. Notwithstanding the above, such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Procuring Entity.

27. TERMINATION FOR CONVENIENCE

27.1 The Procuring Entity may, by written notice sent to the Supplier, terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Procuring Entity 's convenience, the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective.

27.2 The Goods that are complete and ready for shipment within thirty (30) days after the Supplier's receipt of notice of termination shall be purchased by the Procuring Entity at the Contract terms and prices. For the remaining Goods, the Procuring Entity may elect:

(a) to have any portion completed and delivered at the Contract terms and prices; and/or

(b) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and for materials and parts previously procured by the Supplier for the use in this contract.

28. RESOLUTION OF DISPUTES

28.1 The Procuring Entity and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

28.2 If, after thirty (30) days from the commencement of such informal negotiations, the Procuring Entity and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanism specified in the Special Conditions of Contract. This mechanism may include, but is not restricted to, conciliation mediated by a third party, adjudication in an agreed national or international forum, and/or international arbitration. The mechanism shall be specified in the Special Conditions of Contract.

29. GOVERNING LANGUAGE

29.1 The Contract shall be written in the language of the bid, as specified by the Procuring Entity in the Instruction to Bidders. Subject to Clause 30, the language 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 that same language.

30. APPLICABLE LAW

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

31. NOTICES

31.1 Any notice given by one party to the other pursuant to the Contract shall be sent in writing or by telegram, fax or telex/cable and confirmed in writing to the address specified for that purpose in the Special Conditions of Contract.

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

32. TAXES AND DUTIES

32.1 A Supplier providing imported goods shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the Philippines.

32.2 A Supplier providing domestic goods shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the Contract Goods to the Procuring Entity. Value Added Tax (VAT) or similar local taxes on finished products shall be identified and shall be reimbursed to the Supplier by the Procuring Entity upon presentation of documentary evidence that taxes have been paid (Clause 11.2.3, Section IV - Special Conditions of Contract.

SECTION IV. SPECIAL CONDITIONS OF CONTRACT

TABLE OF CLAUSES

1. GENERAL

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Condition of Contract. The corresponding clause number of the General Condition is indicated in parenthesis.

2. DEFINITION

2.1 The Procuring Entity is Nueva Ecija II Electric Cooperative., Inc.- Area 1

2.2 The Supplier is (Name of Supplier)

2.3 EC or Coop is Electric Cooperative

3. COUNTRY OF ORIGIN

The countries of origin are defined in Section II, Clause 3.1, whereas the term "origin" is defined in Section III, Clause 3.

4. PERFORMANCE SECURITY

The Performance Security shall be in the amount of ten (10%) percent of the Contract Price in form of Manager's Check and

4.1 shall be valid initially for a period covering the delivery and construction work schedule plus 45 calendar days; and

4.2 shall be extended with each delivery to cover also the warranty period of the delivered goods plus 30 calendar days.

5. INSPECTION AND TEST

The inspection and test procedures, required by the Procuring Entity, are described in Section V - General Technical Conditions as well as in Section VII - Technical Specifications.

When the Technical Specifications do not specify otherwise and 100 % testing is not required, the American Standard ANSI/ASQC Z1.4-1993 (Sampling Procedures and Tables for Inspection by Attributes) will be used as the guidelines for inspecting and/or testing of the goods and the Acceptable Quality Level to be 0.40.

Cost for a minimum of two (2) Procuring Entity 's representative(s), such as travel cost, accommodation and living expenses shall be borne by the Supplier.

6. PACKING AND MARKING

6.1 Refer to Section V, Clause 8 and 9, for marking requirement

7. DELIVERY AND DOCUMENTS

7.1 Delivery Schedule:

For goods supplied within the Philippines counting will be from the date the Supply Contract is signed.

Delivery is considered complete when:

a) the specified quantity of goods are received at the Coops Headquarters or as specified by the Procuring Entity within the area coverage in accordance with all the requirements in the contract, or

b) the goods, to be delivered, at Manila warehouse/factory, have been loaded on the Supplier's truck, or

c) the goods, to be delivered to the Coop headquarters or as specified by the Procuring Entity within the area coverage, have been received by the Coop and a Receiving Report has been provided by the Coop.

7.2 Documents for Imported Goods Shipped to EC HQ.

Upon shipment, the Supplier shall notify the Procuring Entity and the Insurance Company by cable, fax or telex the full details of the shipment including Contract number, description of Goods, quantity, vessel, the bill of lading number and date, port of loading, date of shipment, port of discharge, estimated time of arrival, port of entry, etc. The Supplier shall send by courier the following documents to the Procuring Entity with a copy to the Insurance Company:

7.2.1 Original & six (6) copies of the Supplier's invoice showing Goods description, quantity, unit price, total amount. The cost of insurance and freight included in the total amount shall be itemized separately. The cost of inland freight, brokerage, handling and other incidental expenses within the Philippines, included in the total amount shall likewise be itemized separately.

7.2.2 Original and four (4) copies of the negotiable, clean on-board bill of lading of the final carrier/vessel to Philippines marked freight prepaid and two (2) copies of non-negotiable bill of lading;

7.2.3 Original & six (6) copies of packing list identifying contents of each

package by serial number;

7.2.4 Original & three (3) copies of Insurance Certificate;

7.2.5 Original & three (3) copies of Manufacturer's/Supplier's guarantee certificate;

7.2.6 Original & three (3) copies of:

7.2.6.1 Inspection certificate issued by the EC or any authorized inspection agency or a certificate of waiver signed by the EC;

7.2.6.2 the Manufacturer's factory inspection report, and

7.2.6.3 Societe de Surveillance (SGS) pre-shipment Clean Report of Findings or number and date of issue.

7.2.7 Original & three (3) copies of Certificate of Origin endorsed by the Chamber of Commerce.

7.2.8 Original & three (3) copies of evidence showing that the Supplier has forwarded the shipping documents listed above to the Procuring Entity via an international document handling service similar to Federal Express or DHL. These documents shall reach the Procuring Entity not later than ten (10) calendar days after shipment as evidenced by the date of the Bill of Lading, except those shipping documents covering shipment of materials from Japan, Korea, Taiwan, Thailand and other eligible Asian source countries and airshipments, which shall reach the Procuring Entity not later than three (3) calendar days after shipment. Any expenditure incurred by the Procuring Entity (such as demurrage charges, storage fee, document reproduction costs and other similar charges/expenditure) as result of late receipt of required shipping documents, or incorrect shipping documents, shall be for the account of the Supplier. Filing fee being charged by the BOI, DOF and other government agencies for the tax and duty free importation of the goods shall be borne by the Supplier.

7.2.9 Original & three (3) copies of the extension for the Performance Security as per Clause 4.2.

7.3 Documents for Domestic Goods delivered to EC HQ.

The Supplier shall send the following documents to the EC with a copy to each the Procuring Entity and the insurance company:

7.3.1 Original & three (3) copies of the Supplier's invoice showing Goods

description, quantity, unit price, total amount. The cost of freight from Supplier's Warehouse to designated destination shall be itemized separately.

7.3.2 Original & three (3) copies of packing list identifying contents of each package by serial number, Consignee & recipient Coop.

7.3.3 Original & three (3) copies of Insurance Certificate on any Goods shipped DDP to EC HQ.

7.3.4 Original & three (3) copies of Manufacturer's/Supplier's guarantee certificate;

7.3.5 Original & three (3) copies of Inspection certificate issued by:

7.3.5.1 An authorized inspection agency or a certificate of waiver signed by the EC, and

7.3.5.2 the Manufacturer's factory inspection report.

7.3.6 Original & three (3) copies of Certificate of Origin.

7.3.7 For wood products, a copy of the DENR logging permit under which the trees were cut in the Philippines.

7.3.8 Original & three (3) copies of the extension for the Performance Security as per Clause 4.2.

7.3.9 Original & three (3) copies of the certificates proving the amount for all costs as well as duties and taxes paid or payable on components and raw material incorporated or to be incorporated in the goods as stated in the price sheets.

Payments are limited to the amount stated in such certificates but shall not exceed the amount stated in the price sheets."

8. INSURANCE

The marine and inland insurance shall be in an amount equal to one hundred ten percent (110%) of the value of the Goods from "warehouse to recipient EC warehouse" on "All Risks" basis including War Risk, Civil Unrest, and Strike clauses and shall be valid for ninety (90) days after arrival of the equipment at designated EC HQ or as specified by the Procuring Entity within the area coverage.

The insurance shall be paid by the Supplier. It shall be the responsibility of the Supplier that the insurance coverage provided include the cost of conducting all necessary

investigation of report of damage, loss or pilferage. Such investigation and preparation of report shall be done by the Supplier at no cost to the Procuring Entity.

9. INCIDENTAL SERVICES

The services covered under Clause 13, Section III, General Conditions of Contract, Sub-Clause 13.1 letters (c), (d), and that of those required in the Technical Specifications shall be furnished. The cost shall be included in the contract price.

10. SPARE PARTS

Suppliers shall carry sufficient inventories to assure ex-stock supply of consumable spares such as gaskets, plugs, washers, belts, etc. other spare parts and components shall be supplied as promptly as possible but in any case shall not exceed one (1) month after placement of order and establishment of Letter of Credit or execution of Contract.

11. PAYMENT

11.1 For Goods and services supplied from countries other than the Philippines payment shall be made as follows:

11.1.1 Once a month or for an accomplishment of at least ₱ 1.0 million, the contractor may submit a request for payment for work accomplished. Such request for payment shall be verified and certified by the Coop project engineer, and approved by Coop Technical/Engineering Manager. Except as otherwise stipulated in the contract, materials and equipment delivered on the site but not completely put in place shall not be included for payment.

11.1.2 The Coop shall have the right to deduct from the contractor's progress billing such amount as may be necessary to cover third party liabilities, as well as uncorrected discovered defect in the project.

11.2 For Goods and Services supplied from within the Philippines, payment shall be made as follows:

11.2.1 Once a month or for an accomplishment of at least ₱ 1.0 million, the contractor may submit a request for payment for work accomplished. Such request for payment shall be verified and certified by the Coop project engineer, and approved by Coop Technical/Engineering Manager. Except as otherwise stipulated in the contract, materials and equipment delivered on the site but not completely put in place shall not be included for payment.

11.2.2 The Coop shall have the right to deduct from the contractor's progress billing such amount as may be necessary to cover third party liabilities, as well as uncorrected discovered defect in the project.

11.3 Should the Supplier fail to receive from Procuring Entity the Acceptance Certificate as specified in paragraphs 11.1.2 & 11.2.2 within (60) days following the date of delivery of the materials to Procuring Entity headquarters or as specified by the Procuring Entity within the area coverage, the Supplier may request for payment by submitting to Procuring Entity three (3) copies of the Voucher bearing the following certification:

I/we hereby certify that the materials and equipment covered by this invoice were delivered to the Procuring Entity headquarters or as specified by the Procuring Entity delivery point as specified in the Delivery Schedule prior to sixty (60) days before the date of this certification, that all warranties and guaranties, and final drawing have been delivered to Procuring Entity, that no objection of any kind has been received from Procuring Entity to the payment of the remaining ten (10%) percent of this equipment.

_____ _____
Date Supplier

ATTESTED BY:

_____
Authorized Signature

_____

_____
Title

12. RESOLUTION OF DISPUTES

The dispute resolution mechanism to be applied pursuant to Clause 28 of the General Conditions shall be as follows:

12.1 in the case of a dispute between the Procuring Entity and a Supplier which is a national of the Philippines, the dispute shall be referred to adjudication/arbitration in accordance with the laws of the Philippines; and

12.2 in the case of a dispute between the Procuring Entity and a foreign Supplier, the dispute shall be settled by arbitration, held in Manila, in accordance with the provisions of the UNCITRAL Arbitration Rule

13. NOTICES

For the purpose of all notices, the following shall be the address of the Procuring Entity and Supplier.

Procuring Entity:

Mr. Lorenzo Valino Jr.
BAC Chair
Nueva Ecija II Electric Cooperative, Inc. -Area 1 (NEECO II Area 1)
Calipahan, Talavera, Nueva Ecija
Philippines 3114
Tel./Fax 044 411 1007
e-mail: bac_neeco2area1@yahoo.com.ph

Supplier:

_____
(to be filled in at the time of contract signature)

SECTION V. GENERAL TECHNICAL CONDITIONS

TABLE OF CLAUSES

1. FORM OF SPECIFICATIONS

1.1 Abbreviated, outline type.

1.2 Determine components of specifications from Table of Contents.

2. SUBMITTAL OF INFORMATION

2.1 General: After award of Contract, submit information requested herein to location designated. All information shall be in English.

2.2 Updated Delivery Schedule:

Submit three (3) copies. (See Section IV)

2.3 Shipping Papers:

Submit three (3) copies, unless specified otherwise, of reports required in specifications and required by referenced codes and standards.

2.4 Test Reports:

Submit three (3) copies unless specified otherwise, of reports required in specifications and required by referenced codes and standards.

2.5 Instruction Manuals:

Submit two (2) complete sets of instruction manuals for each unit supplied; covering installation, operation and maintenance for equipment, auxiliary items and accessory devices furnished, and including assembly drawings descriptive literature and parts lists, with identification symbols, for all replaceable parts and assemblies including address, phone and fax number where spare parts shall be ordered.

2.5.1 Instruction manuals shall include nameplate information and shop order numbers for each item of equipment furnished.

2.5.2 Instruction manuals shall include a list of recommended spare parts.

2.5.3 Information manual shall be bound between hard covers and the contents shall be properly indexed.

2.6 Shop drawings and manufacturer's information:

2.6.1 Material requested herein or in specifications. Term "Shop Drawings" refers to an outline, general arrangements, and installation requirement drawings needed to ensure that equipment to be supplied is in accordance with the Contract Specifications. Term "Shop Drawings" does not include drawings prepared solely for the manufacturer's use in fabrication of equipment.

2.6.2 Initial Submittal:

2.6.2.1 Drawings not larger than 36" x 120": Submit three (3) copies of each drawing to Procuring Entity. Copies of each drawings submitted by Supplier may be produced by any reproduction process except that producing blue-prints having white lines on a blue background.

2.6.2.2 Drawings larger than 36" x 120", printed catalogue information or brochures or other multiple page documents: Submit three (3) copies of each drawing to Procuring Entity.

2.6.2.3 The Supplier shall submit to the Procuring Entity, shop drawing for each item in the contract, which requires drawing approval, within thirty (30) calendar days after the date of contract ratification.

2.6.3 Procuring Entity will review shop drawings, indicate action taken, and return one (1) copy to Supplier. The Procuring Entity within thirty (30) calendar days after receiving such drawings, shall signify his approval or otherwise.

2.6.4 Additional copies and transmittal:

2.6.4.1 If Supplier's copy is marked "RESUBMIT", Supplier shall, within 15 days of receipt thereof, recheck drawing and make necessary revisions in accordance with comments noted on shop drawing and/or in separate letter and resubmit three (3) copies to the Procuring Entity for review. The Procuring Entity has 15 days to notify Supplier of his action or it will be deemed that the Procuring Entity has approved the resubmitted drawings.

2.6.4.2 If Supplier's copy is marked "REVIEWED" OR "SUPPLEMENTAL REFERENCE", Supplier shall submit three (3) copies to the Procuring Entity for review. The Procuring Entity has 15 days to notify Supplier of his action or it will be deemed that the Procuring Entity has approved the resubmitted drawing.

2.6.5 Supplier's responsibility: Check shop drawings prior to submittal for errors, correctness of details and conformance with the Contract and for work detailed on the drawing.

2.6.6 Review of shop drawings by Procuring Entity does not relieve the Supplier of responsibility for errors, correctness of details or conformance with the Contract.

2.6.7 Supplier shall be responsible for making corrections to materials and equipment as required to obtain conformance with Contract requirements, whether such corrections are required during review of shop drawings, subsequent to release of drawings, data and information mentioned hereinafter, or after fabrication and shipment of materials and equipment.

2.6.8 Submit other information and/or samples as may be requested by the Procuring Entity within a reasonable time period.

3. CODES AND STANDARDS

3.1 Perform work in accordance with best present-day manufacturing practices.

3.2 Conform with and test in accordance with applicable sections of latest revisions of codes and standards listed in specifications.

3.3 Conflicts:

3.3.1 Between referenced codes and standards: Codes and standards establishing more stringent requirement shall be followed.

3.3.2 Between referenced codes and standards and specifications: One establishing more stringent requirements shall be followed.

3.4 For convenience in designation in the specifications, certain equipment, articles, materials or processes are designated by trade names of the manufacturer and/or catalogue names and numbers. Such designation shall be deemed to be followed by the words "equal or better" whether such words are shown or not. The Bidder may also offer alternative equipment, articles materials or processes provided that the alternative shall be equivalent or better in quality, suitability and convenience of use to that indicated or specified in the Contract Documents. Equipment articles, materials or processes meeting other standards which ensure an equal or higher quality than the standards mentioned will also be accepted at the discretion of the Procuring Entity. If the equipment, etc., are manufactured to standards other than shown in the bid documents, the bidder shall provide English Translation, by an accredited translation Agency, of the standard proposed in his bid at the time of submission of his bid proposal. It will be the bidder's responsibility to demonstrate and prove to the Procuring Entity's satisfaction that alternatives offered are substantially equivalent to the brand name identified.

The Bidder shall, in his bid, provide the name of the manufacturer and the catalogue number for each item of material listed on the Material Schedule plus the major items in the substations, and shall also provide the guaranteed losses for each transformer size and type.

3.5 The following are the Sources of Standards referred to in this Bid:

ANSI - American National Standard Institute
1430 Broadway, New York, N.Y. 10018

ASTM - American Society for Testing and Materials
1916 Race Street, Philadelphia, Pa. 19103

AWPA - American Wood Preservers Association
P.O. Box 849
Stevensville, Maryland 21666
U. S. A.

EEI - Edison Electric Institute
750 Third Avenue, New York N.Y. 10017

IACS - International Annealed Copper Standard

IEC - International Electrotechnical Commission
3 Rue de Varembe, P.O. Box 131,
CH - 1211 Geneva 20, Switzerland

IEEE - Institute of Electrical and Electronic Engineers
345 East 47th Street, New York, N. Y. 10017

NEMA - National Electrical Manufacturers Association
2101 L Street, N.W., Washington, D.C. 20037

4. SPECIAL TOOLS

4.1 Provide any special tools, fixtures and instruments to EC which are necessary in assembly, operation and maintenance of equipment.

4.2 Special tools and devices are those designed for purpose and use of which are peculiar to the equipment furnished and which are not available from normal wholesale or retail outlets. Standard general purpose tools are not included in this requirement.

4.3 Provide neat and substantial metal tool box with hinged cover and lifting handles or metal cabinet with hinged door, prominently marked box or cabinet "TOOLS FOR _____" for each set of tools furnished.

5. SHOP TESTS

5.1 Shop tests are specified and required by referenced codes and standards.

5.2 The Supplier shall provide Procuring Entity with certified copies of all test data and reports.

5.3 The Supplier shall withhold shipment until the Procuring Entity has examined and acknowledged the receipt of shop test data.

6. FACTORY TEST, INSPECTION AND TRAINING

6.1 A minimum of two (2) Procuring Entity representative, at the expense of Supplier, shall have the right to inspect and/or test any material, equipment or supplies including attendance to appropriate training needs for logistics at the manufacturer site (hereinafter collectively referred to in this clause as "Goods") furnished by the Supplier under this contract during manufacture and assembly and prior to packing for shipment and may reject any merchandise defective or unsuitable for the use and purpose intended, or not in accordance with the intent of the contract (see Section IV, Clause 5 for Sampling). The Supplier, upon demand by the Procuring Entity, shall remedy or replace at his expense such defective or unsuitable Goods.

6.2 The Supplier shall notify in writing the Procuring Entity at least sixty days (60) days in advance of the date Goods will be ready for inspection in the shop or warehouse. The Procuring Entity's inspector shall, at all times during normal working hours, have access to all parts of the shop where Goods are being prepared and also shall be provided by the Supplier with all reasonable inspection and test facilities.

6.3 The fact that such factory inspection and/or test is made by the Procuring Entity, or fails to be made, shall not relieve the Supplier from full responsibility of the contract nor prejudice any claim, right, or privilege which the Procuring Entity may have because of the use of defective or unsatisfactory Goods.

6.4 The Procuring Entity shall be furnished written notice by the Supplier at least sixty (60) days in advance of the date that any test specifically identified in the Contract will be conducted. Failure on the Part of the Procuring Entity to witness any such test at the time and place indicated shall not delay the test or the orderly fulfilment of the provisions of the contract. Costs of all tests shall be on the account of the Supplier and included in the contract price.

6.5 The fact that the Procuring Entity shall have witnessed, or have failed to witness, such tests or any other test required by the conditions of the contract shall not constitute a waiver or release by the Procuring Entity of warranties under the contract. In the event that the Procuring Entity fails to witness test specified in the Contract after proper notice by the Supplier, the Supplier may deem such test as having been witnessed and proceed with the test, manufacture or shipment accordingly.

6.6 The manufacture and inspection of the material, equipment, or supplies are properly prepared for export shipment and the Supplier shall have furnished to the Procuring Entity an SGS pre-shipment Clean Report of Findings and a Certificate of Completion and Inspection to be included as Attachment.

6.7 Upon delivery, the Procuring Entity at its option may test the equipment for conformity to the specifications. If the Procuring Entity elects to perform tests and find the supplied equipment not in accordance with the specifications and/or with the test results provided by the Supplier, the equipment will be rejected.

7. DEFECTIVE EQUIPMENT AND MATERIALS

7.1 Defective equipment:

7.1.1 If equipment fails to conform to requirements of contract documents or to operate satisfactorily, the Supplier shall correct such defects promptly at no cost to the Procuring Entity.

7.1.2 Procuring Entity will have right to operate unsatisfactory equipment until it is replaced or corrected without cost to depreciation, use or wear.

7.1.3 Equipment will be removed from operation for examination, adjustment, alteration or change at times approved by Procuring Entity.

7.2 Defective material:

7.2.1 If the Procuring Entity deems material to be defective through standard conformance test or from reported failures in actual use, the Procuring Entity shall reject the material and equipment and request the Supplier to replace the same. The Supplier, upon receipt of such notification shall replace the defective materials promptly at no cost to the Procuring Entity. If the Supplier fails to comply to the satisfaction of the Procuring Entity, the Procuring Entity may at its option:

7.2.1.1 Replace such defective material and recover the extra cost so involved from the Supplier; or

7.2.1.2 Terminate the contract for default as provided herein.

7.2.2 Supplier shall replace defective materials only at times approved by Procuring Entity.

8. EXPORT PACKING

8.1 When applicable, the Supplier shall pack and crate all equipment for sea shipment in a manner suitable for export to a tropical humid climate in accordance with internationally accepted export practices and in such a manner to protect the equipment from damage and deterioration in transit by road, rail or sea. The Supplier shall be held responsible for all damages due to improper packing.

8.2 Lumber used in the fabrication of all shipping containers shall be new, sound and well seasoned and free from knots and decay. Containers shall be sufficiently strong to prevent loss from pilferage or damage from stacking, shipment or handling.

8.3 Commodities subject to damage from the elements shall be preserved in a manner

appropriate to the commodity and to the best commercial standards. Such commodities shall be packed in weatherproof crates or boxes with a waterproof liner.

8.4 Individual cartons or boxes shall be limited to approximately 50 kg to facilitate handling, unless individual items exceed this weight or unless stated otherwise in technical specifications. Commodities normally packed in cardboard containers shall be enclosed in weatherproof shipping crates or boxes with waterproof liners. All crates shall be skid mounted (100 mm minimum height) to allow handling by fork-lifts.

8.5 Because of fork-lift capacity, crates and pallets shall be limited to approximately 1,000 kg except where the unit weight of an item is in excess of 1,000 kg.

8.6 All material items shall be packed as specified or in manufacturers standard package quantities approved by the Procuring Entity if different than that specified. All packages (cartons) shall be packed as they would be when delivered to a retail supplier and packages (cartons) of an item shall contain the same number of pieces. Bulk shipment is specifically prohibited. Individual packages (cartons) shall be sufficiently strong to withstand normal warehousing handling and storage.

8.7 Refer to Section IV, Clause 6, for additional requirements.

9. EXPORT MARKING

9.1 All packages, cartons, cases, and crates shall be plainly marked to facilitate identification as follows:

Port of Shipment _____
Port of Destination _____
Consignor _____
Consignee _____
Contract No. _____
Gross Weight _____
Package/Case No. _____
Name of Coop _____
Quantity _____
Contents _____
Item No. _____

9.2 All external marking must be legibly and durably painted or stencilled on two sides and both ends (where applicable) of containers in letters at least one and one-half inches (1-1/2") high.

9.3 All crates from one Supplier, regardless of port of shipment, shall be consecutively numbered to facilitate identification and delivery verification with shipping documents.

9.4 Reels shall bear markings on an embossed metal tag on both sides of the reel. Coils shall have markings on metal tags, one tied over the water proof paper wrapping and one tag under the paper wrap. Reels and spools shall be externally marked legibly and

indelibly (chalk or crayon prohibited) with the information specified. Internally, conductor and cable ends shall have weatherproof tags attached containing full conductor or cable description plus length. Length given should be in metric units.

9.5 Conductor and cable shall be furnished on export type non-returnable wood reels of standard dimensions as defined for overhead electrical conductors by the American Aluminum Association, or IEC Standard, or equivalent. Reels shall incorporate full one-inch thick lagging and be bound with galvanized steel straps. The reels shall be sufficiently sturdy to withstand normal service incident to ocean shipping, hauling and field installation.

All wood used in reels and spools shall be treated with an approved wood preservative.

The conductor or cable shall be tightly laid on reel and layer wound and both ends must be clamped to the reel flange. The use of paper liners is prohibited but liners of other materials such as expanded polystyrene or similar plastic is required.

For random lengths a maximum of ten (10%) percent of the total weight of the conductor of any order may be shipped in random lengths but no piece may be shorter than fifty (50%) percent of a standard length. No random lengths shall be wound on the same reel with a standard length.

9.6 In the individual material specification and Schedule of Requirements, additional marking requirements may be specified. Recipient ECs shall be indicated in the markings by codes.

9.7 For failure to comply with the marking requirements as identified in this IFB, payment to the Supplier shall be reduced by the following:

(a) 2% for failure to serially numbered all packages.

(b) 3% for failure to provide correct listing of consignee and recipient coop for each serially numbered crate, box or package.

(c) 5 % for marking package with wrong consignee or recipient coop.

NOTE: All percentages refer to the Contract price CIF of the Goods involved.

10. SAG AND TENSION TABLES

Suppliers of overhead conductor and aerial cable shall furnish, at their expense, reproducible sag and tension tables for both initial (stringing) and final (after stretch and creep) conditions. Sag and tension tables shall be based on achieving maximum tension without exceeding the limit set forth by the following criteria.

(1) Maximum Loaded Tension not to exceed fifty (50%) percent of ultimate tensile strength at -1 degree C, loaded under 44 kg/m^2 (9lb./ft2) wind pressure.

(2) Maximum Unloaded Initial Tension at -1 degree C not to exceed thirty five (35%) percent of ultimate tensile strength.

(3) Maximum Unloaded Final Tension at -1 degree C not to exceed twenty five (25%) percent of ultimate tensile strength.

Temperature Range of Tables:

For temperature range from -1 degree C to 50 degree C in increments of 2 degree C.

Span Length Range of Tables - Bare Conductor:

For Dead-end Spans of lengths ranging from 50 m through 600 m:

- in 10-meter increments for spans from 50 meters through 200 meter;
- in 25-meter increments for spans from 200 meters through 600 meters.

Span Length Range of Tables - Low Voltage and Power Cables:

For Deadend Spans of lengths ranging from 20 meters through 150 meters: in 5-meter increments.

11. QUALIFIED MANUFACTURERS

11.1 A foreign or domestic manufacturer shall prove its qualification by attesting that he sold material, equipment or supplies of similar nature to that being proposed for at least the period of years and the quantities as required on the Certification Requirements for Material and Equipment. A foreign manufacturer shall prove additionally that he sold material, equipment or supplies of similar nature to that being proposed in foreign transactions in each of the last three years and in all of which the buyer still express satisfaction with the performance of the goods.

11.2 The manufacturing experience requirement can be met as follows:

a. The manufacturer has the required years of manufacturing the item and the required sales, or

b. The manufacturer is a licensed manufacturer with the licensor controlling the design and quality of the output, and the licensor meets the experience and sales requirements.

11.3 The bidder shall include in his bid, and attach to his bid response, certification that the manufacturer of the proposed material or equipment has manufactured material and equipment the same as or similar to the material being offered over the periods designated below for items contained in the respectively noted Material Specification. The bidder shall also include for each certification a list of at least three (3) previous Procuring Entity outside the country of the manufacturer along with a description and

the quantities of supplied material or equipment, same as or similar to that being offered, giving full names, addresses, phone and fax numbers of these Procuring Entities.

12. STANDARDS AND SPECIFICATIONS

The Technical Specifications contain references to standards and specifications relevant to the particular item. A listing of such standards and specifications have been compiled below but might be not complete:

INTERNATIONAL STANDARDS	
ACI 318	American Concrete Institute, Building Code Requirements for Reinforced Concrete.
AEIC CS5-82	Specification for thermoplastic and cross-linked polyethylene insulated shielded power cables rated 5 KV through 46 KV.
AEIC CS6-86	Specification for polyethylene propylene rubber insulated shielded power cable rated 5 KV through 46 KV.
AISC	American Institute of Steel Construction Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings.
ANSI 05.1-1979	Specification and dimensions for wood poles.
ANSI 12.10-1987	American national standard for watt-hour meters.
ANSI/ASME B30.10-1982	Safety requirements for hooks.
ANSI/ASME B30.9-1984	American National Standards Institute, safety standard for slings.
ANSI/ASME B-94.52M-1984	Safety requirements for hacksaw blades.
ANSI/ASME B107.8-1984	Safety requirements for adjustable wrenches.
ANSI/ASME B107.11M-1983	Safety requirements for pliers, diagonal cutting and nippers, end cutting.
ANSI/ASME HST-2M-1983	Performance Standard for manually operated Chain Hoists.
ANSI/ASTM A153-82	Standard specification for zinc coating (hot-dip) on iron and steel hardware.
ANSI/ASTM B499-75 (1980)	Method for measurement of coating thickness by the magnetic method: Non-magnetic coatings on magnetic basis metals.
ANSI/ASTM D9-76E	American National Standard Definitions of Terms Relating to Timber.
ANSI/ASTM DI20-79A	Standard specification for rubber insulating gloves.
ANSI B1.1-1982	Unified inch screw threads, (UN and UNR thread form).
ANSI B18.2.1-1981	Square and hex bolts and screws, including square head bolts, hex cap screws and lag screws.
ANSI B18.2.2-1972	Square and hex nuts.
ANSI B18.5-1978	Round head bolts.
ANSI B18.21.1.-1972 (R1983)	Lock washers.
ANSI B94.11M-1979	American National Standards Institute, safety requirements for twist drills, straight shank and taper shank combination drills.
ANSI B107.1-1978	Safety requirements for hand socket wrench (inch).
ANSI B107.5-1978	Safety requirements for hand socket wrench (metric).

ANSI B107.10M-1982	Safety requirements for socket wrench, hand and attachment for hand (inch and metric).
ANSI B157.1-1978	Safety requirements for scales weighing devices and weighing systems.
ANSI B173.1-1982	Safety requirements for nail hammers.
ANSI B173.4-1979	Safety requirements for axes.
ANSI C12.1-1982	American National Standard code for electrical metering.
ANSI C12.7-1982	American National Standard requirements for watt-hour sockets.
ANSI C12.10-1982	American National Standard code for watt hour meters.
ANSI C12.11	American National Standard for Instrument metering purposes.
ANSI C29.1-1982	American National Standard for test methods for electrical power insulators.
ANSI C29.2-1983	American National Standard for insulators wet process porcelain and glass suspension type.
ANSI C29.3-1986	American National Standard for wet process porcelain insulators (spool type).
ANSI C29.5-1984	American National Standard for wet process porcelain insulators (low and medium voltage types).
ANSI C29.6-1977	American National Standard for wet process porcelain insulators (high voltage pin type).
ANSI C29.8-1980	American National Standard for wet process porcelain insulators (apparatus, cap and pin type).
ANSI C29.9-1983	American National Standard for wet process porcelain insulators (apparatus, post type).
ANSI C37.04	Rated structure for AC high voltage circuit breakers.
ANSI C37.06	Schedule of preferred ratings and related required capabilities for AC high voltage breakers.
ANSI C37.07	Interrrupting capability factors for reclosing service for A.C. high voltage circuit breakers.
ANSI C37.09	AC High Voltage breakers
ANSI C37.30-1971	American National Standard definitions and requirements for high voltage air switches, insulator and buss supports.
ANSI C37.32-1972	American National Standard schedules of preferred ratings, manufacturing specifications and application guide for high voltage air switches, bus supports and switch accessories.
ANSI C37-34-1971	American National Standard test code for high voltage air switches.
ANSI C37.40-1981	IEEE Standard service conditions and definitions for high voltage fuses and distribution enclosed single pole air switches.
ANSI C37.41-1981	American Standard design tests for distribution cutouts and fuse links, secondary fuses, distribution enclosed single pole air switches, power fuses, fuse disconnecting switches and accessories.
ANSI C37.42-1981	American National Standard specifications for distribution cutout links.
ANSI C37.60-1979	IEEE Standard for automatic circuit reclosers for alternating current systems.
ANSI C37.66-1969	American National Standard requirements for oil filled capacitor switches for AC systems.
ANSI C39.1-1981	Requirements for electrical analog indicating instruments.
ANSI C39.2	Direct-acting electrical recording instruments (switchboard and portable types).
ANSI C57.12.00	Test code for liquid immersed, distribution, power and regulating transformers.
ANSI C57.12.20	Requirements for over head type distribution transformers 67,000 volts and below 500 KVA and smaller.

ANSI C57.12.30-1977	Requirements for Load-tap-changing transformer 230,000 volts and below.
ANSI C57.12.90	General requirements for dry type distribution and power transformers.
ANSI C57.13-1978	American National Standard requirements for instrument transformers.
ANSI C57.92	Guide loading oil immersed Power transformer.
ANSI C62.1-1981	IEEE Standard for surge arrestors for AC power circuits.
ANSI C62.2-1981	American National Standard Guide for the application of valve-type surge arrestors for alternating current system.
ANSI C62.11	Standard for Metal-Oxide Surge Arrester for AC Power Circuits.
ANSI C63.2-1980	American National Standard specifications for electromagnetic noise and field strength instrumentation, 10 KHz to 1 GHz.
ANSI C76.1-1976	IEEE general requirements and test procedures for outdoor apparatus bushings.
ANSI C76.2-1975	Dimensions and related requirements for outdoor apparatus and bushings.
ANSI C135.1-1979	American National Standard for galvanized steel bolts and nuts for overhead line construction.
ANSI C135.2-1979	American National Standard for threaded galvanized ferrous strand-eye anchor rods and nuts for overhead line construction.
ANSI C135.4-1979	American National Standard for galvanized ferrous eyebolts and nuts for overhead line construction.
ANSI C135.5-1979	American National Standard for galvanized ferrous eye nuts and eyelets for overhead line construction.
ANSI C135.14-1979	American National Standard for staples with rolled on slash points for overhead line construction.
ANSI C135.17-1979	American National Standard for galvanized ferrous bolt-type insulator pins with lead threads for overhead line construction.
ANSI C135.22-1979	American National Standard for galvanized ferrous pole-top insulator pins with lead threads for overhead line construction.
ANSI C135.31-1980	American National Standard for galvanized ferrous single and double upset spool insulator bolts for overhead line construction.
ANSI C136.6-1984	Reflector assemblies and metal head inter-changeability.
ANSI C136.10-1979	Inter-changeability of photo control device plug and mating receptacle used in roadway lighting equipment.
ANSI C136.12-1979	Selection of mercury lamps.
ANSI C136.13-1979	Metal brackets for wood poles.
ANSI/IEEE 18-1980	Standard for shunt power capacitors.
ANSI/UL 299-1984	Safety standard for dry chemical fire extinguisher.
ANSI Z87.1-1979	Practice for occupational and educational eye and face protection.
ANSI Z89.1-1981	Requirements for protective headwear for industrial workers.
ANSI Z308.1-1978	Minimum requirements for industrial unit type first aid kits.
ASTM A36-81A	Standard specification for structural steel.
ASTM A47-77	Standard specification for malleable iron castings.
ASTM A109-83	Standard specification for steel, carbon cold-rolled strip.

ASTM A111-66 (1980)	Standard specification for zinc coated (galvanized) "iron" telephone and telegraph line wire.
ASTM A165-80	Standard specification for electro-deposited coatings on cadmium or steel.
ASTM A197-79	Standard specification for cupola malleable iron.
ASTM A242-81	Standard specification for high-strength low-alloy structural steel.
ASTM A363-72 (1980)	Standard specification for zinc coated (galvanized) steel overhead ground wire strand.
ASTM A413-82	Standard specification for carbon steel.
ASTM A475-78	Standard specification for zinc-coated steel wire stranded.
ASTM A564-81	Standard specification for hot-rolled and cold-finished age-hardening stainless and heat-rending steel bus, wire and shapes.
ASTM A510-82	Standard specification for general requirements for wire and coarse round wire, carbon steel.
ASTM A536-80	Standard specification for ductile iron castings.
ASTM A549-82	Standard specification for steel wire, carbon, cold heading quality, for wood screws.
ASTM A568-83	Standard specification for general requirements for steel, carbon and high strength low-alloy hot-rolled sheet.
ASTM A569-72 (R1979)	Standard specification for steel, carbon (0.15 maximum percent) hot-rolled sheet and strip, commercial quality.
ASTM A570-79	Standard specification for hot-rolled carbon steel sheet and strip, structural quality.
ASTM A575-81	Standard specification steel bars, carbon merchant quality, M-grade.
ASTM A576-81	Standard specification steel bars, carbon, hot wrought, special quality.
ASTM A635-81	Standard specification for hot-rolled carbon steel sheet and strip, commercial quality, heavy thickness coils (formerly plate).
ASTM A663-82	Standard specification for steel bars, carbon, merchant quality, mechanical properties.
ASTM A668-83	Standard specification for steel forgings, carbon and alloy, for general industrial use.
ASTM A675-82	Standard specification for steel bars, carbon, hot wrought, special quality, mechanical properties.
ASTM A705-80	Standard specification for age-hardening stainless and heat resistant steel forgings.
ASTM A24281	Standard specification for high strength low alloy structural steel.
ASTM B2-81	Standard specification for medium hard-drawn copper wire.
ASTM B3-74 (R-1980)	Standard specification for soft annealed copper wire.
ASTM B6-77 (1983)	Standard specification for zinc (slab zinc).
ASTM B8-81	Standard specification for concentric-lay-stranded copper conductors, hard, medium-hard or soft.
ASTM B99-81a	Standard specification for copper silicon alloy wire for general purposes.
ASTM B117-64	Method of salt spray (fog) testing.
ASTM B176-79	Standard specification for copper alloy die castings.
ASTM B193-78	Standard test method for resistivity of electrical conductor materials.
ASTM B221-85a	American National Standard for aluminum and aluminum alloy, extruded bars, rods, wire shapes and tubes.
ASTM B230-81	Standard specification for aluminum 1350-H-19 wire for electrical purposes.

ASTM B230-82	Standard specification for concentric-lay-stranded aluminum conductors, coated steel-reinforced (ACSR).
ASTM B230-82	Standard specification for aluminum 1350-H19 wire for electrical purposes.
ASTM B231-81	Standard specification for concentric-lay-stranded aluminum 1350 conductor.
ASTM B232	Standard Specification for concentric-lay-stranded aluminum conductors, coated steel-reimforced (ACSR).
ASTM B233-78	Standard specification for aluminum-alloy 1350 redrawn rod for electrical purposes.
ASTM B246-69 (R-1980)	Standard specification for tinned hard-drawn and medium hard-drawn copper wire for electrical purposes.
ASTM B317-83	Standard specification for aluminum-alloy extruded bar, rod, pipe and structural shapes for electrical purposes (bus conductor).
ASTM B396-83	Standard specification for aluminum alloy 5005 H-19 wire for electrical purposes.
ASTM B498-74 (R1979)	Standard specification for zinc-coated (galvanized) steel core wire for aluminum conductors, steel reinforced ACSR.
ASTM B531-78	Standard specification for aluminum alloy 5005 re-drawn rod for electrical purposes.
ASTM B557-84	Standard methods of tension testing wrought and cast aluminum and magnesium alloy products.
ASTM B584-85a	Standard specification for copper alloy sand castings for general purpose.
ASTM B597-83	Standard practice for heat treatment of aluminum alloys.
ASTM B609-81	Standard specification for aluminum 1350 round wire annealed and intermediate tempers, for electrical purposes.
ASTM B633-78	Standard specification for electro-deposited coatings of zinc on iron and steel.
ASTM B663-82	Standard specification for electro-deposited coatings of zinc or iron and steel.
ASTM B686-82	Standard specification for aluminum alloy castings, high strength.
ASTM D-117.66	Specifications of New Insulating Oil for transformer and Switch Gear
ASTM D470	Methods of testing crosslinked insulations and jackets for wire and cable.
ASTM-D877-84a	Standard test method for dielectric break-down voltage of insulating liquids using disk electrodes.
ASTM D1351	Standard specification for polyethylene insulation for electrical wire and cable.
ASTM-D1500-82	Standard test method for ASTM color of petroleum products.
ASTM D1816-84a	Standard test method of dielectric breakdown voltage of insulating oils petroleum origin using VDE electrodes.
ASTM D3487	Standard specification for mineral insulating oil used in electrical apparatus.
ASTM F711-83	Standard specification for fiberglass reinforced plastic (FRP) rod to be used in hot line maintenance tools.
ASTM F887-84 Vol. 10.03	Standard specifications for personal climbing equipment.
AWPA A2-85	Standard method for analysis of waterborne preservatives and fire retardent formulations.
AWPA A5-83	Standard methods for analysis of oil-borne preservatives.
AWPA A6-83	Determination of oil-type preservatives and water in wood.
AWPA A7-75	Standard wet ashing procedures for preparing wood for chemical analysis.
AWPA A9-86	Standard method for analysis of treated wood and treating solutions by x-ray.

AWPA A10-82	Analysis for CCA treating solutions and CCA treated wood by colorimetry.
AWPA A11-83	Analysis of treated wood and solutions by atomic absorption spectros-copy.
AWPA C1-84	All timber products-preservative treat by pressure processes.
AWPA C2-85	Lumber, timbers, bridge ties and mine ties-preservative treatment by pressure processes.
AWPA C4-81	Standard for preservative treatment of poles by pressure process.
AWPA C16-77	Wood used on farms: preservative treated by pressure process.
AWPA C25-85	Sawn crossarms-preservative treatment by pressure processes.
AWPA M2-83	Standard instructions for the inspection of preservative treatment of wood.
AWPA P5-85	Standard for water-borne preservatives.
AWPA P8-77	Standards for oil-borne preservatives.
AWPA P9-79	Standards for solvents for organic preservative systems.
AWPA M2-83	Standard instructions for the inspection of preservative treatment of wood.
AWS D1.1	American Welding Society, Structural Welding Code.
AWS D12.1	American Welding Society Recommended procedures for Welding, reinforcing Steel, Metal Inserts and Connections in Reinforced Concrete Constructions.
Federal Specification GGG-H-1426	Helmet, safety, electrical workers.
Federal Specification GGK-391a	Kits, first aid, burn treatment, snake bite and kit contents (unit type).
Federal Specification TT-W-571J	"Wood preservative: treatment practices".
Federal Supplementing Specification TT-W-571J	USADA forest service general technical report FPL-15-1977.
ICEA S-66-254	Cross-linked-thermosetting-polyethylene insulated wire and cable for the transmission and distribution of electric energy.
ICEA S-68-516	Polyethylene-propylene-rubber insulated wire and cable for the transmission and distribution of electrical energy.
IEC 51-2:1984	Part 2; Special requirements for ammeters and voltmeters.
IEC 51.3:1984	Part 3, special requirements for wattmeter and varmeter.
IEC 56:1987	High voltage alternating current circuit breakers.
IEC 70:1967	Power capacitors.
IEC 76-2:1976	Power transformers, temperature rise.
IEC 76-3:1980	Power transformers, insulation level and dielectric tests.
IEC 76-3-1:1987	Power transformers, insulation levels and dielectric tests. External clearances in air.
IEC 76-5:1976	Power transformers, ability to withstand short circuit.
IEC 99-4:1991	Metal oxide surge arresters without gaps for A.C. systems.
IEC 129:1984	Alternating current disconnectors and earthing switches.
IEC 137:184	Bushings for alternating voltage above 1000V.
IEC 156 (1963)	Method for the determination of the electric strength of insulating oils.
IEC 185:1987	Current transformers.
IEC 186:1987	Voltage transformers.

IEC 211:1966	Maximum demand indicators, class 1.0.
IEC 214:1989	On load top changers.
IEC 227	Polyvinyl chloride insulated cables of rated voltage up to and including 450/750 volts.
IEC 258:1968	Direct acting recording electrical measuring instruments and their accessories.
IEC 265-1:1983	High-voltage switches for rated voltage above 1kV and less than 52kV.
IEC 265-2:1988	High-voltage switch for rated voltage of 52kV and above.
IEC 273:1990	Characteristics of indoor and outdoor post insulator for systems with nominal voltage greater than 1,000V.
IEC 282-2:1970	Expulsion and similar fuses.
IEC 296:1982	Specification for unused mineral insulating oils for transformers and switchgear.
IEC 376:1971	Specifications and acceptance of new sulphur hexaflouride.
IEC 383:1983	Tests on insulators of ceramic material or glass for overhead lines.
IEC 473:1974	Dimensions for panel mounted indicating and recording electrical measuring instruments.
IEC 514:1975	Acceptance inspection of class 2 alternating current watt-hour meters.
IEC 521:1988	Class 0.5 and 2 alternating current watt-hour meters.
IEC 540 (1982)	Test methods for insulation and sheaths of electric cable and cord.
IEC 541 (1976)	Comparative information on IEC and North American flexible cord types.
IEC 551:1987	Determination of transformer and reactor sound levels.
IEC 662:1980	High-pressure sodium vapor lamps.
IEC 720:1981	Characteristics of line post insulators.
IEC 743:1983	Terminology for tools and equipment to be used in line working.
IEC 832:1988	Insulating poles and universal tool attachments for line working.
IEC 871	Shunt capacitors for ac power systems having a rated voltage above 600V.
IEC 888:1987	Zinc-coated steel wires for standard conductor.
IEC 889:1987	Hard drawn aluminum wire for overhead line conductors.
IEC 903:1988	Specifications for gloves and mitts of insulating material for live work.
IEC 923:1988	Ballasts for discharge lamps. Performance requirements.
IEC 1024-1:1990	Protection of structures against lightning.
IEEE 48-1975	Standard test procedures and requirements for high-voltage alternating-current cable terminations.
IEEE 404-1986	Standards for cable joints for use with extruded dielectric cable rated 5,000 V through 46,000 V and cable joints for use with laminated dielectric cable rated at 2,500 V through 500,000 V.
ISO 3941-1977	Classification of fires.
ISO 5923-1984	Fire-protection-fire extinguishing media-carbon dioxide.
NEMA Pub. No. CC3-1973 (R1978)	EEI-NEMA Standards for connectors for use between aluminum or aluminum-copper overhead conductors.
NEMA Pub. No. PH6-1970	EEI-NEMA Standard for metal crossarm braces.
NEMA Pub No. PH10-1977	NEMA Standards for galvanized ferrous washers.

NEMA Pub No. PH11-1979	NEMA Standards for galvanized ferrous guy attachments, wrap and formal guy hooks, guy strain plates and pole eye plates.
NEMA Pub. No. PH20-1979	NEMA Standards for galvanized ferrous insulator clevis.
NEMA Pub No. PH23-1964	NEMA Standards for steel and malleable iron guy clamps.
NEMA Pub. No. PH25	Standard for Secondary Extension Brackets
NEMA Pub No. PH31-1977	NEMA Standards for galvanized ferrous single and double upset spool insulator bolts.
NEMA Pub No. PH107-1964 (R1981)	NEMA Standards publication - methods for radio influence voltage (RIV) of high voltage apparatus.
NEMA Pub No. SG-1.501	NEMA Standards publication - temperature rise test for power connectors.
NEMA Pub No. SG-1.502	NEMA Standards publication - resistance test for power connectors.
NEMA Pub No. SG6-1974	Part 32 - Schedules of preferred ratings, manufacturing specifications, and application guide for high voltage air switches, bus supports and switch accessories.
NEMA Pub No. SG14-1958	NEMA Standards publication - electrical connectors for copper conductors.
NEMA Pub. No. TT-1	National Electrical Manufactures association, Tapered Tubular Steel Structures.
NEMA Pub. No. WC7-1982	Cross-linked thermosetting polyethylene-insulated.
OSHA 29CFR	Safety and health regulation for construction section 1926.959, lineman body belts, safety straps and lanyards.
OSHA 1920.158	Requirements for portable fire suppression equipment, fire extinguisher.
PCI MNL-116	Prestressed Concrete Institute Manual for Quality Control for Plants and Production of Processor Pre-stressed Concrete Products.
REA Bulletin 43-5	List of materials acceptable for use on system of REA electrical borrowers.
REA Bulletin 44-4	Quality control and inspection of timber products.
REA Specification DT-58-1977	Specification for wood cross arms (solid and laminated), transmission timbers and pole keys.
REA Spec. No. DT-5B:	Specification for Wood Cross arms, transmission timber and Pole Keys.
REA Specification DT-5C (revision) 1982	Specification for wood poles, stubs, and anchor logs and preservative of those materials.
USAS C57.15-1968	USA Standard requirements terminology and text code for step voltage and induction voltage regulators.
USAS C68.1-1968	USA and IEEE Standard techniques for dielectric tests.
ANSI B27.1-1965	
ANSI C55.1	
ANSI C57.15	
NEMA TR1	
ASTM D-120	
ASTM F469-80	
ASTM F 496	
NEMA EI17-1968	
NEMA EI20-1975	
NEMA Pub. No. LA 1	
NEMA Pub. No. PH3-1977	

NEMA OD3-1977	
NEMA OD4-1977	

13. MATERIAL SPECIFICATIONS LISTING

Each item of material is described in a Material Specification which has a descriptive title and an assigned reference number. This reference number is cross referenced on the Bill of Quantities, which is a listing of each item of material, with quantities, that is to be provided by the Contractor.

The Material Specifications describe the detailed technical requirements of materials, supplies, and equipment to be furnished under this proposal.

The bidder must quote prices on the Material Schedule which include the cost of all accessory or auxiliary parts (mounting brackets, terminal connectors, spare parts, gauges, etc.) that are specified in the Material Specifications to be furnished with the item, even though such accessory or auxiliary parts may not be specially mentioned in the brief item description contained on the Material Schedule.

SECTION VI. FORMS

TABLE OF FORMS

FORM 1: BID

Date: _____
Location: _____
Contract No: _____

TO: Bid and Awards Committee
Nueva Ecija II Electric Cooperative, Inc.- Area-1
Calipahan, Talavera
3114 Nueva Ecija

Gentlemen:

Having examined the Bidding Documents including Addenda Nos. (Insert Numbers), the receipt of which is hereby duly acknowledged, we, the undersigned, offer to deliver (Description of materials) in conformity with the said Bid Documents for the sum of (Total Bid Amount in Words and Figures) or such other sums as may be ascertained in accordance with the Price Schedules attached herewith and made part of this bid.

We undertake, if our bid is accepted, to commence the delivery within (Number) days to complete the project of all the items specified in the Contract within the (Number) days to be calculated from the date of receipt of your Purchase Order.

If our bid is accepted we will post performance security in form of Manager's Check in a sum not exceeding five percent (5%) of the Bid Price for the due performance of the Contract.

We agree to abide by this bid for a period of (Number) days from the date fixed for bid opening 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 Notice of Award/Purchase Order, shall constitute a binding Contract between us.

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

Dated this _____ day of _____, 20__.

_____
Signature

_____
(In capacity of)

Duly authorized to sign bid for and on behalf of_____.

FORM 2: BID SECURITY

WHEREAS, _____ hereinafter called "the BIDDER" has submitted its bid dated _____ for the construction of_____(hereinafter called "the BID").

KNOW ALL MEN BY THESE PRESENTS:

That, WE, _____ of _____, having our registered office at _____ (hereinafter called "the BANK") are the bound unto (hereinafter called "the COOPERATIVE") in the sum of _____ for which payment will truly to be made to the said COOPERATIVE, the Bank binds itself, its successors and assigns by these presents.

Sealed with the common seal of the said Bank this _____ day of _____, 20___.
THE CONDITIONS of this obligation are:

1) If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or
2)
3) If the bidder, having been notified of the acceptance of its bid by the Cooperative during the period of validity:

   a. fails or refuses to execute the Contract Form, if required; or

   b. fails to refuses to furnish the Performance Security, in accordance with the Instructions to Bidders;

We undertake to pay to the Cooperative up to the above amount upon receipt of its first written demand, without the Cooperative having to substantiate it demand, provided that in this demand the Cooperative will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including thirty (30) days after the period of bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

_____
(Signature)

FORM 3: POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, a company organized and existing under the laws of _____, having the principal office at _____ do hereby make, constitute, and appoint _____ our true and lawful attorneys-in-fact to act for us, on our behalf, and in name, by investing them with the following powers:

1) To make any proposal to and/or negotiate and execute the contract or any other agreement with (NEECO II Area-1), its representative and/or agents, if any, relating to the bid of the **Relocation of Electrical Facilities affected by DPWH road widening project**

2) To receive, accept and acknowledge any notice issued under the contract, any other agreement and/or any other proposal.

3) To do any and all acts and things and execute any and all instruments, certificates and agreement which they may deem necessary or advisable, or which may be required for or in connection with the execution of the said contract.

IN WITNESS WHEREOF, we have cause this POWER OF ATTORNEY to be executed in our name by our _____, _____ thereunto duly authorized, in _____ this day of _____, 20____.

(CORPORATION)

by: PRINTED NAME
POSITION/TITLE

FORM 4a: LETTER OF AUTHORIZATION FROM THE MANUFACTURER TO THE BIDDER

Relocation of Electrical Facilities affected by DPWH road widening project

To whom it may concern:

We, _____, a juridical person, organized and existing under the laws of _____ having its principal business office at _____ hereby authorizes _____ having its registered office at _____ to offer and supply our goods to the _____Electric Coop., Inc.

This Letter of Authorization is effective from this _____ day of _____ 20___ and remains in full force until the completion of the contract.

(CORPORATION)

by: _____
PRINTED NAME

_____
POSITION / TITLE

FORM 4b: LETTER OF AUTHORIZATION FROM THE BIDDER THE LOCAL AGENT

Relocation of Electrical Facilities affected by DPWH road widening project

To whom it may concern:

We, _____(company)_____, a juridical person, organized and existing under the laws of _____(country)_____ having its principal business office at _____(address)_____ hereby appoint _____(company)_____ having its registered office at _____(address)_____ as our local agent/representative. In particular, our local agent/representative is authorized to _____.

This Letter of Authorization is effective from this _____ day of _____ 20___ and remains in full force until the completion of the contract.

(CORPORATION)

by: _____
PRINTED NAME

_____
POSITION / TITLE

FORM 5: CONTRACT

CONTRACT FOR THE
Relocation of Electrical Facilities affected by DPWH road widening project

KNOW FOR ALL MEN BY THESE PRESENTS

This Contract entered into this ___th day of _____, 2021 at Nueva Ecija II Electric Cooperative, Inc. (NEECO II) Main Office, Brgy. Calipahan, Talavera, Nueva Ecija by and between:

The Nueva Ecija II Electric Cooperative, Inc. – Area I (NEECO II – AREA 1), a duly organized electric cooperative and existing under and by virtue of the laws of the Philippines, with principal office at Brgy. Calipahan, Talavera, Nueva Ecija, herein represented by its General Manager, Engr. Nelson M. Dela Cruz, herein referred to as the "COOPERATIVE";

-and-

_____, an entity duly organized and existing under and by virtue of the laws of the Philippines, with principal office at _____, represented by its _____, _____ hereinafter referred to as the "CONTRACTOR";

WITNESSETH

1. That, the COOPERATIVE, with Board Resolution No. 07-07-21, Series of 2021 conducted public bidding for **Relocation of Electrical Facilities affected by DPWH road widening project** under of Invitation to Bid (ITB) No. NE-II-2021-03 which was published in Philippine Daily Inquirer (PDI) on July 11, 2021 and was posted in the official website of the cooperative;

2. That, Bid Opening last _____ was participated by _____;

3. That, the BAC, after careful review and evaluation on the bid offers, has awarded the **Relocation of Electrical Facilities affected by DPWH road widening project** to _____ with corresponding contract price:

4. That, as per recommendation of the BAC which was duly approved by the Board of Directors under Board Resolution No. _____ dated _____, the COOPERATIVE awards the **Relocation of Electrical Facilities affected by DPWH road widening project** to _____ with bid offer amounting to _____;

NOWTHEREFORE, for and in consideration of the foregoing premises the parties hereto agree and contract as follows:

1) A copy of bid documents and the Invitation for Bid No. NE-II-A1-2021-03, authority of signing official, electrification schedule, project organizational chart, manpower schedule, equipment utilization schedule of all equipment and machineries which shall be used exclusively for the project, bid summary/ Contractor's bid price offered, detailed estimation of materials, notice of award, notice to proceed, performance security, and other documents establishing the eligibility of the Contractor, are hereto attached and made an integral part of this contract;

2) The CONTRACTOR agrees and binds itself to fully and faithfully provide for its accounts all provisions necessary in the completion of **Relocation of Electrical Facilities affected by DPWH road widening project** within ___ **Calendar Days** including the testing and commissioning, commencing on the date of issuance of Notice to Proceed and the turn- over of the project;

3) The CONTRACTOR shall post a **Performance Security Bond in the amount of _____, equivalent to 10% of the Contractor's Bid Price** which is to be returned to the Contractor after testing and commissioning of the project and not later than thirty (30) days following the date of the issuance of the Certificate of Completion of the Contractor's Performance under the Contract

4) In the event of a delay in work caused by fortuitous events or force majeure, the CONTRACTOR may request for an extension of time, in writing, within three (3) days following the occurrence of the cause of delay. The grant of extension, which shall also be in writing, may not be unreasonably withheld. It shall be understood that the approval of the request for extension of time shall not be construed as to automatically entitle the CONTRACTOR to a cost adjustment;

5) The CONTRACTOR shall exert its best efforts to execute its obligations under the contract in accordance to all the documents made to form part of this contract;

6) The contract price shall be _____ broken down as shown in the bid form of the CONTRACTOR. The required down payment, if any, shall be made upon the written request of the Contractor, and after the Contractor's mobilization of materials. The balance shall be by progress payments based on the estimated amount of work satisfactorily completed by the CONTRACTOR and accepted by the COOPERATIVE for every progress billing in accordance with the General Conditions of the Contract;

7) Time is an essential feature of this contract in the event that the CONTRACTOR fails to complete the _____ within the stipulated time inclusive of any granted extension of time, the CONTRACTOR shall pay the COOPERATIVE, as liquidated damages for its calendar day of delay, an amount equivalent to be computed in accordance with the General Conditions of the Contract;

8) The CONTRACTOR shall guarantee the quality of all materials it will supply, deliver and use in the

_____ and shall make good all defect/s attributable to the quality of materials and workmanship which may be discovered within one (1) year reckoned from the date of issuance of certificate of completion;

9) Equipment/Materials which are the subject matter of this Contract, or are in any way used in the performance or execution of this contract may be inspected and tested at all reasonable times and places, either before, during or after manufacture by the COOPERATIVE at its discretion. If inspection and tests are made on the premises of CONTRACTOR or CONTRACTOR's sub-contractor, the CONTRACTOR shall furnish without additional charge all reasonable facilities and assistance for the safe and convenient inspection and test required by at least a minimum of two (2) Cooperative representatives in the performance of their duty. No shipments shall be made without prior inspection or waiver of inspection issued by the Cooperative;

10) The COOPERATIVE or its authorized representative shall be entitled at all reasonable times to witness and conduct standard association tests, standard factory inspection and/or other tests specifies herein. The CONTRACTOR shall provide reasonable copies of witnessed test result to COOPERATIVE, if required;

11) The Cooperative shall, upon the written request of the Contractor, and after the Contractor's mobilization of materials, may be allowed to make a **DOWN PAYMENT** equivalent to **15% of the contract price.** The balance from the Contract Price shall be paid by the Coop thru progress billings based on the estimated work satisfactorily completed by the Contractor and accepted by the Cooperative for every progress billing;

12) In the event that the Contractor fails to complete the infrastructure projects within the stipulated time inclusive of the granted extension of time, if any, the Contractor shall pay the Cooperative, as **Liquidated Damages** for its calendar day of delay, an amount equal to 1/10 of 1% (.01%) of the cost of the unperformed portion of the contract, for every day of delay. Once the cumulative amount of liquidated damages reaches ten percent (10%) of the amount of the contract, the contract shall be rescinded without prejudice to other courses of action and remedies to be undertaken.

13) Progress payments/ billings are subject to ten percent (10%) **retention** of the billings to answer for any uncorrected/discovered defects and third party liabilities and may be released within sixty (60) days after the issuance of Certificate of Final Inspection and Acceptance and all the discovered defects in the project has been corrected and in exchange thereof, shall post a **Guarantee Bond equivalent to five percent (5%) of the Contract Price;**

14) The Contractor shall issue a Guarantee Bond in the form of Manager's Check in conformity with the general conditions of the contract, equivalent to Five Percent (5%) of the contract price to serve as warranty against defective works and materials for a period of two (2) years reckoned from the date of Final Inspection and Acceptance. The Guarantee Bond shall be released at the end of the guarantee period provided there are no pending reservations for its release. Thereafter, the Contractor is relieved of all obligations under the Contract;

15) The CONTRACTOR obligates to comply with the provisions of the existing laws, executive and administrative orders and rules and regulations issued or to be issued pertinent to the CONSTRUCTION OF THE PROJECTS;

16) The COOPERATIVE shall have the rights to automatically terminate the contract in the event that the CONTRACTOR incurs unjustified delays;

17) In case of litigation arising out of this contract, the parties hereto agree that its venue shall be in the proper court in Nueva Ecija, under the laws of the Philippines.

IN WITNESS WHEREOF, the parties have hereunto signed this contract on the date and place first above written.

NUEVA ECIJA II ELECTRIC COOPERATIVE,
INC.- Area 1 (NEECO II-AREA 1)

By:

By:

ENGR. NELSON M. DELA CRUZ
General Manager

ACKNOWLEDGEMENT

REPUBLIC OF THE PHILIPPINES }
Municipality of Talavera } S.S.
Province Of Nueva Ecija }

BEFORE ME, a Notary Public within and for _____, Philippines, this _____ day of _____, 2021, personally appeared ENGR. NELSON M. DELA CRUZ, and _____, exhibiting their valid identification cards, all known to me as the same persons who executed the foregoing instrument and each of them acknowledged to me that the same is their free act and deed as well as free act and deed of the Cooperative/Corporation which they respectively represent.

This Contract is consisting of five (5) pages including the page, on which this Acknowledgement is written, with each and every page duly signed by the parties and their instrumental witnesses.

WITNESS MY HAND AND SEAL on the date and place above written.

Notary Public

Doc. No.; _____
Page No.; _____
Book No.; _____
Series of 2018

FORM 7: PERFORMANCE SECURITY

TO: (Name of COOPERATIVE)

WHEREAS, _____(Name of Contractor)_____ hereinafter called "the CONTRACTOR" has undertaken, in pursuance of Contract No. dated _____, 20____to construct (Description of Project) hereinafter called "the CONTRACT";

AND WHEREAS it has been stipulated by you in the said contract that the CONTRACTOR shall furnish you with a Bank Guarantee by recognized bank for the sum specified therein as a security for compliance with the CONTRACTOR's performance obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the CONTRACTOR a Guarantee;

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the CONTRACTOR, up to a total of (Amount of the Guarantee in words and figures) and we undertake to pay you, upon your first written demand declaring the CONTRACTOR to be in default under the Contract and without cavil or argument, any sum of sums within the limits of (Amount of Guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the ____ day of _____, 20___.

Signature and seal of the Guarantors
_____
_____
_____

FORM 8: DEVIATIONS

Reference to the Specifications	Requirements of Specifications	Detailed Description of the Deviations from the Specifications

FORM 9: ACKNOWLEDGEMENT RECEIPT

BACKGROUND

As the results of the innovative of NEECO II-Area 1's procurement process and policy, the Bids and Awards Committee (BAC), releases copies of bidding documents in soft copy through electronic data.

BIDDER'S INFORMATION

(Bidder/Company Name), an entity duly organized and existing under and by virtue of the laws of the Republic of the Philippines, with office address at *(Bidder/Company Address)*, represented by its (Name of Bidder's Representative and designation) hereinafter referred to as the "**BIDDER**"

ACCEPTANCE OF BIDDING DOCUMENTS

That we, *(Bidder/Company Name)* hereby confirm the receipt of the copy of bidding documents for **Relocation of Electrical Facilities affected by DPWH road widening project** in soft copy form.

Whereby, in cases of any inconsistency or discrepancy on the contents of bidding documents between the copy of the Bidders and the original copy secured from NECCO II-Area 1, the contents of the original copy shall prevail.

CONFORME:

_____
(Printed Name & Signature of Duly Authorized Representative)

DATE: _____

NUEVA ECIJA ELECTRIC COOPERATIVE, INC,. - AREA 1

Calipahan, Talavera, Nueva Ecija

July 14, 2021

PROJECT DESCRIPTION : **BILL OF MATERIALS FOR THE RELOCATION OF ELECTRICAL FACILITIES OF NEECO II - AREA 1 AFFECTED BY THE ROAD WIDENING PROJECT OF DPWH. (MATURANOC, GUIMBA TO BALOC, STO. DOMINGO F43 (GUIMBA - PANGASINAN ROAD)**

3 Phase = 10.694 Kms.
U.B. = 10.694 Kms.

DESCRIPTION	PROJECT REQ'MNTS.	
LOT. A		
Anchor, Expanding, 8,000 Pounds, 4 Way, Galvanized Steel, HDG, JFI	53	pieces
Bolt, Thimble Eye 5/8" X 14", HD Angle Type,	53	pieces
Bolt, Thimble Eye 5/8" X 14", HD Straight Type	10	pieces
Bolt, Carriage 3/8" X 4-1/2", HDG, JFI	4	pieces
Bolt, Double Arming 5/8" X 24", HDG, JFI	49	pieces
Bolt, Double Upset 5/8" X 14", HDG, JFI	145	pieces
Bolt, Oval Eye 5/8" X 14", HDG, JFI	91	pieces
Bolt, Oval Eye, 5/8" X 18", HDG, JFI	26	pieces
Bolt, Machine, 1/2" X 6", HDG, JFI	240	pieces
Bolt, Machine 1/2" X 14", HDG, JFI	11	pieces
Bolt, Machine 5/8" X 14", HDG,JFI	245	pieces
Bolt, Machine 5/8" X 16", HDG, JFI	196	pieces
Bolt, Single Upset 5/8" X 12", HDG, JFI	196	pieces
Brace, Crossarm, 28", Steel , HDG, JFI	4	each
Brace, Crossarm, 60" - 18" Drop, HDG, JFI	10	pairs
Brace, Sidearm, Diagonal, 7 Feet, HDG, JFI	222	pieces
Bracket, Clevis Deadend Without Spool, HDG, JFI	15	pieces
Clamp, Anchor Bonding, Single Eye Rod, HDG, JFI	53	pieces
Clamp, Loop Deadend, #2/0 ACSR, HDG, JFI	314	pieces
Clamp, Deadend Strain, #336.4 MCM, HDG, JFI	63	pieces
Clamp, Guy Straight, 3 Bolt, Heavy Duty Steel, HDG, JFI	116	pieces
Clevis, Secondary Swinging Without Spool, HDG, JFI	157	pieces
Shackle, Anchor, Forged Steel, Galvanized, HDG, JFI	26	pieces
Conductor, Bare, ACSR #2/0, AWG 6/1, Phelps Dodge/AMWIRE	12,298	meters
Conductor, Bare, ACSR #336.4, MCM 26/7 STD (Meters),Phelps Dodge/AMWIRE	36,894	meters
Conductor, Insulated, ACSR #2/0, AWG 6/1, Phelps Dodge/AMWIRE	12,298	meters
Connector, Compression, #2/0 - #4/0 ACSR Run To #2/0 - #4/0	217	pieces
Connector, Ground Rod (Clamp) For 5/8" Steel Rod, HDG, JFI	51	pieces
Connector, Wedge Type, #336 - #336 MCTA (Ampact connector)	33	pieces
Pin, Crossarm, Steel, 5/8" X 14-3/4"X 1-3/8", Hot Dip Galvanized, JFI, Nylon Thread	700	pieces
Nut, Thimble Eye, 5/8" Single Eye, Hot Dip Galvanized, JFI	10	pieces
Insulator, Pin Type, Polymer, ANSI, Class 55 - 5 X 1-3/8", HENDRIX	700	pieces
Insulator, Spool, 1-3/4", ANSI, Class 53 - 2	341	pieces
Insulator, Spool, 3", ANSI, Class 53 - 4	173	pieces
Insulator, Suspension, 4 shed, Polymer,15KV, HENDRIX	69	pieces
Nut, Eye, 5/8", Conventional, HDG, JFI	163	pieces
Nut, Lock, Mf Type, 3/8", HDG, JFI	4	pieces
Nut, Lock, Mf Type, 1/2", HDG, JFI	465	pieces
Nut, Lock, Mf Type, 5/8", HDG, JFI	859	pieces
Rod, Anchor, Threaded, Single Eye, 5/8" X 7', HDG, JFI	53	pieces
Rod, Armor, Preformed, #2/0 ACSR, Single Support	349	sets
Rod, Armor, Preformed, #2/0 ACSR, Double Support	8	sets
Rod, Armor, Preformed, #336 MCM, Single Support	618	sets
Rod, Armor, Preformed, #336 MCM, Double Support	24	sets
Rod, Ground Steel, Galvanized, 5/8" X 10', HDG, JFI	51	pieces
Washer, Square, Flat, 2-1/4" X 2-1/4" X 3/16", 13/16" Diameter Hole, HDG, JFI	1,069	pieces
Washer, Round, 1-3/8" Diameter With 9/16" Diameter Hole, HDG, JFI	465	pieces
Wire, Tie, Aluminum Alloy, Soft, #4 AWG	8,084	feet
Wire, Tape, Armor, Aluminum Alloy, 0,5" X 0.3"	158	feet
Wire, Grounding, Aluminum Alloy, 3 Strand, #4 AWG	2,397	feet
Wire, Guy, Steel, 3/8", 7 Strand	3,000	feet
CONCRETE/STEEL MATERIAL		
Pole, Concrete, 30', Class 5, Minimum Break Load - 1000 kgs. , Approx. Weight -745 kgs. Top Dia. 201 mm, Bottom Dia. 310, Wall Thickness 50 mm, Depth in Ground 1500mm -TEH HSIN	5	pieces
Pole, Concrete, 50', Class 3A, . Minimum Break Load- 1600 kgs, Approx. Weight - 1960kgs. Top Dia. 238 mm, Bottom Dia. 418, Wall Thickness 55 mm, Depth in Ground 2100mm-TEH HSIN	206	pieces
Pole, Concrete, 60', Class 3A, Minimum Break Load - 1600 kgs., Approx. Weight - 2690kgs. Top Dia. 238 mm, Bottom Dia. 418, Wall Thickness 55 mm, Depth in Ground 2250mm-TEH HSIN	12	pieces
Crossarm, Steel, 3" X 4" X 8', Hot Dip Galvanized, JFI	234	pieces

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

STAKING SHEET

Sheet No. 1 of 15 | Map Ref.

Proj. No. ____ (c) | Page No. ____ (c)

Checked by: ENGR. R.M. PUNO | Staked by: STAKING CREW

Date: | Date: (5)

Released by: | Final Inv. By:

Date: | Date: (8)

PRIMARY COND. ACSR # 336.4 6/1 ACSR

NEUTRAL COND. ACSR # 2/0 6/1 ACSR

RULING SPAN 50 METERS

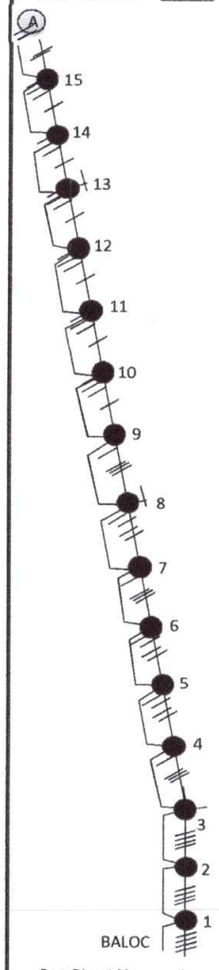
SUBSTATION GUIMBA SUBSTATION

LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.

AS PLAN STAKING SHEET

SKETCH

See Sheet No. START



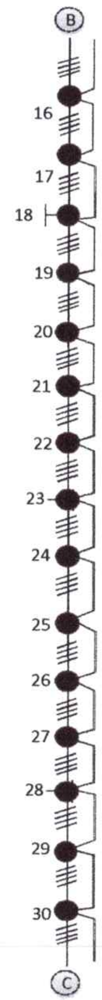
See Sheet No 1

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
1	55	3	1	50	C	1	C14											55	UB	D2/0	1	J5												
									G		M2		E			F					J		S			K	M		R1				
2	55	3	1	50	C	1	C14											55	UB	D2/0	1	J5												
3	54	3	1	50	C	1	C15				1	M2-11A	1	E1-2		1	F1-2	54	UB	D2/0	1	J10												
4	44	3	1	50	C	1	C14											44	UB	D2/0	1	J5												
5	43	3	1	50	C	1	C14											43	UB	D2/0	1	J5												
6	42	3	1	50	C	1	C14											42	UB	D2/0	1	J5												
7	42	3	1	50	C	1	C14											42	UB	D2/0	1	J5												
8	43	3	1	50	C	1	C14				1	M2-11A	1	E1-2		1	F1-2	43	UB	D2/0	1	J5												
9	43	3	1	50	C	1	C14											43	UB	D2/0	1	J5												
10	46	3	1	50	C	1	C14											46	UB	D2/0	1	J5												
11	46	3	1	50	C	1	C14											46	UB	D2/0	1	J6												
																					1	J15												
12	49	3	1	50	C	1	C14											49	UB	D2/0	1	J5												
13	63	3	1	50	C	1	C14				1	M2-11A	1	E1-2		1	F1-2	63	UB	D2/0	1	J5												
14	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5												
15	59	3	1	50	C	1	C14											59	UB	D2/0	1	J5												

QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase				14	C14				3	M2-11A	3	E1-2	3	F1-2		2W		13	J5					K		M		R1-		R	2037	ACSR	ACSR
0	2-Phase				1	C15												ACSR	1	J6		2S	D		K		M		R1-		C			ACSR
679	3-Phase	15	40													679		ACSR	1	J10					K		M		R1-		PB			
0	D-Ckt.															734	1UB	D1/0	1	J15		3S	D		K		M		R1-		LP			Insulated
																															IR			Duplex
2037	Total																														SL			

SKETCH

See Sheet No. 1



See Sheet No 2

STAKING SHEET

PRIMARY COND. ACSR # 336.4 6/1 ACSR
NEUTRAL COND. ACSR # 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

SUBSTATION GUIMBA SUBSTATION
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.
AS PLAN STAKING SHEET

Sheet No. 2 of 15
Map Ref.

Proj. No. (c) Page No. (c)
Checked by: ENGR. R.M. PUNO
Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS. QUAN	C	POLE Q	POLE CODE (H)	C	PRI. POLE TOP UNIT (ABC) Q	CODE	TRANS-FORMER "G" Q	CODE	GND. "M2" Q	CODE	GUY "E" Q	CODE	ANC. "F" Q	CODE	SECODARY SPAN MTRS. QUAN	SEC. OR U.B. CODE	WIRE SIZE	NO Q	"J" CODE	SERVICE DROP MTRS. QUAN	Q	WIRE SIZE	"K" CODE	MISC. UNIT "M" Q	CODE	R/W "R1" Q	CODE	CONS Q	C	MEMBER NAME AND NO. OR REMARKS / COMPUTER CODING
16	55	3	1	50	C	1	C14									55	UB	D2/0	1	J5											
									G		M2		E		F					J		S		K		M		R1			
17	55	3	1	50	C	1	C14									55	UB	D2/0	1	J5											
18	50	3	1	50	C	1	C14			1	M2-11A	1	E1-2	1	F1-2	50	UB	D2/0	1	J5											
19	50	3	1	50	C	1	C14									50	UB	D2/0	1	J5											
20	50	3	1	50	C	1	C14									50	UB	D2/0	1	J5											
21	50	3	1	50	C	1	C8									50	UB	D2/0	1	J6											
																			1	J15											
22	50	3	1	50	C	1	C14									50	UB	D2/0	1	J5											
23	50	3	1	50	C	1	C14			1	M2-11A	1	E1-2	1	F1-2	50	UB	D2/0	1	J5											
24	50	3	1	50	C	1	C14									50	UB	D2/0	1	J5											
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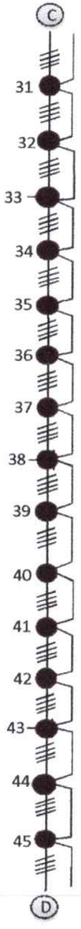
26	50	3	1	50	C	1	C14									50	UB	D2/0	1	J5											
27	50	3	1	50	C	1	C14									50	UB	D2/0	1	J5											
28	50	3	1	50	C	1	C14			1	M2-11A	1	E1-2	1	F1-2	50	UB	D2/0	1	J5											
29	50	3	1	50	C	1	C14									50	UB	D2/0	1	J5											
30	50	3	1	50	C	1	C14									50	UB	D2/0	1	J6											
																			1	J15											

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase			1	C8			3	M2-11A	3	E1-2	3	F1-2		2W		13	J5				K		M		R1-		R	2280	ACSR	ACSR
0	2-Phase			14	C14											ACSR	2	J6		2S	D	K		M		R1-		C			ACSR
760	3-Phase	15	40											760		ACSR	2	J15				K		M		R1-		PB			
0	D-Ckt.													760	1UB	D1/0				3S	D	K		M		R1-		LP			Insulated
																												IR			Duplex
2280	Total																											SL			

SKETCH

See Sheet No. 2



See Sheet No 3

STAKING SHEET

PRIMARY COND. ACSR # 336.4 6/1 ACSR
NEUTRAL COND. ACSR # 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 3 of 15
Map Ref.

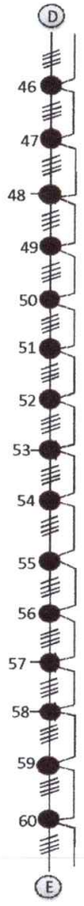
SUBSTATION GUIMBA SUBSTATION
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.
AS PLAN STAKING SHEET

Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. R.M. PUNO
Staked by: STAKING CREW
Date: ____ Date: ____ (5)
Released by: ____ Final Inv. By: ____
Date: ____ Date: ____ (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE						MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
			H	C													SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"							
	QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
31	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5												
									G		M2		E			F							S			K		M		R1			
32	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5												
33	50	3	1	50 C	1	C14				1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J5												
34	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5												
35	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5												
36	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5												
37	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5												
38	50	3	1	50 C	1	C14				1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J5												
39	50	3	1	50 C	1	C8											50	UB	D2/0	1	J6												
																				1	J15												
40	47	3	1	50 C	1	C14											47	UB	D2/0	1	J5												
41	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5												
42	60	3	1	50 C	1	C14											60	UB	D2/0	1	J5												
43	61	3	1	50 C	1	C14				1	M2-11A	1	E1-2		1	F1-2	61	UB	D2/0	1	J5												
44	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5												
45	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5												
QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase				1	C8				3	M2-11A	3	E1-2		3	F1-2		2W		14	J5					K		M		R1-		R	2304	ACSR	ACSR
0	2-Phase				14	C14													ACSR	1	J6					K		M		R1-		C			ACSR
768	3-Phase	15	40														768		ACSR	1	J15					K		M		R1-		PB			
0	D-Ckt.																768	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
																																IR			Duplex
2304	Total																															SL			

SKETCH

See Sheet No. 3



See Sheet No 4

STAKING SHEET

PRIMARY COND. ACSR # 336.4 6/1 ACSR
NEUTRAL COND. ACSR # 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.
Calipahan, Talavera, Nueva Ecija

SUBSTATION GUIMBA SUBSTATION
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.
AS PLAN STAKING SHEET

Sheet No. 4 of 15
Map Ref.

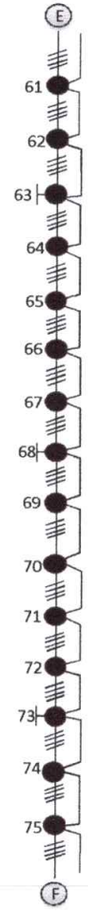
Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. R.M. PUNO
Date: ____
Released by: ____
Date: ____ (8)
Staked by: STAKING CREW
Date: ____ (5)
Final Inv. By: ____
Date: ____

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE					MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
			H	C													SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"							
	QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
46	50	3	1	50	C	1	C14										50	UB	D2/0	1	J5											
									G		M2		E			F					J		S			K		M		R1			
47	50	3	1	50	C	1	C14										50	UB	D2/0	1	J5											
48	50	3	1	50	C	1	C14			1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J6											
																				1	J15											
49	50	3	1	50	C	1	C14										50	UB	D2/0	1	J5											
50	50	3	1	50	C	1	C14										50	UB	D2/0	1	J5											
51	50	3	1	50	C	1	C14										50	UB	D2/0	1	J5											
52	50	3	1	50	C	1	C14										50	UB	D2/0	1	J5											
53	50	3	1	50	C	1	C14			1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J5											
54	50	3	1	50	C	1	C14										50	UB	D2/0	1	J5											
55	50	3	1	50	C	1	C14										50	UB	D2/0	1	J5											
56	50	3	1	50	C	1	C14										50	UB	D2/0	1	J5											
57	50	3	1	50	C	1	C8			1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J6											
																				1	J15											
58	50	3	1	50	C	1	C14			1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J5											
59	50	3	1	50	C	1	C14										50	UB	D2/0	1	J5											
60	50	3	1	50	C	1	C14										50	UB	D2/0	1	J5											

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase			1	C8			4	M2-11A	4	E1-2	4	F1-2		2W		13	J5					K		M		R1-		R	2250	ACSR	ACSR
0	2-Phase			14	C14											ACSR	2	J6		2S	D		K		M		R1-		C			ACSR
750	3-Phase	15	40											750		ACSR	2	J15					K		M		R1-		PB			
0	D-Ckt.													750	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
																													IR			Duplex
2250	Total																												SL			

SKETCH

See Sheet No. 4



See Sheet No 5

STAKING SHEET

PRIMARY COND. ACSR # 336.4 6/1 ACSR
NEUTRAL COND. ACSR # 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

SUBSTATION GUIMBA SUBSTATION
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.
AS PLAN STAKING SHEET

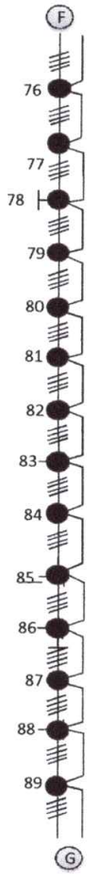
Sheet No. 5 of 15
Map Ref.

Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW
Date: Date: (5)
Released by: Finel Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H CODE	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	C	COMPUTER CODING
61	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5											
									G		M2		E			F						J		S		K	M		R1			
62	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5											
63	50	3	1	50	C	1	C14				1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J5											
64	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5											
65	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5											
66	50	3	1	50	C	1	C14											50	UB	D2/0	1	J6											
																					1	J15											
67	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5											
68	50	3	1	50	C	1	C14				1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J5											
69	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5											
70	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5											
71	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5											
72	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5											
73	50	3	1	50	C	1	C14				1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J5											
74	60	3	1	50	C	1	C14											60	UB	D2/0	1	J5											
75	55	3	1	50	C	1	C8											55	UB	D2/0	1	J6											
																					1	J15											
QUAN	C		Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	C	QUAN	CODE	
0	1-Phase					1	C8				3	M2-11A	3	E1-2		3	F1-2		2W		13	J5				K	M		R1-		R	2295	ACSR	ACSR
0	2-Phase					14	C14													ACSR	2	J6		2S	D	K	M		R1-		C			ACSR
765	3-Phase		15	40														765		ACSR	2	J15				K	M		R1-		PB			
0	D-Ckt.																	765	1UB	D1/0				3S	D	K	M		R1-		LP			Insulated
																															IR			Duplex
2295	Total																														SL			

SKETCH

See Sheet No.



See Sheet No

STAKING SHEET

PRIMARY COND. ACSR # 336.4 6/1 ACSR
NEUTRAL COND. ACSR # 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 6
of 15
Map Ref.

SUBSTATION GUIMBA SUBSTATION
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.
AS PLAN STAKING SHEET

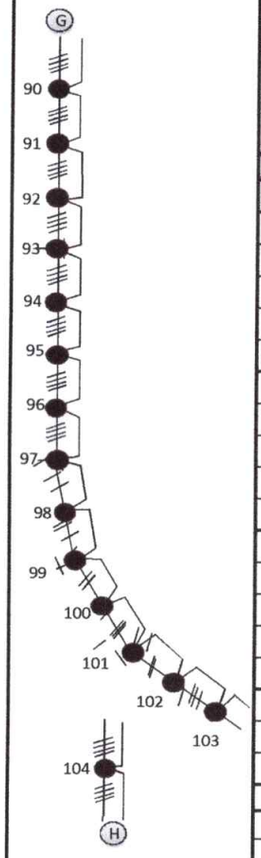
Proj. No. ____(c) Page No. ____(c)
Checked by: ENGR. H.B. DELA CRUZ
Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE Q	POLE H	POLE C	PRI. POLE TOP UNIT (ABC) Q	PRI. POLE TOP UNIT (ABC) CODE	LINE ANGLE	TRANS-FORMER "G" Q	TRANS-FORMER "G" CODE	GND. "M2" Q	GND. "M2" CODE	GUY "E" Q	GUY "E" CODE	LEAD M	ANC. "F" Q	ANC. "F" CODE	SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M" Q	MISC. UNIT "M" CODE	R/W "R1" Q	R/W "R1" CODE	CONS Q	CONS C	MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
76	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
									G		M2		E			F					J		S			K		M		R1		
77	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
78	50	3	1	50 C	1	C14				1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J5											
79	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
80	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
81	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
82	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
83	50	3	1	50 C	1	C14				1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J5											
84	50	3	1	50 C	1	C14											50	UB	D2/0	1	J6											
																				1	J15										
85	50	3	2	60 C	1	CH-FRAME				1	M2-11A	2	E1-2		2	F1-2	50	UB	D2/0	1	J6											
																				1	J15										
86	170	3	2	60 C	1	CH-FRAME				1	M2-11A	2	E1-2		2	F1-2	170	UB	D2/0	1	J6											
																				1	J15										
87	53	3	1	60 C	1	C14											53	UB	D2/0	1	J5											
88	53	3	1	60 C	1	C14				1	M2-11A	1	E1-2		1	F1-2	53	UB	D2/0	1	J5											
89	53	3	1	60 C	1	C14											53	UB	D2/0	1	J5											

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase			12	C14			5	M2-11A	7	E1-2	7	F1-2		2W		11	J5					K		M		R1-		R	2487	ACSR	ACSR
0	2-Phase			2	CH-FRAM											ACSR	3	J6		2S	D		K		M		R1-		C			ACSR
829	3-Phase	9	40											829		ACSR	3	J15					K		M		R1-		PB			
0	D-Ckt.													829	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
																													IR			Duplex
2487	Total																												SL			

SKETCH

See Sheet No.



See Sheet No

STAKING SHEET

PRIMARY COND. ACSR # 336.4 6/1 ACSR
NEUTRAL COND. ACSR # 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 7 of 15
Map Ref.

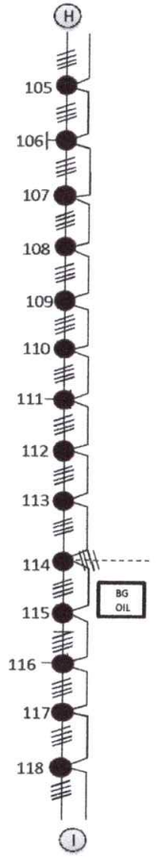
SUBSTATION GUIMBA SUBSTATION
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.
AS PLAN STAKING SHEET

Proj. No. (c) Page No. (c)
Checked by: ENGR. H.B. DELA CRUZ
Staked by: STAKING CREW
Date: Date: (5)
Released by:
Finel Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE H	POLE C	PRI. POLE TOP UNIT (ABC)	LINE ANGLE	TRANS-FORMER "G"	GND. "M2"	GUY "E"	LEAD M	ANC. "F"	SECODARY SPAN MTRS.	SECODARY SEC. OR U.B.	SECODARY WIRE SIZE	SECODARY NO	SECODARY "J"	SERVICE DROP MTRS.	SERVICE NO	SERVICE WIRE SIZE	SERVICE NO	SERVICE "K"	MISC. UNIT "M"	R/W "R1"	CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	Q CODE	C	Q CODE		Q CODE	Q CODE	Q CODE		Q CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q CODE	Q CODE	Q	C	COMPUTER CODING
90	53	1 60	C	1 C14							53	UB	D2/0	1	J5										
						G	M2	E		F					J		S			K	M	R1			
91	53	1 60	C	1 C14							53	UB	D2/0	1	J5										
92	53	1 60	C	1 C14							53	UB	D2/0	1	J5										
93	53	1 60	C	1 C14			1 M2-11A	1 E1-2		1 F1-2	53	UB	D2/0	1	J5										
94	53	1 60	C	1 C14							53	UB	D2/0	1	J5										
95	53	1 50	C	1 C14							53	UB	D2/0	1	J6										
														1	J15										
96	50	1 50	C	1 C14							50	UB	D2/0	1	J5										
97	50	1 50	C	1 C15			1 M2-11A	1 E1-2		1 F1-2	50	UB	D2/0	1	J10										
98	38	1 50	C	1 C14							38	UB	D2/0	1	J5										
99	35	1 50	C	1 C15			1 M2-11A	1 E1-2		1 F1-2	35	UB	D2/0	1	J10										
100	40	1 50	C	1 C14							40	UB	D2/0	1	J5										
101	40	1 50	C	1 C15			1 M2-11A	1 E1-2		1 F1-2	40	UB	D2/0	1	J10										
102	50	1 50	C	1 C14							50	UB	D2/0	1	J5										
103	50	1 50	C	1 C14							50	UB	D2/0	1	J5										
104	50	1 50	C	1 C14							50	UB	D2/0	1	J5										
QUAN	C	Q CODE		Q CODE		Q CODE	Q CODE	Q CODE		Q CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q CODE	Q CODE	Q	C	QUAN CODE
0	1-Phase			12 C14			4 M2-11A	4 E1-2		4 F1-2		2W		11	J5					K	M	R1-		R	2163 ACSR ACSR
0	2-Phase			3 C15									ACSR	1	J6		2S	D		K	M	R1-		C	ACSR
721	3-Phase	10	40								721		ACSR	3	J10					K	M	R1-		PB	
0	D-Ckt.										721	1UB	D1/0	1	J15		3S	D		K	M	R1-		LP	Insulated
																								IR	Duplex
2163	Total																							SL	

SKETCH

See Sheet No.



See Sheet No

STAKING SHEET

PRIMARY COND. ACSR # 336.4 6/1 ACSR
NEUTRAL COND. ACSR # 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.
Calipahan, Talavera, Nueva Ecija

SUBSTATION GUIMBA SUBSTATION
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.
AS PLAN STAKING SHEET

Sheet No. 8
of 15
Map Ref.

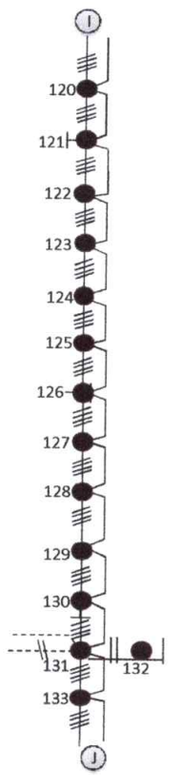
Proj. No. (c) Page No. (c)
Checked by: ENGR. H.B. DELA CRUZ
Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	C	COMPUTER CODING
105	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5											
									G		M2		E			F					J		S			K		M		R1			
106	43	3	1	50	C	1	C8				1	M2-11A	1	E1-2		1	F1-2	43	UB	D2/0	1	J6											
																					1	J15											
107	43	3	1	50	C	1	C14											43	UB	D2/0	1	J5											
108	42	3	1	50	C	1	C14											42	UB	D2/0	1	J5											
109	42	3	1	50	C	1	C14											42	UB	D2/0	1	J5											
110	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5											
111	53	3	1	50	C	1	C14				1	M2-11A	1	E1-2		1	F1-2	53	UB	D2/0	1	J5											
112	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5											
113	53	3	1	50	C	1	C14											53	UB	D2/0	1	J5											
114	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5											
115	45	3	1	50	C	1	C14											45	UB	D2/0	1	J5											
116	56	3	1	50	C	1	C14				1	M2-11A	1	E1-2		1	F1-2	56	UB	D2/0	1	J6											
																					1	J15											
117	46	3	1	50	C	1	C14											46	UB	D2/0	1	J5											
118	46	3	1	50	C	1	C14											46	UB	D2/0	1	J5											
119	56	3	1	50	C	1	C14											56	UB	D2/0	1	J5											

QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	C	QUAN	CODE	
0	1-Phase				1	C8				3	M2-11A	3	E1-2	3	F1-2		2W		13	J5				K		M		R1-		R	2175	ACSR	ACSR
0	2-Phase				14	C14												ACSR	2	J6		2S	D	K		M		R1-		C			ACSR
725	3-Phase	15	40													725		ACSR	2	J15				K		M		R1-		PB			
0	D-Ckt.															725	1UB	D1/0				3S	D	K		M		R1-		LP			Insulated
																														IR			Duplex
2175	Total																													SL			

SKETCH

See Sheet No. 8



See Sheet No 9

STAKING SHEET

PRIMARY COND. ACSR # 336.4 6/1 ACSR
NEUTRAL COND. ACSR # 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 9 of 15
Map Ref.

SUBSTATION GUIMBA SUBSTATION
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.
AS PLAN STAKING SHEET

Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. H.B. DELA CRUZ Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE				PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE						MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
			H	C														SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"							COMPUTER CODING
	QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE				Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	
120	46	3	1	50	C	1	C14											46	UB	D2/0	1	J5												
									G		M2		E			F						J		S		K		M		R1			
121	47	3	1	50	C	1	C14				1	M2-11A	1	E1-2		1	F1-2	47	UB	D2/0	1	J5												
122	54	3	1	50	C	1	C14											54	UB	D2/0	1	J5												
123	54	3	1	50	C	1	C14											54	UB	D2/0	1	J5												
124	54	3	1	50	C	1	C14											54	UB	D2/0	1	J5												
125	54	3	1	50	C	1	C14											54	UB	D2/0	1	J5												
126	50	3	1	50	C	1	C8				1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J6												
																					1	J15												
127	51	3	1	50	C	1	C14											51	UB	D2/0	1	J5												
128	38	3	1	50	C	1	C14											38	UB	D2/0	1	J5												
129	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5												
130	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5												
131	45	3	1	50	C	1	C14				1	M2-11A	1	E4-2				45	UB	D2/0	1	J5												
						1	A5-2														1	J15												
132			1	30	C								1	E1-2		1	F1-2																
133	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5												

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase	1	30	1	A5-2			3	M2-11A	3	E1-2	3	F1-2		2W		12	J5				K		M		R1-		R	1929	ACSR	ACSR
0	2-Phase			1	C8					1	E4-2					ACSR	1	J6		2S	D	K		M		R1-		C			ACSR
643	3-Phase	13	40	12	C14									643		ACSR	2	J15				K		M		R1-		PB			
0	D-Ckt.													643	1UB	D1/0				3S	D	K		M		R1-		LP			Insulated
																												IR			Duplex
1929	Total																											SL			

STAKING SHEET

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 10 of 15

Map Ref.

Proj. No. ____ (c) Page No. ____ (c)

Checked by: ENGR. H.B. DELA CRUZ Staked by: STAKING CREW

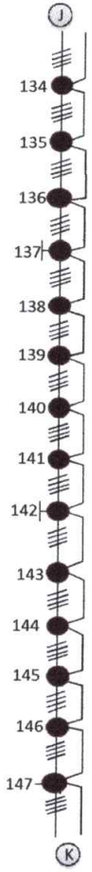
Date: Date: (5)

Released by: Finel Inv. By:

Date: Date: (8)

SKETCH

See Sheet No. 9



See Sheet No 10

PRIMARY COND. ACSR # 336.4 6/1 ACSR

NEUTRAL COND. ACSR # 2/0 6/1 ACSR

RULING SPAN 50 METERS

SUBSTATION GUIMBA SUBSTATION

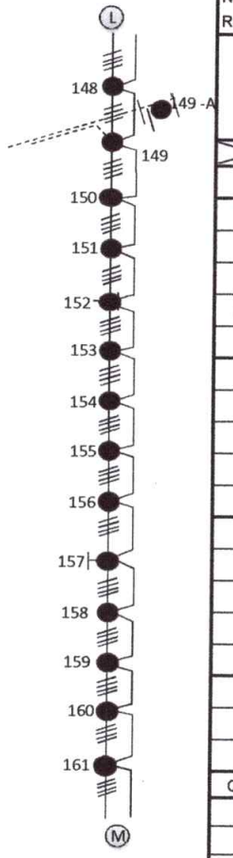
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.

AS PLAN STAKING SHEET

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE						MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
			H	C													SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"							
	QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
134	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
									G		M2		E			F					J		S			K		M		R1			
135	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
136	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
137	50	3	1	50 C	1	C14				1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J6											
																				1	J15											
138	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
139	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
140	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
141	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
142	50	3	1	50 C	1	C14				1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J5											
143	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
144	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
145	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
146	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
147	50	3	1	50 C	1	C8				1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J6											
																				1	J15											
QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	QUAN	CODE	
0	1-Phase				1	C8				3	M2-11A	3	E1-2		3	F1-2		2W		12	J5					K		M		R1-	R	2100	ACSR	ACSR
0	2-Phase				13	C14													ACSR	2	J6		2S	D		K		M		R1-	C			ACSR
700	3-Phase	14	40														700		ACSR	2	J15					K		M		R1-	PB			
0	D-Ckt.																700	1UB	D1/0				3S	D		K		M		R1-	LP			Insulated
																															IR			Duplex
2100	Total																														SL			

SKETCH

See Sheet No. 10



See Sheet No 11

STAKING SHEET

PRIMARY COND. ACSR # 336.4 6/1 ACSR
NEUTRAL COND. ACSR # 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

SUBSTATION GUIMBA SUBSTATION
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.
AS PLAN STAKING SHEET

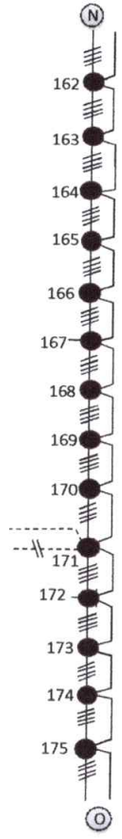
Sheet No. 11
of 15
Map Ref.

Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. H.B. DELA CRUZ
Staked by: STAKING CREW
Date: ____ Date: ____ (5)
Released by: ____ Final Inv. By: ____
Date: ____ Date: ____ (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H CODE	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
148	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5												
									G		M2		E			F					J		S		K		M		R1				
149	50	3	1	50	C	1	C14				1	M2-11A	1	E4-2				50	UB	D2/0	1	J5											
						1	A5-2														1	J6											
149-A			1	30	C								1	E1-2		1	F1-2															
150	47	3	1	50	C	1	C14											47	UB	D2/0	1	J5											
151	47	3	1	50	C	1	C14											47	UB	D2/0	1	J5											
152	46	3	1	50	C	1	C14				1	M2-11A	1	E1-2		1	F1-2	46	UB	D2/0	1	J5											
153	46	3	1	50	C	1	C14											46	UB	D2/0	1	J5											
154	46	3	1	50	C	1	C14											46	UB	D2/0	1	J5											
155	26	3	1	50	C	1	C14											26	UB	D2/0	1	J5											
156	51	3	1	50	C	1	C14											51	UB	D2/0	1	J5											
157	41	3	1	50	C	1	C14				1	M2-11A	1	E1-2		1	F1-2	41	UB	D2/0	1	J6											
																					1	J15											
158	42	3	1	50	C	1	C14											42	UB	D2/0	1	J5											
159	41	3	1	50	C	1	C14											41	UB	D2/0	1	J5											
160	37	3	1	50	C	1	C14											37	UB	D2/0	1	J5											
161	37	3	1	50	C	1	C14											37	UB	D2/0	1	J5											
QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase	1	30		1	A5-2				3	M2-11A	3	E1-2		3	F1-2		2W			13	J5				K		M		R1-		R	1821	ACSR	ACSR
0	2-Phase				14	C14						1	E4-2						ACSR	2	J6		2S	D	K		M		R1-		C			ACSR
607	3-Phase	14	40														607		ACSR	1	J15				K		M		R1-		PB			
0	D-Ckt.																607	1UB	D1/0				3S	D	K		M		R1-		LP			Insulated
																															IR			Duplex
1821	Total																														SL			

SKETCH

See Sheet No. 1



See Sheet No 12

STAKING SHEET

PRIMARY COND. ACSR # 336.4 6/1 ACSR
NEUTRAL COND. ACSR # 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

SUBSTATION GUIMBA SUBSTATION
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.
AS PLAN STAKING SHEET

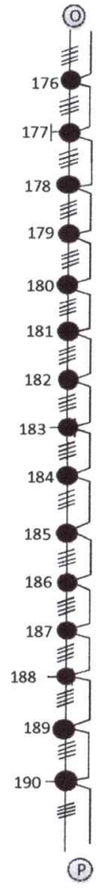
Sheet No. 12
of 15
Map Ref.

Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. H.E. DELA CRUZ
Staked by: STAKING CREW
Date: ____ Date: ____ (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H CODE	C Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
162	50	3	1	50 C	1	C14				1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J5												
									G		M2		E			F					J		S			K		M		R1			
163	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
164	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
165	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
166	50	3	1	50 C	1	C14											50	UB	D2/0	1	J5											
167	50	3	1	50 C	1	C14				1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J5											
168	44	3	1	50 C	1	C8											44	UB	D2/0	1	J6											
																				1	J15											
169	43	3	1	50 C	1	C14											43	UB	D2/0	1	J5											
170	41	3	1	50 C	1	C14											41	UB	D2/0	1	C											
171	41	3	1	50 C	1	C14											41	UB	D2/0	1	J5											
					1	A5-2														1	J6											
172	41	3	1	50 C	1	C14				1	M2-11A	1	E1-2		1	F1-2	41	UB	D2/0	1	J5											
173	47	3	1	50 C	1	C14											47	UB	D2/0	1	J5											
174	53	3	1	50 C	1	C14											53	UB	D2/0	1	J5											
175	54	3	1	50 C	1	C14											54	UB	D2/0	1	J5											
QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase				1	A5-2				3	M2-11A	3	E1-2		3	F1-2		2W		12	J5					K		M		R1-		R	1992	ACSR	ACSR
0	2-Phase				1	C8													ACSR	2	J6		2S	D		K		M		R1-		C			ACSR
664	3-Phase	14	40		13	C14											664		ACSR	1	J15					K		M		R1-		PB			
0	D-Ckt.																664	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
																																IR			Duplex
1992	Total																															SL			

SKETCH

See Sheet No.



See Sheet No

STAKING SHEET

PRIMARY COND. ACSR # 336.4 6/1 ACSR
NEUTRAL COND. ACSR # 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 13
of 15
Map Ref.

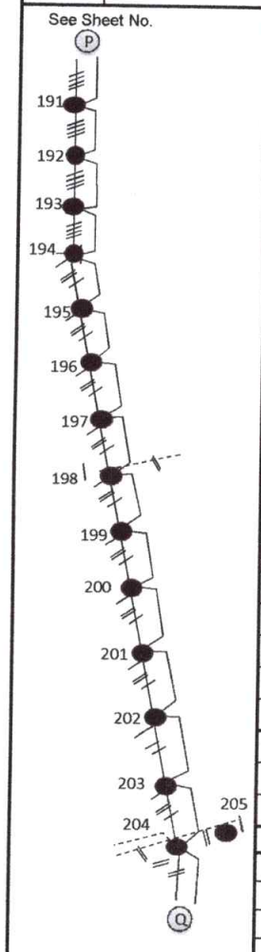
SUBSTATION GUIMBA SUBSTATION
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.
AS PLAN STAKING SHEET

Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. H.B. DELA CRUZ Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE H	POLE C	PRI. POLE TOP UNIT (ABC)	LINE ANGLE	TRANS-FORMER "G"	GND. "M2"	GUY "E"	LEAD M	ANC. "F"	SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"	R/W "R1"	CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	C	COMPUTER CODING
176	54	1	50	C	1	C14						54	UB	D2/0	1	J5									
						G		M2		E		F				J		S		K		M		R1			
177	49	3	1	50	C	1	C14		1	M2-11A	1	E1-2	1	F1-2	49	UB	D2/0	1	J5							
178	40	3	1	50	C	1	C14								40	UB	D2/0	1	J5							
179	39	3	1	50	C	1	C14								39	UB	D2/0	2	J6							
						1	C7											1	J15							TO TRIALA
180	47	3	1	50	C	1	C14								47	UB	D2/0	1	J5							
181	58	3	1	50	C	1	C14								58	UB	D2/0	1	J5							
182	46	3	1	50	C	1	C14								46	UB	D2/0	1	J5							
183	48	3	1	50	C	1	C14		1	M2-11A	1	E1-2	1	F1-2	48	UB	D2/0	1	J5							
184	41	3	1	50	C	1	C14								41	UB	D2/0	1	J5							
185	40	3	1	50	C	1	C14								40	UB	D2/0	1	J5							
186	39	3	1	50	C	1	C14								39	UB	D2/0	1	J5							
187	40	3	1	50	C	1	C14								40	UB	D2/0	1	J5							
188	40	3	1	50	C	1	C14		1	M2-11A	1	E1-2	1	F1-2	40	UB	D2/0	1	J5							
189	40	3	1	50	C	1	C14								40	UB	D2/0	1	J5							
190	41	3	1	50	C	1	C8		1	M2-11A	1	E1-2	1	F1-2	41	UB	D2/0	1	J6							
																		1	J15							

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	C	QUAN	CODE	
0	1-Phase			1	C7			4	M2-11A	4	E1-2	4	F1-2		2W		13	J5				K		M		R1-		R	1986	ACSR	ACSR
0	2-Phase			1	C8											ACSR	3	J6		2S	D	K		M		R1-		C			ACSR
662	3-Phase	15	40	14	C14									662		ACSR	2	J15				K		M		R1-		PB			
0	D-Ckt.													662	1UB	D1/0				3S	D	K		M		R1-		LP			Insulated
																												IR			Duplex
1986	Total																											SL			

SKETCH



STAKING SHEET

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 14 of 15

Map Ref.

Proj. No. ____ (c) Page No. ____ (c)

Checked by: ENGR. H.B. DELA CRUZ Staked by: STAKING CREW

Date: Date: (5)

Released by: Final Inv. By:

Date: Date: (8)

PRIMARY COND. ACSR # 336.4 6/1 ACSR

NEUTRAL COND. ACSR # 2/0 6/1 ACSR

RULING SPAN 50 METERS

SUBSTATION GUIMBA SUBSTATION

LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.

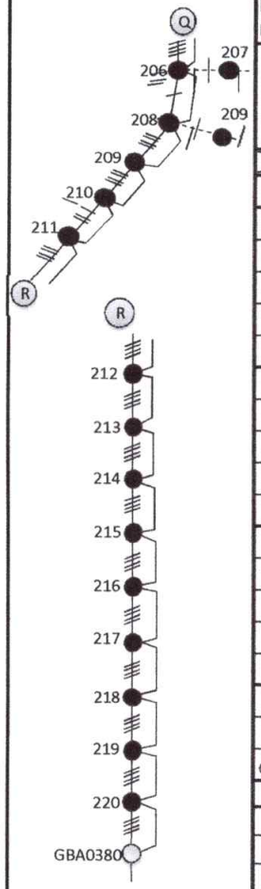
AS PLAN STAKING SHEET

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
191	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5											
									G		M2		E			F					J		S			K		M		R1			
192	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5											
193	42	3	1	50	C	1	C14											42	UB	D2/0	1	J5											
194	47	3	1	50	C	1	C15			1	M2-11A	1	E1-2		1	F1-2		47	UB	D2/0	1	J10											
195	43	3	1	50	C	1	C14											43	UB	D2/0	1	J5											
196	55	3	1	50	C	1	C14											55	UB	D2/0	1	J5											
197	58	3	1	50	C	1	C14											58	UB	D2/0	1	J5											
198	58	3	1	50	C	1	C14			1	M2-11A	1	E1-2		1	F1-2		58	UB	D2/0	1	J5											
						1	A5-2														1	J6											
199	41	3	1	50	C	1	C14											41	UB	D2/0	1	J6											
200	41	3	1	50	C	1	C14											41	UB	D2/0	1	J5											
201	42	3	1	50	C	1	C14											42	UB	D2/0	1	J5											
202	42	3	1	50	C	1	C14											42	UB	D2/0	1	J5											
203	55	3	1	50	C	1	C14											55	UB	D2/0	1	J5											
204	55	3	1	50	C	1	C15			1	M2-11A	1	E4-2					55	UB	D2/0	1	J10											
						1	A5-2														1	J6											
205			1	30	C							1	E1-2		1	F1-2																
QUAN	C		Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C
0	1-Phase		1	30		2	A5-2				3	M2-11A	3	E1-2		3	F1-2		2W		11	J5					K		M		R1-		R
0	2-Phase					12	C14						1	E4-2						ACSR	3	J6		2S	D		K		M		R1-		C
729	3-Phase		14	40		2	C15											729		ACSR	2	J10					K		M		R1-		PB
0	D-Cld.																	729	1UB	D1/0				3S	D		K		M		R1-		LP
																																	IR
2187	Total																																SL

QUAN	CODE	
2187	ACSR	ACSR
		ACSR
		Insulated
		Duplex

SKETCH

See Sheet No.



See Sheet No

STAKING SHEET

PRIMARY COND. ACSR # 336.4 6/1 ACSR
NEUTRAL COND. ACSR # 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 15
of 15
Map Ref.

SUBSTATION GUIMBA SUBSTATION
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.
AS PLAN STAKING SHEET

Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. H.B. DELA CRUZ Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE					MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
			H	C													SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"							
	QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
206	55	3	1	50	C	1	C15				1	M2-11A	1	E4-2			55	UB	D2/0	1	J10											
207			1	30	C								1	E1-2		1	F1-2				J		S			K		M		R1			
208	60	3	1	50	C	1	C15				1	M2-11A	1	E4-2			60	UB	D2/0	1	J10											
209			1	50	C								1	E1-2		1	F1-2				J											
210	50	3	1	50	C	1	C14										50	UB	D2/0	1	J5											
211	45	3	1	50	C	1	C14										45	UB	D2/0	1	J5											
212	46	3	1	50	C	1	C8										46	UB	D2/0	1	J6											
						1	A5-2													1	J15											
213	54	3	1	50	C	1	C14										54	UB	D2/0	1	J5											
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215	44	3	1	50	C	1	C14											44	UB	D2/0	1	J5											
216	41	3	1	50	C	1	C14											41	UB	D2/0	1	J5											
217	42	3	1	50	C	1	C14											42	UB	D2/0	1	J5											
218	46	3	1	50	C	1	C14											46	UB	D2/0	1	J5											
219	49	3	1	50	C	1	C14				1	M2-11A	1	E1-2		1	F1-2	49	UB	D2/0	1	J5											
220	54	3	1	50	C	1	C14											54	UB	D2/0	1	J5											
GBA0380	55	3																55	UB	D2/0													
QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	QUAN	CODE	
0	1-Phase	2	30		1	A5-2				4	M2-11A	4	E1-2		4	F1-2		2W								K		M		R1-		R	2076	ACSR	ACSR
0	2-Phase				1	C8						2	E4-2						ACSR # 2/0				2S	D		K		M		R1-		C			ACSR
692	3-Phase	13	40		10	C14											692		ACSR # 2/0							K		M		R1-		PB			
0	D-Ckt.				2	C15											637	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
																																IR			Duplex
2076	Total																															SL			

NUEVA ECIJA ELECTRIC COOPERATIVE, INC,. - AREA 1

Calipahan, Talavera, Nueva Ecija

July 14, 2021

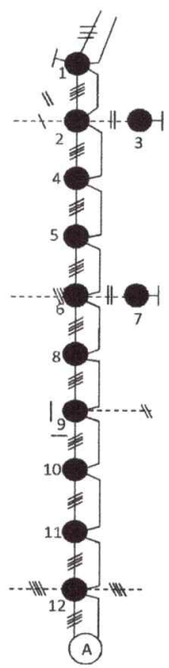
PROJECT DESCRIPTION : **BILL OF MATERIALS FOR THE RELOCATION OF ELECTRICAL FACILITIES OF NEECO II - AREA 1 AFFECTED BY THE ROAD WIDENING PROJECT OF DPWH. (SALVADOR ST., GUIMBA TO LENNEC GUIMBA (GUIMBA - PANGASINAN ROAD)**

3 Phase = 2.492 Kms.
U.B. = 2.538 Kms.

DESCRIPTION	PROJECT REQ'MNTS.	
LOT. B		
Anchor, Expanding, 8,000 Pounds, 4 Way, Galvanized Steel, HDG, JFI	18	pieces
Bolt, Thimble Eye 5/8" X 12", Angle Type, HDG, JFI	18	pieces
Bolt, Thimble Eye 5/8" X 12" Straight Type, HDG, JFI	6	pieces
Bolt, Carriage 3/8" X 4-1/2", HDG, JFI	16	pieces
Bolt, Double Arming 5/8" X 24", HDG, JFI	30	pieces
Bolt, Double Upset, 5/8" X 12", HDG, JFI	59	pieces
Bolt, Oval Eye, 5/8" X 12", HDG, JFI	26	pieces
Bolt, Oval Eye, 5/8" X 18", HDG, JFI	2	pieces
Bolt, Machine, 1/2" X 6", HDG, JFI	79	pieces
Bolt, Machine, 1/2" X 12", HDG, JFI	14	pieces
Bolt, Machine, 5/8" X 12", HDG, JFI	99	pieces
Brace, Crossarm, 28", Steel, HDG, JFI	16	each
Brace, Crossarm, 60" - 18" Drop, HDG, JFI	4	pairs
Brace, Sidearm, Diagonal, 7 Feet, HDG, JFI	75	pieces
Bracket, Clevis Deadend Without Spool, HDG, JFI	12	pieces
Clamp, Anchor Bonding, Single Eye Rod, HDG, JFI	18	pieces
Clamp, Loop Deadend, #2/0 ACSR, HDG, JFI	48	pieces
Clamp, Dead-end Strain, #4/0 ACSR, HDG, JFI	25	pieces
Clamp, Guy Straight, 3 Bolt, Heavy Duty Steel, HDG, JFI	48	pieces
Clevis, Secondary Swinging Without Spool, HDG, JFI	24	pieces
Shackle, Anchor, Forged Steel, Galvanized, HDG, JFI	6	pieces
Conductor, Bare, ACSR #2/0, AWG 6/1, Phelps Dodge/AMWIRE	2,866	meters
Conductor, Bare, ACSR #4/0, AWG 6/1, Phelps Dodge/AMWIRE	8,597	meters
Conductor, Insulated, ACSR #2/0, AWG 6/1, Phelps Dodge/AMWIRE	2,919	meters
Connector, Compression, #2/0 - #4/0 ACSR Run To #2/0 - #4/0	87	pieces
Connector, Ground Rod (Clamp) For 5/8" Steel Rod, HDG, JFI	19	pieces
Pin, Crossarm, Steel, 5/8" X 14-3/4"X 1-3/8", Hot Dip Galvanized, JFI, Nylon Thread	142	pieces
Nut, Thimble Eye, 5/8" Single Eye, Hot Dip Galvanized, JFI	6	pieces
Insulator, Pin Type, Polymer, ANSI, Class 55 - 5 X 1-3/8", HENDRIX	234	pieces
Insulator, Spool, 1-3/4", ANSI, Class 53 - 2	115	pieces
Insulator, Spool, 3", ANSI, Class 53 - 4	36	pieces
Insulator, Suspension, 4 shed, Polymer,15KV, HENDRIX	50	pieces
Nut, Eye, 5/8", Conventional, HDG, JFI	33	pieces
Nut, Lock, Mf Type, 3/8", HDG, JFI	16	pieces
Nut, Lock, Mf Type, 1/2", HDG, JFI	154	pieces
Nut, Lock, Mf Type, 5/8", HDG, JFI	322	pieces
Rod, Anchor, Threaded, Single Eye, 5/8" X 7', HDG, JFI	18	pieces
Rod, Armor, Preformed, #2/0 ACSR, Single Support	114	sets
Rod, Armor, Preformed, #2/0 ACSR, Double Support	6	sets
Rod, Armor, Preformed, #4/0 ACSR, Single Support	176	sets
Rod, Armor, Preformed, #4/0 ACSR, Double Support	18	sets
Rod, Ground Steel, Galvanized, 5/8" X 10', HDG, JFI	19	pieces
Washer, Square, Flat, 2-1/4" X 2-1/4" X 3/16", 13/16" Diameter Hole, HDG, JFI	378	pieces
Washer, Round, 1-3/8" Diameter With 9/16" Diameter Hole, HDG, JFI	154	pieces
Wire, Tie, Aluminum Alloy, Soft, #4 AWG	2,656	feet
Wire, Tape, Armor, Aluminum Alloy, 0,5" X 0.3"	27	feet
Wire, Grounding, Aluminum Alloy, 3 Strand, #4 AWG	893	feet
Wire, Guy, Steel, 3/8", 7 Strand	1,320	feet
CONCRETE/STEEL MATERIAL		
Pole, Concrete, 30', Class 5, Minimum Break Load - 1000 kgs. , Approx. Weight -745 kgs. Top Dia. 201 mm, Bottom Dia. 310, Wall Thickness 50 mm, Depth in Ground 1500mm-TEH HSIN	7	pieces
Pole, Concrete, 40', Class 3, Minimum Break Load - 1400 kgs. , Approx. Weight -1335 kgs. Top Dia. 238 mm, Bottom Dia. 418, Wall Thickness 50 mm, Depth in Ground 1800mm-TEH HSIN	66	pieces
Crossarm, Steel, 3" X 4" X 8', Hot Dip Galvanized, JFI	83	pieces

SKETCH

See Sheet No. START



See Sheet No 1

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

SUBSTATION GUIMBA SUBSTATION
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.
AS PLAN STAKING SHEET

Sheet No. 1 of 4
Map Ref.

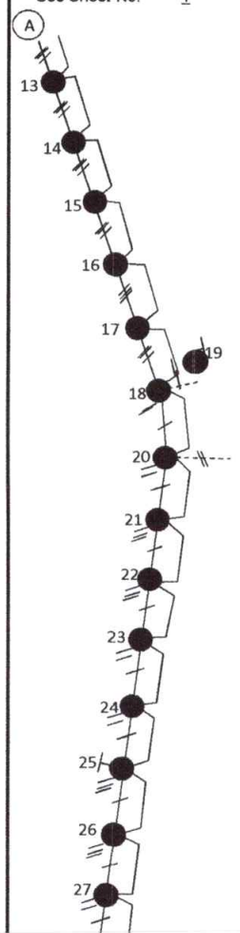
Proj. No. (c) Page No. (c)
Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE						MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
			H	C													SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"						
	QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	COMPUTER CODING
1			1	40	C	1	C15				1	M2-11A	1	E1-2		1	F1-2		UB	D2/0	1	J10										
									G			M2		E			F					J		S			K		M		R1		
2	51	3	1	40	C	1	C14						1	E4-2				51	UB	D2/0	1	J5										
						1	B7														1	J6										
3			1	30	C						1	M2-11A	1	E1-2		1	F1-2															
4	57	3	1	40	C	1	C14											57	UB	D2/0	1	J5										
5	38	3	1	40	C	1	C14											38	UB	D2/0	1	J5										
6	35	3	1	40	C	1	C14				1	M2-11A	1	E4-2				35	UB	D2/0	1	J5										
						1	C7														1	J6										
7			1	30	C						1	M2-11A	1	E1-2		1	F1-2															
8	34	3	1	40	C	1	C14											34	UB	D2/0	1	J5										
9	35	3	1	40	C	1	C14				1	M2-11A	1	E1-2		1	F1-2	35	UB	D2/0	1	J5										
						1	A5-2														1	J6										
10	35	3	1	40	C	1	C14											35	UB	D2/0	1	J5										
11	34	3	1	40	C	1	C14											34	UB	D2/0	1	J5										
12	52	3	1	40	C	1	C14											52	UB	D2/0	1	J5										
						2	C7														1	J6										
																					1	J15										

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase	2	30	1	A5-2			5	M2-11A	4	E1-2	4	F1-2		2W		9	J5					K		M		R1-		R	1113	ACSR	ACSR
0	2-Phase			1	B7					2	E4-2					ACSR	4	J6		2S	D		K		M		R1-		C			ACSR
371	3-Phase	10	40	3	C7									371		ACSR	1	J10					K		M		R1-		PB			
0	D-Ckt.			9	C14									371	1UB	D1/0	1	J15		3S	D		K		M		R1-		LP			Insulated
				1	C15																								IR			Duplex
1113	Total																												SL			

SKETCH

See Sheet No. 1



See Sheet No

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 2 of 4
Map Ref.

SUBSTATION GUIMBA SUBSTATION
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.
AS PLAN STAKING SHEET

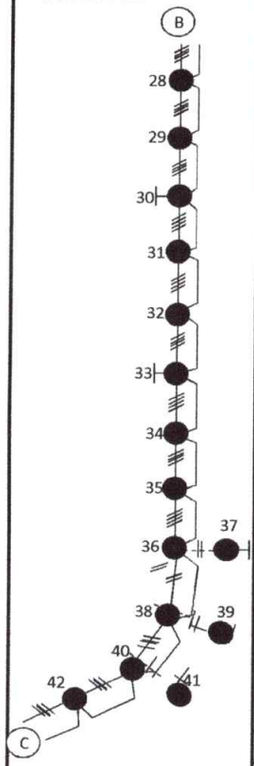
Proj. No. (c) Page No. (c)
Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE															COMPUTER CODING
13	37	3	1	40	C	1	C14											37	UB	D2/0	1	J5										
										G		M2		E			F					J		S		K		M		R1			
14	38	3	1	40	C	1	C14				1	M2-11A	1	E1-2		1	F1-2	38	UB	D2/0	1	J5										
15	35	3	1	40	C	1	C14											35	UB	D2/0	1	J6										
																					1	J15										
16	36	3	1	40	C	1	C14											36	UB	D2/0	1	J5										
17	48	3	1	40	C	1	C14											48	UB	D2/0	1	J5										
18	55	3	1	40	C	1	C15				1	M2-11A	1	E4-2				55	UB	D2/0	1	J10										
19			1	30	C								1	E1-2		1	F1-2															
20	22	3	1	40	C	1	C15				1	M2-11A						22	UB	D2/0	1	J10										
						1	A5-2														1	J6										
21	29	3	1	40	C	1	C14											9	UB	D2/0	1	J5										
22	35	3	1	40	C	1	C14											35	UB	D2/0	1	J5										
23	34	3	1	40	C	1	C14											34	UB	D2/0	1	J5										
24	28	3	1	40	C	1	C14											28	UB	D2/0	1	J5										
25	55	3	1	40	C	1	C14				1	M2-11A	1	E1-2		1	F1-2	55	UB	D2/0	1	J5										
26	59	3	1	40	C	1	C14											59	UB	D2/0	1	J5										
27	51	3	1	40	C	1	C14											51	UB	D2/0	1	J5										

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		NO	CODE	QUAN	C		NO	CODE		CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase	1	30	1	A5-2			4	M2-11A	3	E1-2	3	F1-2		2W		11	J5					K		M		R1-		R	1626	ACSR	ACSR
0	2-Phase			12	C14					1	E4-2					ACSR	2	J6		2S	D		K		M		R1-		C			ACSR
542	3-Phase	14	40	2	C15									542		ACSR	2	J10					K		M		R1-		PB			
0	D-Ckt.													542	1UB	D1/0	1	J15		3S	D		K		M		R1-		LP			Insulated
																													IR			Duplex
1626	Total																												SL			

SKETCH

See Sheet No.



See Sheet No

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 3 of 4
Map Ref.

SUBSTATION GUIMBA SUBSTATION
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.
AS PLAN STAKING SHEET

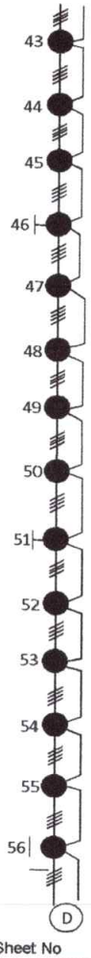
Proj. No. (c) Page No. (c)
Checked by: ENGR. R.M. PUNO
Staked by: STAKING CREW
Date: Date: (5)
Released by:
Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
28	50	3	1	40	C	1	C8											50	UB	D2/0	1	J6											
									G		M2		E				F					J15		S		K		M		R1			
29	42	3	1	40	C	1	C14											42	UB	D2/0	1	J5											
30	42	3	1	40	C	1	C14				1	M2-11A	1	E1-2		1	F1-2	42	UB	D2/0	1	J5											
31	43	3	1	40	C	1	C14											43	UB	D2/0	1	J5											
32	46	3	1	40	C	1	C14											46	UB	D2/0	1	J5											
33	46	3	1	40	C	1	C14				1	M2-11A	1	E1-2		1	F1-2	46	UB	D2/0	1	J5											
34	46	3	1	40	C	1	C14											46	UB	D2/0	1	J5											
35	47	3	1	40	C	1	C14											47	UB	D2/0	1	J5											
36	47	3	1	40	C	1	C15				1	M2-11A	1	E4-2				47	UB	D2/0	1	J10											
37			1	30	C								1	E1-2		1	F1-2																
38	53	3	1	40	C	1	C15				1	M2-11A	1	E4-2				53	UB	D2/0	1	J10											
39			1	30	C								1	E1-2		1	F1-2																
40	41	3	1	40	C	1	C15				1	M2-11A	1	E4-2				41	UB	D2/0	1	J10											
41			1	30	C								1	E1-2		1	F1-2																
42	38	3	1	40	C	1	C14											38	UB	D2/0	1	J6											
																					1	J15											

QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase	3	30		1	C8				5	M2-11A	5	E1-2	5	F1-2		2W		7	J5				K		M		R1-		R	1485	ACSR	ACSR
0	2-Phase				8	C14						3	E4-2					ACSR	2	J6		2S	D	K		M		R1-		C			ACSR
495	3-Phase	12	40		3	C15										495		ACSR	3	J10				K		M		R1-		PB			
0	D-Ckt.															541	1UB	D1/0	1	J15		3S	D	K		M		R1-		LP			Insulated
																														IR			Duplex
1485	Total																													SL			

SKETCH

See Sheet No. C



See Sheet No

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 4
of 4
Map Ref.

SUBSTATION GUIMBA SUBSTATION
LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.
AS PLAN STAKING SHEET

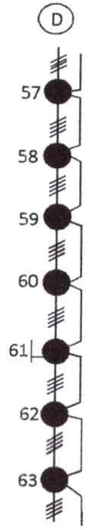
Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE		COMPUTER CODING
43	38	3	1	40	C	1	C14											38	UB	D2/0	1	J5											
									G		M2		E			F					J		S			K		M		R1			
44	48	3	1	40	C	1	C14											48	UB	D2/0	1	J5											
45	48	3	1	40	C	1	C14											48	UB	D2/0	1	J5											
46	49	3	1	40	C	1	C14				1	M2-11/A	1	E1-2		1	F1-2	49	UB	D2/0	1	J5											
47	49	3	1	40	C	1	C14											49	UB	D2/0	1	J5											
48	49	3	1	40	C	1	C14											49	UB	D2/0	1	J5											
49	49	3	1	40	C	1	C14											49	UB	D2/0	1	J5											
50	49	3	1	40	C	1	C14											49	UB	D2/0	1	J5											
51	50	3	1	40	C	1	C14				1	M2-11/A	1	E1-2		1	F1-2	50	UB	D2/0	1	J5											
52	46	3	1	50	C	1	C14											46	UB	D2/0	1	J6											
																						J15											
53	47	3	1	40	C	1	C14											47	UB	D2/0	1	J5											
54	47	3	1	40	C	1	C14											47	UB	D2/0	1	J5											
55	47	3	1	40	C	1	C14											47	UB	D2/0	1	J5											
56	47	3	1	40	C	1	C14				1	M2-11/A	1	E1-2		1	F1-2	47	UB	D2/0	1	J5											

QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase				14	C14				3	M2-11/A	3	E1-2	3	F1-2		2W		13	J5					K		M		R1-		R	1989	ACSR	ACSR
0	2-Phase																	ACSR	1	J6		2S	D		K		M		R1-		C			ACSR
663	3-Phase	13	40													663		ACSR # 1/0							K		M		R1-		PB			
0	D-Ckt.															663	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
																															IR			Duplex
1989	Total																														SL			

SKETCH

See Sheet No.



See Sheet No

STAKING SHEET

PRIMARY COND. 0 6/1 ACSR
NEUTRAL COND. 0 6/1 ACSR
RULING SPAN 0 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

SUBSTATION GUIMBA SUBSTATION
LINE REHABILITATION OF FEEDER 41 FROM GUIMBA MARKET TO SAN RAFAEL GUIMBA AS PLAN STAKING SHEET

Sheet No. 5
of 0
Map Ref.

Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. H.B. DELA CRUZ Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE					MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
			H	C													SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"						
	QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	COMPUTER CODING
57	47	3	1	40 C	1	C14											47	UB	D2/0	1	J5										
								G		M2		E			F						J		S			K		M		R1		
58	47	3	1	40 C	1	C14											47	UB	D2/0	1	J5										
59	55	3	1	40 C	1	C14											55	UB	D2/0	1	J5										
60	55	3	1	40 C	1	C14											55	UB	D2/0	1	J5										
61	55	3	1	40 C	1	C8				1	M2-11A	1	E1-2		1	F1-2	55	UB	D2/0	1	J6										
																				1	J15										
62	117	3	1	40 C	1	C14											117	UB	D2/0	1	J5										BRIDGE
63	45	3	1	40 C	1	C8											45	UB	D2/0	1	J6										
																				1	J15										

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase																2W								K		M		R1-		R	1263	0	ACSR
0	2-Phase																	0					2S	D	K		M		R1-		C			ACSR
421	3-Phase	7	40													421		0							K		M		R1-		PB			
0	D-Ckt.															421	1UB	D1/0					3S	D	K		M		R1-		LP			Insulated
																															IR			Duplex
1263	Total																														SL			

SKETCH

STAKING SHEET

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 1 of 1

Map Ref.

Proj. No. ____ (c) Page No. ____ (c)

Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW

Date: Date: (5)

Released by: Final Inv. By:

Date: Date: (8)

PRIMARY COND. ACSR # 1/0 6/1 ACSR

NEUTRAL COND. ACSR # 1/0 6/1 ACSR

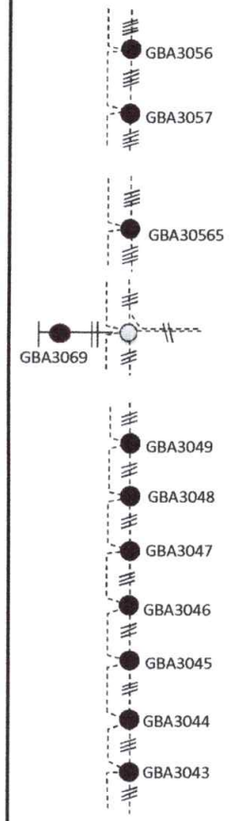
RULING SPAN 50 METERS

SUBSTATION GUIMBA SUBSTATION

LINE RELOCATION OF LINE ATGUIMBA - PANGASINAN ROAD, N. E.

AS-PLAN STAKING SHEET

See Sheet No.



See Sheet No

POLE NO.	PRI. BACK SPAN MTRS.	POLE H	POLE C	PRI. POLE TOP UNIT (ABC)	LINE ANGLE	TRANS-FORMER "G"	GND. "M2"	GUY "E"	LEAD M	ANC. "F"	SECODARY SPAN MTRS.	SECODARY SEC. OR U.B.	SECODARY WIRE SIZE	SECODARY NO	SECODARY "J"	SERVICE DROP MTRS.	SERVICE NO	SERVICE WIRE SIZE	SERVICE NO	SERVICE "K"	MISC. UNIT "M"	R/W "R1"	CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN C	Q CODE		Q CODE		Q CODE	Q CODE	Q CODE		Q CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q CODE	Q CODE	Q C	COMPUTER CODING
GBA3056		1 40	C	1 C14								UB	D1//0	1	J5									
						G	M2	E		F					J		S			K	M	R1		
GBA3057		1 40	C	1 C14								UB	D1/0	1	J5									
GBA3065		1 40	C	1 C14								UB	D1/0	1	J5									
GBA3069		1 30	C					1 E1-2		1 F1-2														
GBA3243		1 40	C	1 B14								UB	D1/0	1	J5									
GBA3244		1 40	C	1 B14								UB	D1/0	1	J5									
GBA3245		1 40	C	1 B14								UB	D1/0	1	J5									
GBA3246		1 40	C	1 B14			1 M2-11A	1 E1-2		1 F1-2		UB	D1/0	1	J5									
GBA3247		1 40	C	1 B14								UB	D1/0	1	J5									
GBA3248		1 40	C	1 B14								UB	D1/0	1	J5									
GBA3249		1 40	C	1 B14								UB	D1/0	1	J5									

QUAN	C	Q CODE		Q CODE		Q CODE	Q CODE	Q CODE	Q CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q CODE	Q CODE	Q C	QUAN	CODE	
0	1-Phase	1	30	7	B14			1 M2-11A	2 E1-2	2 F1-2		2W		10	J5				K	M	R1-	R		ACSR	ACSR
0	2-Phase			3	C14								ACSR # 1/0				2S	D	K	M	R1-	C			ACSR
0	3-Phase	10	40								0		ACSR # 1/0						K	M	R1-	PB			
0	D-Ckt.											1UB					3S	D	K	M	R1-	LP			Insulated
																						IR			Duplex
0	Total																					SL			

NUEVA ECIJAII ELECTRIC COOPERATIVE, INC,.
Calipahan, Talavera, Nueva Ecija

July 14, 2021

PROJECT DESCRIPTION : **BILL OF MATERIALS FOR THE RELOCATION OF ELECTRICAL FACILITIES OF NEECO II - AREA 1 AFFECTED BY THE ROAD WIDENING PROJECT OF DPWH. (SARANAY (CATMAN) TO BANITAN, GUIMBA. (GUIMBA - TARLAC ROAD)**

3 Phase = 1.834 Kms.
1 Phase = 2.399 Kms.
U.B. = 4.233 Kms.

LOT. C

DESCRIPTION	PROJECT REQ'MNTS.
Anchor, Expanding, 8,000 Pounds, 4 Way, Galvanized Steel, JFI	46 pieces
Bolt, Thimble Eye 5/8" X 12" Angle Type, HDG, JFI	47 pieces
Bolt, Thimble Eye 5/8" X 12" Straight Type, HDG, JFI	15 pieces
Bolt, Carriage 3/8" X 4-1/2", HDG, JFI	12 pieces
Bolt, Double Arming 5/8" X 22", HDG, JFI	33 pieces
Bolt, Oval Eye, 5/8" X 12", HDG, JFI	39 pieces
Bolt, Oval Eye, 5/8" X 18", HDG, JFI	6 pieces
Bolt, Machine, 1/2" X 6", HDG, JFI	52 pieces
Bolt, Machine, 1/2" X 12", HDG, JFI	47 pieces
Bolt, Machine, 5/8" X 12", HDG, JFI	223 pieces
Bolt, Machine 5/8" X 14", HDG, JFI	26 pieces
Bolt, Single Upset 5/8" X 12", HDG, JFI	36 pieces
Brace, Crossarm, 28", Steel , HDG, JFI	12 each
Brace, Crossarm, 60" - 18" Drop, HDG, JFI	4 pairs
Brace, Sidearm, Diagonal, 7 Feet, HDG, JFI	44 pieces
Bracket, Clevis Deadend Without Spool, HDG, JFI	35 pieces
Clamp, Hot Line, #2 - #4/0 ACSR, HDG, JFI	5 pieces
Clamp, Anchor Bonding, Single Eye Rod, HDG, JFI	47 pieces
Clamp, Deadend Strain, #2/0 ACSR, HDG, JFI	15 pieces
Clamp, Deadend Strain, #336.4 MCM, HDG, JFI	21 pieces
Clamp, Guy Straight, 3 Bolt, Heavy Duty Steel, HDG, JFI	124 pieces
Clamp, Loop Deadend, #2/0 ACSR, HDG, JFI	70 pieces
Connector, Wedge Type, #336 - #336 MCTA Ampact 336	15 pieces
Clevis, Secondary Swinging Without Spool, HDG, JFI	30 pieces
Shackle, Anchor, Forged Steel, Galvanized, HDG, JFI	6 pieces
Conductor, Bare, ACSR #2/0, AWG 6/1, Phelps Dodge/AMWIRE	### meters
Conductor, Bare, ACSR #336.4, MCM 26/7 STD (Meters), Phelps Dodge/AMWIRE	### meters
Conductor, Duplex, #2/0, AWG 6/1, Phelps Dodge/AMWIRE	### meters
Connector, Compression, #1/0 - #2/0 ACSR Run To #1/0 - #2/0	136 pieces
Connector, Ground Rod (Clamp) For 5/8" Steel Rod, HDG, JFI	6 pieces
Pin, Crossarm, Steel, 5/8" X 14-3/4"X 1 -3/8", Hot Dip Galvanized, JFI, Nylon Thread	94 pieces
Nut, Thimble Eye, 5/8" Single Eye, Hot Dip Galvanized, JFI	30 pieces
Insulator, Pin Type, Polymer, ANSI, Class 55 - 5 X 1-3/8", HENDRIX	211 pieces
Insulator, Spool, 1-3/4", ANSI, Class 53 - 2	36 pieces
Insulator, Spool, 3", ANSI, Class 53 - 4	73 pieces
Insulator, Suspension, 4 shed, Polymer,15KV, HENDRIX	36 pieces
Nut, Eye, 5/8", Conventional, HDG, JFI	41 pieces
Pin, Pole Top, Channel, 1" Thread, 25" Long, Hot Dip Galvanized, HDG, JFI	117 pieces
Rod, Anchor, Threaded, Single Eye, 5/8" X 7', HDG, JFI	46 pieces
Rod, Ground Steel, Galvanized, 5/8" X 10', HDG, JFI	6 pieces
Rod, Armor, Preformed, #336 MCM, Single Support	84 sets
Rod, Armor, Preformed, #336 MCM, Double Support	27 sets
Washer, Square, Flat, 2-1/4" X 2-1/4" X 3/16", 13/16" Diameter Hole, HDG, JFI	369 pieces
Washer, Round, 1-3/8" Diameter With 9/16" Diameter Hole, HDG, JFI	99 pieces
Wire, Tie, Aluminum Alloy, Soft, #4 AWG	### feet
Wire, Grounding, Aluminum Alloy, 3 Strand, #4 AWG	364 feet
Wire, Guy, Steel, 3/8", 7 Strand	### feet
CONCRETE/STEEL MATERIAL	
Pole, Concrete, 30', Class 5, Minimum Break Load - 1000 kgs. , Approx. Weight -745 kgs. Top Dia. 201 mm, Bottom Dia. 310, Wall Thickness 50 mm, Depth in Ground 1500mm-TEH HSIN	15 pieces
Pole, Concrete, 35', Class 3, Minimum Break Load - 1400 kgs. , Approx. Weight -1125 kgs. Top Dia. 238 mm, Bottom Dia. 396, Wall Thickness 50 mm, Depth in Ground 1800mm-TEH HSIN	51 pieces
Pole, Concrete, 40', Class 3, Minimum Break Load - 1400 kgs. , Approx. Weight -1335 kgs. Top Dia. 238 mm, Bottom Dia. 418, Wall Thickness 50 mm, Depth in Ground 1800mm-TEH HSIN	37 pieces
Crossarm, Steel, 3" X 4" X 8', Hot Dip Galvanized, JFI	54 pieces

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

STAKING SHEET

Sheet No. 1 of 8 | Map Ref.

Proj. No. (c) | Page No. (c)
Checked by: ENGR. R. M. PUNO | Staked by: STAKING CREW
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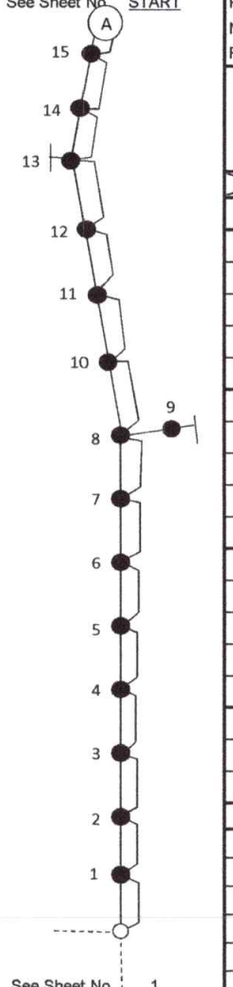
Date: | Date: (8)

SKETCH



PRIMARY COND. ACSR 2/0 6/1 ACSR
NEUTRAL COND. ACSR 2/0 6/1 ACSR
RULING SPAN 50 METERS

SUBSTATION GUIMBA SUBSTATION
LINE RE-ROUTING OF LINE DUE TO ROAD WIDENING AT GUIMBA-TARLAC ROAD
AS- PLAN STAKING SHEET

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE						MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
			H	C													SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"							
	QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
1	52	3	1	40 C	1	C14				1	M2-11A						52	UB	D2/0	1	J5											
2	52	3	1	40 C	1	C14			G		M2		E			F	52	UB	D2/0	1	J5		S			K		M		R1			
3	53	3	1	40 C	1	C14											53	UB	D2/0	1	J5											
4	54	3	1	40 C	1	C14											54	UB	D2/0	1	J5											
5	54	3	1	40 C	1	C14											54	UB	D2/0	1	J5											
6	54	3	1	40 C	1	C14											54	UB	D2/0	1	J6											
																				1	J15											
7	54	3	1	40 C	1	C14											54	UB	D2/0	1	J5											
8	54	3	1	40 C	1	C15						1	E4-2				54	UB	D2/0	1	J10											
9			1	30 C								1	E1-2		1	F1-2																
10	46	3	1	40 C	1	C14											46	UB	D2/0	1	J5											
11	50	3	1	40 C	1	C14											50	UB	D2/0	1	J5											
12	50	3	1	40 C	1	C14											50	UB	D2/0	1	J6											
																				1	J15											
13	50	3	1	40 C	1	C15						1	E1-2		1	F1-2	50	UB	D2/0	1	J10											
14	50	3	1	40 C	1	C14											50	UB	D2/0	1	J5											
15	50	3	1	40 C	1	C14											50	UB	D2/0	1	J5											
QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE
0	1-Phase	1	30		12	C14				1	M2-11A	2	E1-2		2	F1-2		2W								K		M		R1-		R	2169	ACSR
0	2-Phase				2	C15						1	E4-2						ACSR 2/0				2S	D		K		M		R1-		C		ACSR
723	3-Phase	14	40														723		ACSR 2/0							K		M		R1-		PB		
0	D-Ckt.																723	1UB	D1/0				3S	D		K		M		R1-		LP		Insulated
																																IR		Duplex
2169	Total																															SL		

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

STAKING SHEET

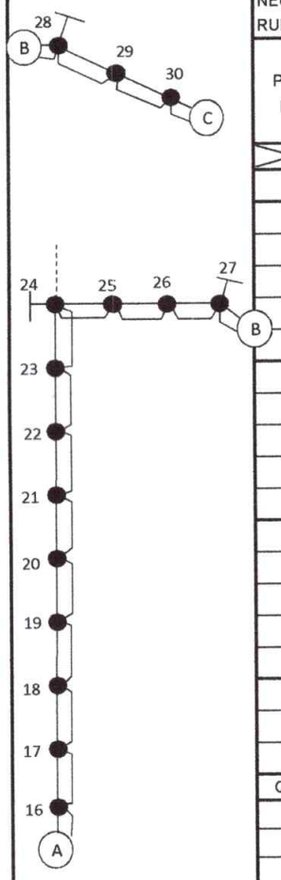
Sheet No. 2 of 8
Map Ref.

Proj. No. (c) Page No. (c)
Checked by: ENGR. R. M. PUNO
Staked by: STAKING CREW
Date: (5)
Released by:
Final Inv. By:
Date: Date: (8)

PRIMARY COND. ACSR 2/0 6/1 ACSR
NEUTRAL COND. ACSR 2/0 6/1 ACSR
RULING SPAN 50 METERS

SUBSTATION GUIMBA SUBSTATION
LINE RE-ROUTING OF LINE DUE TO ROAD WIDENING AT GUIMBA-TARLAC ROAD
AS- PLAN STAKING SHEET

SKETCH

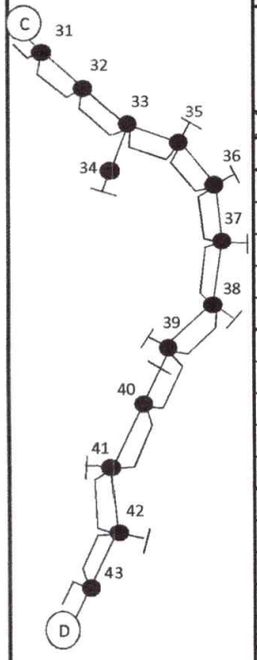


POLE NO.	PRI. BACK SPAN MTRS.	POLE C	POLE H	POLE C	PRI. POLE TOP UNIT (ABC)	LINE ANGLE	TRANS-FORMER "G"	GND. "M2"	GUY "E"	LEAD M	ANC. "F"	SECODARY SPAN MTRS.	SECODARY SEC. OR U.B.	SECODARY WIRE SIZE	SECODARY NO	SECODARY "J"	SERVICE DROP MTRS.	SERVICE NO	SERVICE WIRE SIZE	SERVICE NO	SERVICE "K"	MISC. UNIT "M"	R/W "R1"	CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	CODE	Q CODE		Q CODE	Q CODE	Q CODE		Q CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q CODE	Q CODE	Q	C	COMPUTER CODING
16	50	3	1	40 C	1 C14			1 M2-11A				50	UB	D2/0	1	J6									
					1 C7		G	M2	E		F				1	J15		S		K		M	R1		
17	34	3	1	40 C	1 C14							34	UB	D2/0	1	J5									
18	33	3	1	40 C	1 C14							33	UB	D2/0	1	J5									
19	52	3	1	40 C	1 C14							52	UB	D2/0	1	J5									
20	51	3	1	40 C	1 C14							51	UB	D2/0	1	J5									
21	51	3	1	40 C	1 C14							51	UB	D2/0	1	J5									
22	51	3	1	40 C	1 C14							51	UB	D2/0	1	J5									
23	57	3	1	40 C	1 C14							57	UB	D2/0	1	J5									
24	57	3	1	40 C	1 C8				1 E1-2		1 F1-2	57	UB	D2/0	2	J6									
					1 C7										1	J15									
25	39	3	1	40 C	1 C14							39	UB	D2/0	1	J5									
26	39	3	1	40 C	1 C14							39	UB	D2/0	1	J5									
27	39	3	1	40 C	1 C15				1 E1-2		1 F1-2	39	UB	D2/0	1	J10									
28	47	3	1	40 C	1 C15				1 E1-2		1 F1-2	47	UB	D2/0	1	J10									
29	52	3	1	40 C	1 C14							52	UB	D2/0	1	J5									
30	52	3	1	40 C	1 C14							52	UB	D2/0	1	J5									

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	QUAN	CODE	
0	1-Phase			2	C7			1	M2-11A	3	E1-2	3	F1-2		2W						K		M		R1-		R	2112	ACSR	ACSR
0	2-Phase			2	C8										ACSR 2/0			2S	D		K		M		R1-		C			ACSR
704	3-Phase	15	40	12	C14							704			ACSR 2/0						K		M		R1-		PB			
0	D-Ckt.			2	C15							704	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
																											IR			Duplex
2112	Total																										SL			

SKETCH

See Sheet No. 2



See Sheet No 3

STAKING SHEET

PRIMARY COND. ACSR 2/0 6/1 ACSR
NEUTRAL COND. ACSR 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.
Calipahan, Talavera, Nueva Ecija

SUBSTATION GUIMBA SUBSTATION
LINE RE-ROUTING OF LINE DUE TO ROAD WIDENING AT GUIMBA-TARLAC ROAD
AS- PLAN STAKING SHEET

Sheet No. 3
of 8
Map Ref.

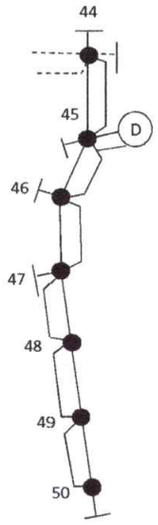
Proj. No. (c) Page No. (c)
Checked by: ENGR. R. M. PUNO
Staked by: STAKING CREW
Date: (5)
Released by:
Final Inv. By:
Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"	GND. "M2"	GUY "E"	LEAD M	ANC. "F"	SECODARY					SERVICE					MISC. UNIT "M"	R/W "R1"	CONS		MEMBER NAME AND NO. OR REMARKS
			H	C									SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"					
	QUAN	C	Q	CODE	Q	CODE		Q CODE	Q CODE	Q CODE		Q CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q CODE	Q CODE	Q	C	COMPUTER CODING
31	52	3	1	40 C	1	C14							52	UB	D2/0	1	J5									
32	52	3	1	40 C	1	C14		G	M2	E		F	52	UB	D2/0	1	J6		S			K	M	R1		
																1	J15									
33	52	3	1	40 C	1	C15				1 E4-2			52	UB	D2/0	1	J10									
34			1	30 C						1 E1-2		1 F1-2														
35	59	3	1	40 C	1	C15				1 E1-2		1 F1-2	59	UB	D2/0	1	J10									
36	37	3	1	40 C	1	C15				1 E1-2		1 F1-2	37	UB	D2/0	1	J10									
37	42	3	1	40 C	1	C15				1 E1-2		1 F1-2	42	UB	D2/0	1	J10									
38	67	3	1	40 C	1	C15				1 E1-2		1 F1-2	67	UB	D2/0	1	J10									
39	46	3	1	40 C	1	C7			1 M2-11A	2 E1-2		2 F1-2	46	UB	D2/0	1	J6									
					1	A5-2										1	J15									
40	38	1	1	35 C	1	A1							38	UB	D2/0	1	J5									
41	37	1	1	35 C	1	A2				1 E1-2		1 F1-2	37	UB	D2/0	1	J10									
42	39	1	1	35 C	1	A2				1 E1-2		1 F1-2	39	UB	D2/0	1	J10									
43	51	1	1	35 C	1	A1							51	UB	D2/0	1	J6									
																1	J15									

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
165	1-Phase	1	30	2	A1			1	M2-11A	9	E1-2	9	F1-2		2W								K		M		R1-		R	1386	ACSR	ACSR
0	2-Phase	4	35	2	A2					1	E4-2					ACSR 2/0				2S	D		K		M		R1-		C			ACSR
407	3-Phase	8	40	1	A5-2									572		ACSR 2/0							K		M		R1-		PB			
0	D-Ckt.			1	C7									572	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
				2	C14																								IR			Duplex
1386	Total			5	C15																								SL			

SKETCH

See Sheet No. 3



See Sheet No 4

STAKING SHEET

PRIMARY COND. ACSR 2/0 6/1 ACSR
NEUTRAL COND. ACSR 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

SUBSTATION GUIMBA SUBSTATION
LINE RE-ROUTING OF LINE DUE TO ROAD WIDENING AT GUIMBA-TARLAC ROAD
AS- PLAN STAKING SHEET

Sheet No. 4 of 8
Map Ref.

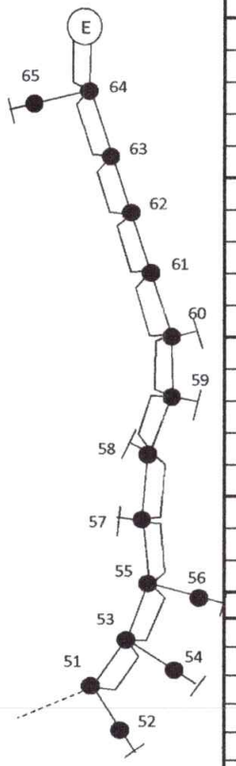
Proj. No. (c) Page No. (c)
Checked by: ENGR. R. M. PUNO
Date:
Released by:
Date:
Staked by: STAKING CREW
Date: (5)
Final Inv. By:
Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"	GND. "M2"	GUY "E"	LEAD M	ANC. "F"	SECODARY				SERVICE					MISC. UNIT "M"	R/W "R1"	CONS	MEMBER NAME AND NO. OR REMARKS
			H	C									SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"			
	QUAN	C	Q	CODE	Q	CODE		Q CODE	Q CODE	Q CODE		Q CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q CODE	Q CODE	Q C	COMPUTER CODING
44	51	1	1	35 C	1	A4				2 E1-2		2 F1-2	51	UB	D2/0	2	J6									
					1	A5-2		G	M2	E		F				1	J15		S			K	M	R1		
45	30	1	1	35 C	1	A4				2 E1-2		2 F1-2	30	UB	D2/0	2	J6									
46	57	1	1	35 C	1	A2				1 E1-2		1 F1-2	57	UB	D2/0	1	J10									
47	49	1	1	35 C	1	A2				1 E1-2		1 F1-2	49	UB	D2/0	1	J10									
48	46	1	1	35 C	1	A1							46	UB	D2/0	1	J5									
49	45	1	1	35 C	1	A1							45	UB	D2/0	1	J5									
50	45	1	1	35 C	1	A5				1 E1-2		1 F1-2	45	UB	D2/0	1	J6									

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	C	QUAN	CODE	
323	1-Phase			2	A1					7	E1-2	7	F1-2		2W								K		M		R1-		R	323	ACSR	ACSR
0	2-Phase	7	35	2	A2											ACSR 2/0				2S	D		K		M		R1-		C			ACSR
0	3-Phase			2	A4									323		ACSR 2/0							K		M		R1-		PB			
0	D-Ckt.			1	A5									323	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
				1	A5-2																								IR			Duplex
323	Total																												SL			

SKETCH

See Sheet No. 4



See Sheet No 5

STAKING SHEET

PRIMARY COND. ACSR 2/0 6/1 ACSR
NEUTRAL COND. ACSR 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 5
of 8
Map Ref.

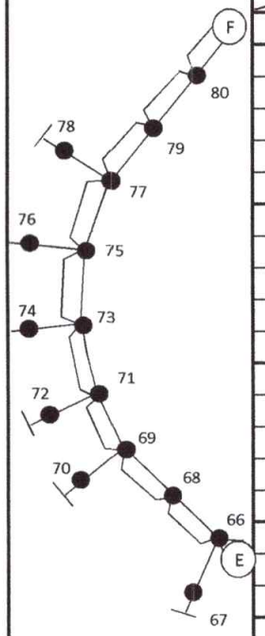
SUBSTATION GUIMBA SUBSTATION
LINE RE-ROUTING OF LINE DUE TO ROAD WIDENING AT GUIMBA-TARLAC ROAD
AS- PLAN STAKING SHEET

Proj. No. (c) Page No. (c)
Checked by: Staked by:
ENGR. R. M. PUNO STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE						MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
			H	C													SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"							
	QUAN C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
51		1	35	C	1	A6				1	M2-11A	1	E4-2							1	J6											
52		1	30	C					G		M2	1	E1-2		1	F1-2				1	J15		S		K		M		R1			
53	43 1	1	35	C	1	A2						1	E4-2				43	UB	D2/0	1	J10											
54		1	30	C								1	E1-2		1	F1-2																
55	35 1	1	35	C	1	A2						1	E4-2				35	UB	D2/0	1	J10											
56		1	30	C								1	E1-2		1	F1-2																
57	37 1	1	35	C	1	A2						1	E1-2		1	F1-2	37	UB	D2/0	1	J10											
58	33 1	1	35	C	1	A2						1	E1-2		1	F1-2	33	UB	D2/0	1	J10											
59	53 1	1	35	C	1	A2						1	E1-2		1	F1-2	53	UB	D2/0	1	J10											
60	63 1	1	35	C	1	A2						1	E1-2		1	F1-2	63	UB	D2/0	1	J10											
61	54 1	1	35	C	1	A1											54	UB	D2/0	1	J5											
62	54 1	1	35	C	1	A1											54	UB	D2/0	1	J6											
																				1	J15											
63	54 1	1	35	C	1	A1											54	UB	D2/0	1	J5											
64	55 1	1	35	C	1	A2						1	E4-2				55	UB	D2/0	1	J10											
65		1	30	C								1	E1-2		1	F1-2																
QUAN C		Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN CODE
481	1-Phase	4	30		3	A1				1	M2-11A	8	E1-2		8	F1-2		2W							K		M		R1-		R	481 ACSR
0	2-Phase	11	35		7	A2						4	E4-2						ACSR 2/0				2S	D	K		M		R1-		C	ACSR
0	3-Phase				1	A6											481		ACSR 2/0						K		M		R1-		PB	
0	D-Ckt.																481	1UB	D1/0				3S	D	K		M		R1-		LP	Insulated
																															IR	Duplex
481	Total																														SL	

SKETCH

See Sheet No. 5



See Sheet No 6

STAKING SHEET

PRIMARY COND. ACSR 2/0 6/1 ACSR
NEUTRAL COND. ACSR 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 6
of 8
Map Ref.

SUBSTATION GUIMBA SUBSTATION
LINE RE-ROUTING OF LINE DUE TO ROAD WIDENING AT GUIMBA-TARLAC ROAD
AS- PLAN STAKING SHEET

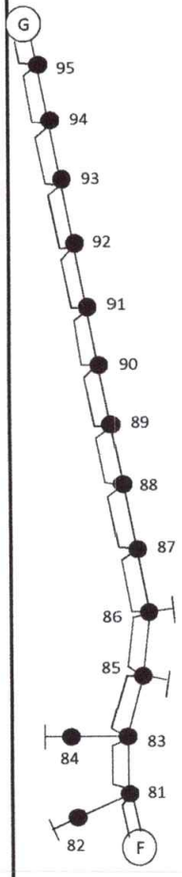
Proj. No. (c) Page No. (c)
Checked by: ENGR. R. M. PUNO Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE						MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
			H	C													SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"							
	QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
66	50	1	1	35	C	1	A6				1	M2-11A	1	E4-2			50	UB	D2/0	1	J6												
67			1	30	C				G		M2		1	E1-2		1	F1-2				1	J15		S			K		M		R1			
68	50	1	1	35	C	1	A1										50	UB	D2/0	1	J5												
69	45	1	1	35	C	1	A2						1	E4-2			45	UB	D2/0	1	J10												
70			1	30	C								1	E1-2		1	F1-2																
71	56	1	1	35	C	1	A2						1	E4-2			56	UB	D2/0	1	J6												
																				1	J15												
72			1	30	C								1	E1-2		1	F1-2																
73	46	1	1	35	C	1	A2						1	E4-2			46	UB	D2/0	1	J10												
74			1	30	C								1	E1-2		1	F1-2																
75	44	1	1	35	C	1	A2						1	E4-2			44	UB	D2/0	1	J10												
76			1	30	C								1	E1-2		1	F1-2																
77	55	1	1	35	C	1	A2						1	E4-2			55	UB	D2/0	1	J10												
78			1	30	C								1	E1-2		1	F1-2																
79	46	1	1	35	C	1	A1										46	UB	D2/0	1	J5												
80	50	1	1	35	C	1	A1										50	UB	D2/0	1	J5												

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
442	1-Phase	6	30	3	A1			1	M2-11A	6	E1-2	6	F1-2		2W								K		M		R1-		R	442	ACSR	ACSR
0	2-Phase	9	35	5	A2					6	E4-2					ACSR 2/0				2S	D		K		M		R1-		C			ACSR
0	3-Phase			1	A6									442		ACSR 2/0							K		M		R1-		PB			
0	D-Ckt.													442	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
																													IR			Duplex
442	Total																												SL			

SKETCH

See Sheet No. 6



See Sheet No 7

STAKING SHEET

PRIMARY COND. ACSR 2/0 6/1 ACSR
NEUTRAL COND. ACSR 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 7 of 8
Map Ref.

SUBSTATION GUIMBA SUBSTATION
LINE RE-ROUTING OF LINE DUE TO ROAD WIDENING AT GUIMBA-TARLAC ROAD
AS- PLAN STAKING SHEET

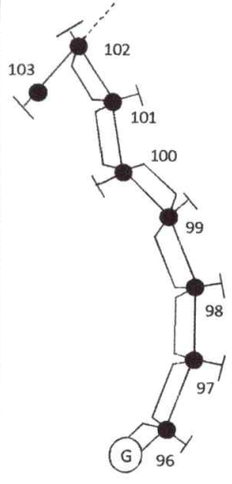
Proj. No. (c) Page No. (c)
Checked by: ENGR. R. M. PUNO Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE H	POLE C	PRI. POLE TOP UNIT (ABC)	LINE ANGLE	TRANS-FORMER "G"	GND. "M2"	GUY "E"	LEAD M	ANC. "F"	SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"	R/W "R1"	CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	CODE	C	Q CODE		Q CODE	Q CODE	Q CODE		Q CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q CODE	Q CODE	Q CODE	COMPUTER CODING
81	43	1	1	35 C	1 A2			1 E4-2			43	UB	D2/0	1	J10									
82			1	30 C		G	M2	1 E1-2		1 F1-2					J		S			K	M	R1		
83	43	1	1	35 C	1 A2			1 E4-2			43	UB	D2/0	1	J10									
84			1	30 C				1 E1-2		1 F1-2														
85	57	1	1	35 C	1 A2			1 E1-2		1 F1-2	57	UB	D2/0	1	J10									
86	50	1	1	35 C	1 A2			1 E1-2		1 F1-2	50	UB	D2/0	1	J10									
87	46	1	1	35 C	1 A1						46	UB	D2/0	1	J6									
														1	J15									
88	50	1	1	35 C	1 A1						50	UB	D2/0	1	J5									
89	50	1	1	35 C	1 A1						50	UB	D2/0	1	J5									
90	50	1	1	35 C	1 A1						50	UB	D2/0	1	J5									
91	50	1	1	35 C	1 A1						50	UB	D2/0	1	J5									
92	50	1	1	35 C	1 A1						50	UB	D2/0	1	J5									
93	50	1	1	35 C	1 A1						50	UB	D2/0	1	J5									
94	50	1	1	35 C	1 A1						50	UB	D2/0	1	J5									
95	50	1	1	35 C	1 A6		1 M2-11A				50	UB	D2/0	1	J6									
														1	J15									
QUAN	C	Q	CODE	Q CODE		Q CODE	Q CODE	Q CODE		Q CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q CODE	Q CODE	Q CODE	QUAN CODE
639	1-Phase	2	30	8 A1			1 M2-11A	4 E1-2		4 F1-2		2W								K	M	R1-	R	639 ACSR ACSR
0	2-Phase	13	35	4 A2				2 E4-2					ACSR 2/0				2S	D		K	M	R1-	C	ACSR
0	3-Phase			1 A6							639		ACSR 2/0							K	M	R1-	PB	
0	D-Ckt.										639	1UB	D1/0				3S	D		K	M	R1-	LP	Insulated
																							IR	Duplex
639	Total																						SL	

N

SKETCH

See Sheet No. 7



See Sheet No END

STAKING SHEET

PRIMARY COND. ACSR 2/0 6/1 ACSR
NEUTRAL COND. ACSR 2/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 8
of 8
Map Ref.

SUBSTATION GUIMBA SUBSTATION
LINE RE-ROUTING OF LINE DUE TO ROAD WIDENING AT GUIMBA-TARLAC ROAD
AS- PLAN STAKING SHEET

Proj. No. (c) Page No. (c)
Checked by: ENGR. R. M. PUNO
Staked by: STAKING CREW
Date: Date: {5}
Released by: Final Inv. By:
Date: Date: {8}

POLE NO.	PRI. BACK SPAN MTRS.	POLE				PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE					MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
			H	C														SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"						
	QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE		QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
96	50	1	1	35	C	1	A2						1	E1-2		1	F1-2	50	UB	D2/0	1	J10											
97	40	1	1	35	C	1	A2						1	E1-2		1	F1-2	40	UB	D2/0	1	J10		S			K		M		R1		
98	50	1	1	35	C	1	A2						1	E1-2		1	F1-2	50	UB	D2/0	1	J10											
99	40	1	1	35	C	1	A2						1	E1-2		1	F1-2	40	UB	D2/0	1	J10											
100	53	1	1	35	C	1	A2						1	E1-2		1	F1-2	53	UB	D2/0	1	J10											
101	59	1	1	35	C	1	A2						1	E1-2		1	F1-2	59	UB	D2/0	1	J10											
102	57	1	1	35	C	1	A4						1	E4-2				57	UB	D2/0	2	J6											
													1	E1-2		1	F1-2																
103			1	30	C								1	E1-2		1	F-12																

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
349	1-Phase	1	30	6	A2					8	E1-2	7	F1-2				2W							K		M		R1-		R	349	ACSR	ACSR
0	2-Phase	7	35	1	A4					1	E4-2							ACSR 2/0				2S	D	K		M		R1-		C			ACSR
0	3-Phase															349		ACSR 2/0						K		M		R1-		PB			
0	D-Ckt.															349	1UB	D1/0				3S	D	K		M		R1-		LP			Insulated
																														IR			Duplex
349	Total																													SL			

NUEVA ECIJA ELECTRIC COOPERATIVE, INC,. - AREA 1

Calipahan, Talavera, Nueva Ecija

July 14, 2021

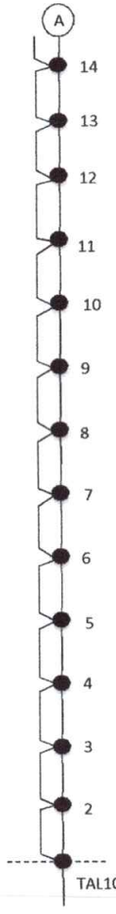
PROJECT DESCRIPTION : **BILL OF MATERIALS FOR THE RELOCATION OF ELECTRICAL FACILITIES OF NEECO II - AREA 1 AFFECTED BY THE ROAD WIDENING PROJECT OF DPWH. (CALIPAHAN TO POB. SUR. (WALTER MART), TALAVERA. (TALAVERA - SAN JOSE ROAD)**

3 Phase = 2.721 Kms.
U.B. = 2.721 Kms.

DESCRIPTION	PROJECT REQ'MNTS.	
LOT. D		
Anchor, Expanding, 8,000 Pounds, 4 Way, Galvanized Steel, HDG, JFI	16	pieces
Bolt, Thimble Eye 5/8" X 14" Angle Type, HDG, JFI	16	pieces
Bolt, Carriage 3/8" X 4-1/2", HDG, JFI	24	pieces
Bolt, Double Arming 5/8" X 24", HDG, JFI	48	pieces
Bolt, Double Upset 5/8" X 14", HDG, JFI	42	pieces
Bolt, Oval Eye 5/8" X 14", HDG, JFI	50	pieces
Bolt, Oval Eye, 5/8" X 18", HDG, JFI	4	pieces
Bolt, Machine, 1/2" X 6", HDG, JFI	86	pieces
Bolt, Machine 1/2" X 14", HDG, JFI	16	pieces
Bolt, Machine, 5/8" X 12", HDG, JFI	74	pieces
Bolt, Machine 5/8" X 14", HDG, JFI	50	pieces
Bolt, Single Upset 5/8" X 14", HDG, JFI	50	pieces
Brace, Crossarm, 28", Steel , HDG, JFI	24	each
Brace, Crossarm, 60" - 18" Drop, HDG, JFI	3	pairs
Brace, Sidearm, Diagonal, 7 Feet, HDG, JFI	74	pieces
Bracket, Clevis Deadend Without Spool, HDG, JFI	74	pieces
Clamp, Anchor Bonding, Single Eye Rod, HDG, JFI	16	pieces
Clamp, Loop Deadend, #2/0 ACSR, HDG, JFI	116	pieces
Clamp, Deadend Strain, #336.4 MCM, HDG, JFI	58	pieces
Clamp, Guy Straight, 3 Bolt, Heavy Duty Steel, HDG, JFI	32	pieces
Clevis, Secondary Swinging Without Spool, HDG, JFI	50	pieces
Shackle, Anchor, Forged Steel, Galvanized, HDG, JFI	16	pieces
Conductor, Bare, ACSR #2/0, AWG 6/1, Phelps Dodge/AMWIRE	3,129	meters
Conductor, Bare, ACSR #336.4, MCM 26/7 STD (Meters), Phelps Dodge/AMWIRE	9,387	meters
Conductor, Insulated, ACSR #2/0, AWG 6/1, Phelps Dodge/AMWIRE	3,129	meters
Connector, Compression, #2/0 - #4/0 ACSR Run To #2/0 - #4/0	72	pieces
Connector, Ground Rod (Clamp) For 5/8" Steel Rod, HDG, JFI	10	pieces
Connector, Wedge Type, #336 - #336 MCTA (Ampact connector)	36	pieces
Pin, Crossarm, Steel, 5/8" X 14-3/4"X 1-3/8", Hot Dip Galvanized, JFI, Nylon Thread	246	pieces
Insulator, Pin Type, Polymer, ANSI, Class 55 - 5 X 1-3/8", HENDRIX	246	pieces
Insulator, Spool, 1-3/4", ANSI, Class 53 - 2	92	pieces
Insulator, Spool, 3", ANSI, Class 53 - 4	70	pieces
Insulator, Suspension, 4 shed, Polymer,15KV, HENDRIX	58	pieces
Nut, Eye, 5/8", Conventional, HDG, JFI	84	pieces
Nut, Lock, Mf Type, 3/8", HDG, JFI	24	pieces
Nut, Lock, Mf Type, 1/2", HDG, JFI	154	pieces
Nut, Lock, Mf Type, 5/8", HDG, JFI	380	pieces
Rod, Anchor, Threaded, Single Eye, 5/8" X 7', HDG, JFI	16	pieces
Rod, Armor, Preformed, #2/0 ACSR, Single Support	106	sets
Rod, Armor, Preformed, #2/0 ACSR, Double Support	6	sets
Rod, Armor, Preformed, #336 MCM, Single Support	156	sets
Rod, Armor, Preformed, #336 MCM, Double Support	18	sets
Rod, Ground Steel, Galvanized, 5/8" X 10', HDG, JFI	10	pieces
Washer, Square, Flat, 2-1/4" X 2-1/4" X 3/16", 13/16" Diameter Hole, HDG, JFI	436	pieces
Washer, Round, 1-3/8" Diameter With 9/16" Diameter Hole, HDG, JFI	154	pieces
Wire, Tie, Aluminum Alloy, Soft, #4 AWG	2,336	feet
Wire, Tape, Armor, Aluminum Alloy, 0,5" X 0.3"	48	feet
Wire, Grounding, Aluminum Alloy, 3 Strand, #4 AWG	470	feet
Wire, Guy, Steel, 3/8", 7 Strand	800	feet
CONCRETE/STEEL MATERIAL		
Pole, Concrete, 50', Class 3A, . Minimum Break Load- 1600 kgs, Approx. Weight - 1960kgs. Top Dia. 238 mm, Bottom Dia. 418, Wall Thickness 55 mm, Depth in Ground 2100mm-TEH HSIN	60	pieces
Crossarm, Steel, 3" X 4" X 8', Hot Dip Galvanized, JFI	86	pieces

SKETCH

See Sheet No. START



FRONT OF NEECO

See Sheet No 1

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 1 of 5
Map Ref.

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA TO MUÑOZ ROAD, NUEVA ECIJA
AS PLAN STAKING SHEET

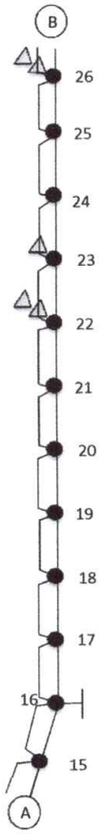
Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	C	COMPUTER CODING
TAL1020		3	1	50	C	2	C7		1	G105	1	M2-11A	2	E1-2		2	F1-2		UB	D2/0	2	J6											
										G		M2		E			F					J		S			K		M		R1			
2	40	3	1	50	C	1	C14											40	UB	D2/0	1	J5											
3	53	3	1	50	C	1	C14											53	UB	D2/0	1	J5											
4	55	3	1	50	C	1	C14											55	UB	D2/0	1	J5											
5	51	3	1	50	C	1	C14											51	UB	D2/0	1	J6											
																					1	J15											
6	61	3	1	50	C	1	C14											61	UB	D2/0	1	J5											
7	51	3	1	50	C	1	C15						1	E1-2		1	F1-2	51	UB	D2/0	1	J10											
8	47	3	1	50	C	1	C14											47	UB	D2/0	1	J5											
9	49	3	1	50	C	1	C8											49	UB	D2/0	1	J6											
																					1	J15											
10	62	3	1	50	C	1	C14											62	UB	D2/0	1	J5											
11	88	3	1	50	C	1	C14											88	UB	D2/0	1	J5											
12	42	3	1	50	C	1	C14											42	UB	D2/0	2	J6											
						1	A5-2						1	E1-2		1	F1-2		UB	D2/0	1	J15											
13	64	3	1	50	C	1	C14											64	UB	D2/0	1	J5											
14	43	3	1	50	C	1	C14											43	UB	D2/0	1	J5											

QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	C	QUAN	CODE	
0	1-Phase				1	A5-2		1	G105	1	M2-11A	4	E1-2	4	F1-2		2W		2	J6					K		M		R1-	R	2118	ACSR	ACSR
0	2-Phase				2	C7												ACSR # 1/0					2S	D		K		M		R1-	C			ACSR
706	3-Phase	14	40		1	C8										706		ACSR # 1/0								K		M		R1-	PB			
0	D-Ckt.				11	C14											1UB						3S	D		K		M		R1-	LP			Insulated
					1	C15																									IR			Duplex
2118	Total																														SL			

SKETCH

See Sheet No. 1



See Sheet No 2

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA TO MUÑOZ ROAD, NUEVA ECIJA
AS PLAN STAKING SHEET

Sheet No. 2
of 5
Map Ref.

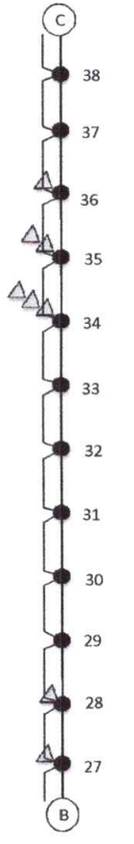
Proj. No. (c) Page No. (c)
Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
15	59	3	1	50	C	1	C14											59	UB	D2/0	J6												
									G		M2		E			F				1	J15	J		S		K		M		R1			
16	67	3	1	50	C	1	C15						1	E1-2		1	F1-2	67	UB	D2/0	J10												
17	80	3	1	50	C	1	C14											80	UB	D2/0	J5												
18	33	3	1	50	C	1	C14											33	UB	D2/0	J5												
19	65	3	1	50	C	1	C8						1	E1-2		1	F1-2	65	UB	D2/0	J6												
						1	C7													1	J15												
20	58	3	1	50	C	1	C14											58	UB	D2/0	J5												
21	38	3	1	50	C	1	C14											38	UB	D2/0	J5												
22	26	3	1	50	C	1	C14											26	UB	D2/0	J6												
						1	A5-2						1	E1-2		1	F1-2			1	J15												
22-A	16	3	1	50	C	1	C14		2	G105	1	M2-11A						16	UB	D2/0	J5												
23	38	3	1	50	C	1	C14		1	G105	1	M2-11A						38	UB	D2/0	J5												
24	22	3	1	50	C	1	C14											22	UB	D2/0	J5												
						1	A5-2						1	E1-2		1	F1-2			1	J15												
25	10	3	1	50	C	1	C14											10	UB	D2/0	J5												
26	9	3	1	50	C	1	C14		2	G105	1	M2-11A						9	UB	D2/0	J5												

QUAN	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase				2	A5-2	5	G105	3	M2-11A	4	E1-2		4	F1-2			2W								K		M		R1-		R	1563	ACSR	ACSR
0	2-Phase				1	C7													ACSR # 1/0				2S	D		K		M		R1-		C			ACSR
521	3-Phase	13	40		1	C8											521		ACSR # 1/0							K		M		R1-		PB			
0	D-Ckt.				11	C14												1UB					3S	D		K		M		R1-		LP			Insulated
					1	C15																										IR			Duplex
1563	Total																															SL			

SKETCH

See Sheet No. 2



See Sheet No 3

STAKING SHEET

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 3 of 5

Map Ref.

Proj. No. ____ (c) Page No. ____ (c)

Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW

Date: Date: (5)

Released by: Final Inv. By:

Date: Date: (8)

PRIMARY COND. ACSR # 1/0 6/1 ACSR

NEUTRAL COND. ACSR # 1/0 6/1 ACSR

RULING SPAN 50 METERS

SUBSTATION TALAVERA SUBSTATION

LINE RELOCATION OF LINE AT TALAVERA TO MUÑOZ ROAD, NUEVA ECIJA

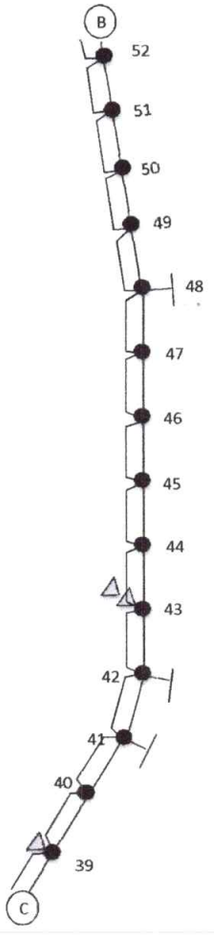
AS PLAN STAKING SHEET

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE						MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
			H	C													SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"						
	QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	COMPUTER CODING
27	38	3	1	50 C	1	C14		1	G105	1	M2-11A						38	UB	D2/0	1	J6										
									G		M2		E			F				1	J15		S			K		M		R1		
28	45	3	1	50 C	1	C14		1	G105	1	M2-11A						45	UB	D2/0	1	J5										
29	28	3	1	50 C	1	C14						1	E1-2		1	F1-2	28	UB	D2/0	1	J5										
30	26	3	1	50 C	1	C14											26	UB	D2/0	1	J5										
31	46	3	1	50 C	1	C14											46	UB	D2/0	1	J5										
32	26	3	1	50 C	1	C14											26	UB	D2/0	1	J5										
33	70	3	1	50 C	1	C14											70	UB	D2/0	1	J5										
34	28	3	1	50 C	1	C14		3	G105	1	M2-11A						28	UB	D2/0	1	J6										
																				1	J15										
35	29	3	1	50 C	1	C14		2	G105	1	M2-11A						29	UB	D2/0	1	J5										
					1	C8																									
36	29	3	1	50 C	1	C14		1	G105	1	M2-11A						29	UB	D2/0	1	J5										
37	48	3	1	50 C	1	C14											48	UB	D2/0	1	J5										
38	49	3	1	50 C	1	C8											49	UB	D2/0	1	J6										
																				1	J15										

QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q		QUAN	CODE	
0	1-Phase			2	C8		8	G105	5	M2-11A	1	E1-2		1	F1-2		2W							K		M		R1-		R		1386	ACSR	ACSR
0	2-Phase			12	C14													ACSR # 1/0				2S	D	K		M		R1-		C				ACSR
462	3-Phase	12	40	1	C15											462		ACSR # 1/0						K		M		R1-		PB				
0	D-Ckt.																1UB					3S	D	K		M		R1-		LP				Insulated
																														IR				Duplex
1386	Total																													SL				

SKETCH

See Sheet No.



See Sheet No

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.
Calipahan, Talavera, Nueva Ecija

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA TO MUÑOZ ROAD, NUEVA ECIJA
AS PLAN STAKING SHEET

Sheet No. 4 of 5
Map Ref.

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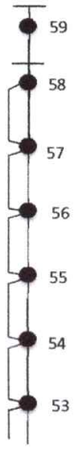
Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE				PRI. POLE TOP UNIT (ABC)		ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE						MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
			H	C														SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"							
	QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
39	42	3	1	50	C	1	C14											42	UB	D2/0	1	J5											
						1	A5-2						1	E1-2		1	F1-2				1	J15		S			K		M		R1			
40	30	3	1	50	C	1	C14											30	UB	D2/0	1	J5											
						1	C7						1	E1-2		1	F1-2				1	J15											
41	20	3	1	50	C	1	C15						1	E1-2		1	F1-2	20	UB	D2/0	1	J10											
42	59	3	1	50	C	1	C15						1	E1-2		1	F1-2	59	UB	D2/0	1	J10											
43	73	3	1	50	C	1	C14		2	G105	1	M2-11A						73	UB	D2/0	1	J6											
																					1	J15											
44	44	3	1	50	C	1	C14											44	UB	D2/0	1	J5											
45	63	3	1	50	C	1	C14											63	UB	D2/0	1	J5											
46	62	3	1	50	C	1	C14											62	UB	D2/0	1	J5											
47	78	3	1	50	C	1	C14											78	UB	D2/0	1	J5											
48	60	3	1	50	C	1	C15						1	E1-2		1	F1-2	60	UB	D2/0	1	J10											
49	52	3	1	50	C	1	C8											52	UB	D2/0	1	J6											
																					1	J15											
50	40	3	1	50	C	1	C14											40	UB	D2/0	1	J5											
51	68	3	1	50	C	1	C14											68	UB	D2/0	1	J5											
52	40	3	1	50	C	1	C14											40	UB	D2/0	1	J5											
QUAN	C	Q	CODE			Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	QUAN	CODE	
0	1-Phase					1	A5-2		2	G105	1	M2-11A	5	E1-2		5	F1-2		2W							K		M		R1-		R	2193	ACSR	ACSR
0	2-Phase					1	C1													ACSR # 1/0				2S	D	K		M		R1-		C			ACSR
731	3-Phase	14	40			1	C7											731		ACSR # 1/0						K		M		R1-		PB			
0	D-Ckt.					1	C8												1UB					3S	D	K		M		R1-		LP			Insulated
						10	C14																									IR			Duplex
2193	Total					3	C15																									SL			

SKETCH

See Sheet No.

WALTER MART



See Sheet No

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA TO MUÑOZ ROAD, NUEVA ECIJA
AS PLAN STAKING SHEET

Sheet No. 5
of 5
Map Ref.

Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW
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POLE NO.	PRI. BACK SPAN MTRS.	POLE				PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE					MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
			H	C														SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"						
	QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
53	54	3	1	50	C	1	C14											54	UB	D2/0	1	J6											
										G		M2		E			F				1	J15		S			K		M		R1			
54	38	3	1	50	C	1	C14											38	UB	D2/0	1	J5											
55	50	3	1	50	C	1	C14											50	UB	D2/0	1	J5											
56	49	3	1	50	C	1	C14											49	UB	D2/0	1	J5											
57	46	3	1	50	C	1	C14											46	UB	D2/0	1	J5											
TAL1073	64	3	1	50	C	1	C7						1	E1-2		1	F1-2	64	UB	D2/0	1	J6											
						1	C8																										
59		3	1	50	C	1	C7						1	E1-2		1	F1-2																

QUAN	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase															2W								K		M		R1-		R	903	ACSR	ACSR
0	2-Phase																ACSR # 1/0				2S	D		K		M		R1-		C			ACSR
301	3-Phase	7	40												301		ACSR # 1/0							K		M		R1-		PB			
0	D-Ckt.															1UB					3S	D		K		M		R1-		LP			Insulated
																														IR			Duplex
903	Total																													SL			

NUEVA ECIJA ELECTRIC COOPERATIVE, INC,. - AREA 1

Calipahan, Talavera, Nueva Ecija

July 14, 2021

PROJECT DESCRIPTION : **BILL OF MATERIALS FOR THE RELOCATION OF ELECTRICAL FACILITIES OF NEECO II - AREA 1 AFFECTED BY THE ROAD WIDENING PROJECT OF DPWH.**

(BANTUG, MUÑOZ TO BACAL III, TALAVERA. (TALAVERA - SAN JOSE ROAD)

Dbl. Ckt. = 2.360 Kms.
3 Phase = 0.913 Km.
U.B. = 3.128 Kms.

DESCRIPTION	PROJECT REQ'MNTS.
LOT. E	
Anchor, Expanding, 8,000 Pounds, 4 Way, Galvanized Steel, HDG, JFI	15 pieces
Bolt, Thimble Eye 5/8" X 12" Angle Type, HDG, JFI	15 pieces
Bolt, Carriage 3/8" X 4-1/2", HDG, JFI	56 pieces
Bolt, Double Arming 5/8" X 24", HDG, JFI	83 pieces
Bolt, Double Upset 5/8" X 16", HDG, JFI	47 pieces
Bolt, Oval Eye 5/8" X 16", HDG, JFI	54 pieces
Bolt, Oval Eye, 5/8" X 18", HDG, JFI	3 pieces
Bolt, Machine, 1/2" X 6", HDG, JFI	225 pieces
Bolt, Machine 1/2" X 16", HDG, JFI	109 pieces
Bolt, Machine 5/8" X 16", HDG, JFI	94 pieces
Boit, Single Upset 5/8" X 14", HDG, JFI	53 pieces
Brace, Crossarm, 28", Steel , HDG, JFI	56 each
Brace, Crossarm, 60" - 18" Drop, HDG, JFI	2 pairs
Brace, Sidearm, Vertical, HDG, JFI	54 pieces
Brace, Sidearm, Diagonal, 7 Feet, HDG, JFI	73 pieces
Bracket, Clevis Deadend Without Spool, HDG, JFI	14 pieces
Clamp, Anchor Bonding, Single Eye Rod, HDG, JFI	15 pieces
Clamp, Loop Deadend, #1/0 ACSR, HDG, JFI	24 pieces
Clamp, Loop Deadend, #2/0 ACSR, HDG, JFI	96 pieces
Clamp, Deadend Strain, #1/0 ACSR, HDG, JFI	6 pieces
Clamp, Deadend Strain, #336.4 MCM, HDG, JFI	102 pieces
Clamp, Guy Straight, 3 Bolt, Heavy Duty Steel, HDG, JFI	30 pieces
Clevis, Secondary Swinging Without Spool, HDG, JFI	54 pieces
Shackle, Anchor, Forged Steel, Galvanized, HDG, JFI	9 pieces
Conductor, Bare, ACSR #2/0, AWG 6/1, Phelps Dodge/AMWIRE	3,764 meters
Conductor, Bare, ACSR #336.4, MCM 26/7 STD (Meters), Phelps Dodge/AMWIRE	19,434 meters
Conductor, Insulated, ACSR #2/0, AWG 6/1, Phelps Dodge/AMWIRE	3,596 meters
Connector, Compression, #2/0 - #4/0 ACSR Run To #2/0 - #4/0	44 pieces
Connector, Ground Rod (Clamp) For 5/8" Steel Rod, HDG, JFI	17 pieces
Connector, Wedge Type, #336 - #336 MCTA (Ampact connector)	54 pieces
Pin, Crossarm, Steel, 5/8" X 14-3/4"X 1-3/8", Hot Dip Galvanized, JFI, Nylon Thread	443 pieces
Insulator, Pin Type, Polymer, ANSI, Class 55 - 5 X 1-3/8", HENDRIX	443 pieces
Insulator, Spool, 1-3/4", ANSI, Class 53 - 2	100 pieces
Insulator, Spool, 3", ANSI, Class 53 - 4	68 pieces
Insulator, Suspension, 4 shed, Polymer,15KV, HENDRIX	108 pieces
Nut, Eye, 5/8", Conventional, HDG, JFI	164 pieces
Nut, Lock, Mf Type, 3/8", HDG, JFI	56 pieces
Nut, Lock, Mf Type, 1/2", HDG, JFI	218 pieces
Nut, Lock, Mf Type, 5/8", HDG, JFI	522 pieces
Rod, Anchor, Threaded, Single Eye, 5/8" X 7', HDG, JFI	15 pieces
Rod, Armor, Preformed, #2/0 ACSR, Single Support	109 sets
Rod, Armor, Preformed, #2/0 ACSR, Double Support	8 sets
Rod, Armor, Preformed, #336 MCM, Single Support	162 sets
Rod, Armor, Preformed, #336 MCM, Double Support	24 sets
Rod, Ground Steel, Galvanized, 5/8" X 10', HDG, JFI	17 pieces
Washer, Square, Flat, 2-1/4" X 2-1/4" X 3/16", 13/16" Diameter Hole, HDG, JFI	569 pieces
Washer, Round, 1-3/8" Diameter With 9/16" Diameter Hole, HDG, JFI	218 pieces
Wire, Tie, Aluminum Alloy, Soft, #4 AWG	2,472 feet
Wire, Tape, Armor, Aluminum Alloy, 0,5" X 0.3"	59 feet
Wire, Grounding, Aluminum Alloy, 3 Strand, #4 AWG	969 feet
Wire, Guy, Steel, 3/8", 7 Strand	750 feet
CONCRETE/STEEL MATERIAL	
Pole, Concrete, 50', Class 3A, . Minimum Break Load- 1600 kgs, Approx. Weight - 1960kgs. Top Dia. 238 mm, Bottom Dia. 418, Wall Thickness 55 mm, Depth in Ground 2100mm-TEH HSIN	66 pieces
Crossarm, Steel, 3" X 4" X 8', Hot Dip Galvanized, HDG, JFI	157 pieces

SKETCH

STAKING SHEET

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.
Calipahan, Talavera, Nueva Ecija

Sheet No. 1 of 5
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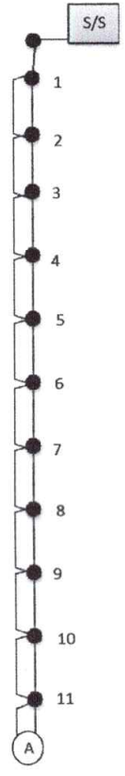

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA TO MUÑOZ ROAD, NUEVA ECIJA
AS PLAN STAKING SHEET

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	C	COMPUTER CODING
MNZ0515			1	50	C	4	C7												UB	D2/0	1	J6										
									G		M2		E			F					1	J15		S			K		M		R1		
1	52	6	1	50	C	1	DC-C1						1	E1-2		1	F1-2	52	UB	D2/0	2	J6										
						2	C7														2	J15										
2	42	6	1	50	C	1	DC-C1											42	UB	D2/0	1	J5										
																					1	J6										
3	46	6	1	50	C	1	DC-C1											46	UB	D2/0	1	J5										
4	47	6	1	50	C	1	DC-C1											47	UB	D2/0	1	J5										
5	45	6	1	50	C	1	DC-C1											45	UB	D2/0	1	J5										
6	24	6	1	50	C	1	DC-C1		1	G105	1	M2-11A						24	UB	D2/0	1	J5										
7	15	6	1	50	C	1	DC-C1											15	UB	D2/0	1	J6										
																					1	J15										
8	51	6	1	50	C	1	DC-C1		1	G105	1	M2-11A	1	E1-2		1	F1-2	51	UB	D2/0	1	J5										
						1	A5-2																										
9	50	6	1	50	C	1	DC-C8											50	UB	D2/0	1	J6										
																					1	J15										
10	52	6	1	50	C	1	DC-C1		1	G105	1	M2-11A						52	UB	D2/0	1	J5										
11	46	6	1	50	C	1	DC-C1											46	UB	D2/0	1	J5										

QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE	Q	CODE		QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	C	QUAN	CODE	
0	1-Phase																	2W								K		M		R1-	R		ACSR	ACSR
0	2-Phase																		ACSR # 1/0				2S	D		K		M		R1-	C			ACSR
0	3-Phase	12	40														0		ACSR # 1/0							K		M		R1-	PB			
0	D-Ckt.																470	1UB	D1/0				3S	D		K		M		R1-	LP			Insulated
																															IR			Duplex
0	Total																														SL			

See Sheet No

Prepared by:

JEFFREY S. ABELLON
Distribution System Design Surveying Foreman

Checked by:

ENGR.ROLAND M. PUNO
Distribution System Planning & Design Engineer

Recommending Approval

ENGR. JOSEPHINE L. BADIOLA
Distribution Asset Management Supervisor

Approved by:

ENGR. JEFFREY C. CUDAPAS
Technical Services Dept. Manager

SKETCH

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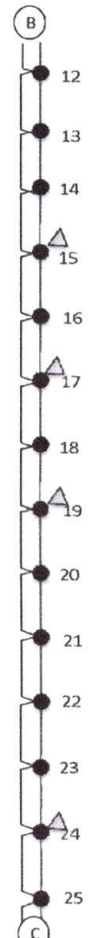

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STAKING SHEET

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.
Calipahan, Talavera, Nueva Ecija

Sheet No. 2 of 5
Map Ref.

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PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA TO MUÑOZ ROAD, NUEVA ECIJA
AS PLAN STAKING SHEET

POLE NO.	PRI. BACK SPAN MTRS.	POLE				PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	C	COMPUTER CODING
12	55	6	1	50	C	1	DC-C1						1	E1-2		1	F1-2	55	UB	D2/0	2	J6											
						2	B7			G		M2		E			F				1	J15		S			K		M		R1			
13	51	6	1	50	C	1	DC-C1											51	UB	D2/0	1	J5											
14	44	6	1	50	C	1	DC-C1											44	UB	D2/0	1	J5											
																						J6											
15	46	6	1	50	C	1	DC-C1		1	G105	1	M2-11A						46	UB	D2/0	1	J5											
16	42	6	1	50	C	1	DC-C1											42	UB	D2/0	1	J5											
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25	35	6	1	50	C	1	DC-C1						1	E1-2		1	F1-2	35	UB	D2/0	1	J5											

QUAN	C		Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	C	QUAN	CODE	
0	1-Phase																		2W							K		M		R1-		R		ACSR	ACSR
0	2-Phase																			ACSR # 1/0				2S	D	K		M		R1-		C			ACSR
0	3-Phase		14	40														0		ACSR # 1/0						K		M		R1-		PB			
0	D-Ckt.																	614	1UB	D1/0				3S	D	K		M		R1-		LP			Insulated
																																IR			Duplex
0	Total																															SL			

Prepared by:

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Distribution Asset Management Supervisor

Approved by:

ENGR. JEFFREY C. CUDAPAS
Technical Services Dept. Manager

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 3 of 5

Map Ref.

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PRIMARY COND. ACSR # 1/0 6/1 ACSR

NEUTRAL COND. ACSR # 1/0 6/1 ACSR

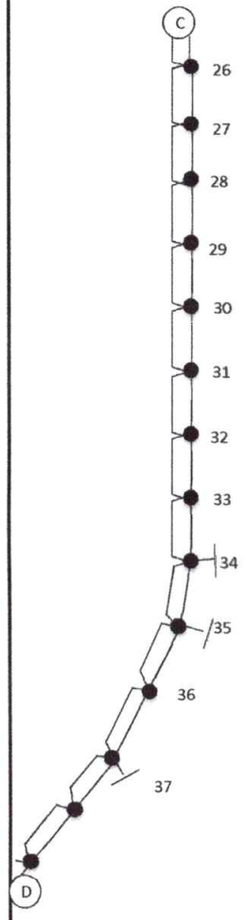
RULING SPAN 50 METERS

SUBSTATION TALAVERA SUBSTATION

LINE RELOCATION OF LINE AT TALAVERA TO MUÑOZ ROAD, NUEVA ECIJA

AS PLAN STAKING SHEET

SKETCH



POLE NO.	PRI. BACK SPAN MTRS.	POLE				PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	COMPUTER CODING
26	45	6	1	50	C	1	DC-C1											45	UB	D2/0	1	J6											
									G		M2		E			F						J15		S			K		M		R1			
27	59	6	1	50	C	1	DC-C1											59	UB	D2/0	1	J5											
28	41	6	1	50	C	1	DC-C1											41	UB	D2/0	1	J5											
29	39	6	1	50	C	1	DC-C1											39	UB	D2/0	1	J5											
30	52	6	1	50	C	1	DC-C1						1	E1-2		1	F1-2	52	UB	D2/0	1	J5											
31	50	6	1	50	C	1	DC-C1											50	UB	D2/0	1	J5											
32	49	6	1	50	C	1	DC-C1											49	UB	D2/0	1	J5											
						1	B7														1	J6											
33	52	6	1	50	C	1	DC-C8											52	UB	D2/0	1	J6											
																					1	J15											
34	51	6	1	50	C	1	DC-C2						1	E1-2		1	F1-2	51	UB	D2/0	1	J10											
35	65	6	1	50	C	1	DC-C2						1	E1-2		1	F1-2	65	UB	D2/0	1	J10											
36	48	6	1	50	C	1	DC-C1											48	UB	D2/0	1	J5											
37	40	6	1	50	C	1	DC-C2						1	E1-2		1	F1-2	40	UB	D2/0	1	J10											
38	41	6	1	50	C	1	DC-C1											41	UB	D2/0	1	J5											
39	46	6	1	50	C	1	DC-C1											46	UB	D2/0	1	J5											
QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase																		2W								K		M		R1-		R		ACSR	ACSR
0	2-Phase																			ACSR # 1/0				2S	D		K		M		R1-		C			ACSR
0	3-Phase	14	40															0		ACSR # 1/0							K		M		R1-		PB			
0	D-Ckt.																	678	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
																																	IR			Duplex
0	Total																																SL			

Prepared by:

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Checked by:

ENGR.ROLAND M. PUNO
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ENGR. JOSEPHINE L. BADIOLA
Distribution Asset Management Supervisor

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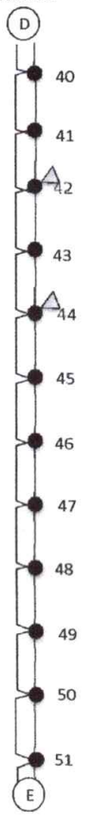
ENGR. JEFFREY C. CUDAPAS
Technical Services Dept. Manager

SKETCH

See Sheet No.



See Sheet No

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA TO MUÑOZ ROAD, NUEVA ECIJA
AS PLAN STAKING SHEET

Sheet No. 4
of 5
Map Ref.

Proj. No. ____(c) Page No. ____(c)
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Date: ____ Date: ____ (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE Q	POLE H	POLE C	PRI. POLE TOP UNIT (ABC) Q	PRI. POLE TOP UNIT (ABC) CODE	LINE ANGLE	TRANS-FORMER "G" Q	TRANS-FORMER "G" CODE	GND. "M2" Q	GND. "M2" CODE	GUY "E" Q	GUY "E" CODE	LEAD M	ANC. "F" Q	ANC. "F" CODE	SECODARY SPAN MTRS.	SECODARY SEC. OR U.B.	SECODARY WIRE SIZE	SECODARY NO	SECODARY "J"	SERVICE DROP MTRS.	SERVICE NO	SERVICE WIRE SIZE	SERVICE NO	SERVICE "K"	MISC. UNIT "M" Q	MISC. UNIT "M" CODE	R/W "R1" Q	R/W "R1" CODE	CONS Q	CONS C	MEMBER NAME AND NO. OR REMARKS
	QUAN	C	H	C																												COMPUTER CODING
40	51	6	1	50 C	1	DC-C1											51	UB	D2/0	1	J5											
									G		M2		E			F					J		S			K		M		R1		
41	56	6	1	50 C	1	DC-C8											56	UB	D2/0	1	J6											
																				1	J15											
42	49	6	1	50 C	1	DC-C1		1	G105	1	M2-11A	1	E1-2		1	F1-2	49	UB	D2/0	1	J5											
43	48	6	1	50 C	1	DC-C1											48	UB	D2/0	1	J5											
					1	A5-2															J15											
44	48	6	1	50 C	1	DC-C1		1	G105	1	M2-11A						48	UB	D2/0	1	J5											
45	44	6	1	50 C	1	DC-C1											44	UB	D2/0	1	J5											
46	52	6	1	50 C	1	DC-C1											52	UB	D2/0	1	J5											
47	56	6	1	50 C	1	DC-C1											56	UB	D2/0	1	J5											
48	48	6	1	50 C	1	DC-C1						1	E1-2		1	F1-2	48	UB	D2/0	1	J5											
49	47	3	1	50 C	1	C8											47	UB	D2/0	1	J6											
					3	C7														1	J15											
50	42	3	1	50 C	1	C8											42	UB	D2/0	1	J5											
					1	C7														1	J6											
																				1	J15											
51	57	3	1	50 C	1	C15		3	G105	1	M2-11A	1	E1-2		1	F1-2	57	UB	D2/0	1	J10											

QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase																2W								K		M		R1-		R	171	ACSR	ACSR
0	2-Phase																	ACSR # 1/0				2S	D		K		M		R1-		C			ACSR
57	3-Phase	12	40													57		ACSR # 1/0							K		M		R1-		PB			
0	D-Ckt.															598	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
																															IR			Duplex
171	Total																														SL			

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Distribution Asset Management Supervisor

Approved by:

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Technical Services Dept. Manager

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

STAKING SHEET

Sheet No. 5 of 5

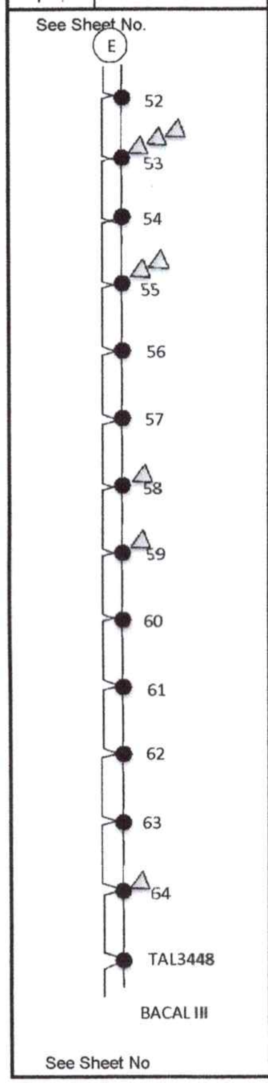
Map Ref. ______

Proj. No. ______ (c) Page No. ______ (c)
Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW
Date: ______ Date: ______ (5)
Released by: ______ Final Inv. By: ______
Date: ______ Date: ______ (8)

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA TO MUÑOZ ROAD, NUEVA ECIJA
AS PLAN STAKING SHEET

SKETCH



POLE NO.	PRI. BACK SPAN MTRS. QUAN	C	POLE Q	POLE CODE (H)	C	PRI. POLE TOP UNIT (ABC) Q	PRI. POLE TOP CODE	TRANS-FORMER "G" Q	TRANS-FORMER "G" CODE	GND. "M2" Q	GND. "M2" CODE	GUY "E" Q	GUY "E" CODE	ANC. "F" Q	ANC. "F" CODE	SECONDARY SPAN MTRS. QUAN	SEC. OR U.B. CODE	WIRE SIZE	"J" Q	"J" CODE	SERVICE DROP MTRS. QUAN	Q	WIRE SIZE	"K" Q	"K" CODE	MISC. UNIT "M" Q	MISC. "M" CODE	R/W "R1" Q	R/W "R1" CODE	CONS Q	CONS C	MEMBER NAME AND NO. OR REMARKS / COMPUTER CODING
52	60	3	1	50	C	1	C1									60	UB	D2/0	1	J10												
									G		M2		E		F					J		S			K		M		R1			
53	72	3	1	50	C	1	C8	3	G105	1	M2-11A					72	UB	D2/0	1	J5												
54	48	3	1	50	C	1	C1									48	UB	D2/0	1	J5												
55	41	3	1	50	C	1	C14	2	G105	1	M2-11A					41	UB	D2/0	1	J5												
56	53	3	1	50	C	1	C14					1	E1-2	1	F1-2	53	UB	D2/0	1	J6												
						1	A5-2												1	J15												
57	65	3	1	50	C	1	C14									65	UB	D2/0	1	J5												
58	58	3	1	50	C	1	C1	1	G105	1	M2-11A					58	UB	D2/0	1	J5												
59	51	3	1	50	C	1	C14	1	G105	1	M2-11A					51	UB	D2/0	1	J5												
						1	C7												1	J15												
60	52	3	1	50	C	1	C14									52	UB	D2/0	1	J5												
61	52	3	1	50	C	1	C1									52	UB	D2/0	1	J5												
62	70	3	1	50	C	1	C1									70	UB	D2/0	1	J5												
63	67	3	1	50	C	1	C14	1	G105	1	M2-11A	1	E1-2	1	F1-2	67	UB	D2/0	1	J10												
64	38	3	1	50	C	1	C14	1	G105	1	M2-11A					38	UB	D2/0	1	J5												
TAL3448	40	3	1	50	C	1	C8	1	G105	1	M2-11A	1	E1-2	1	F1-2	40	UB	D2/0	1	J6												
																			1	J15												
QUAN	C		Q	CODE		Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN / CODE
0	1-Phase																2W								K		M		R1-		R	2301 ACSR ACSR
0	2-Phase																	ACSR # 1/0				2S	D		K		M		R1-		C	ACSR
767	3-Phase		14	40												767		ACSR # 1/0							K		M		R1-		PB	
0	D-Ckt.															767	1UB	D1/0				3S	D		K		M		R1-		LP	Insulated
																															IR	Duplex
2301	Total																														SL	

Prepared by:

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Distribution Asset Management Supervisor

Approved by:

ENGR. JEFFREY C. CUDAPAS
Technical Services Dept. Manager

NUEVA ECIJA ELECTRIC COOPERATIVE, INC,. - AREA 1

Calipahan, Talavera, Nueva Ecija

July 14, 2021

PROJECT DESCRIPTION : **BILL OF MATERIALS FOR THE RELOCATION OF ELECTRICAL FACILITIES OF NEECO II - AREA 1 AFFECTED BY THE ROAD WIDENING PROJECT OF DPWH. (CALIPAHAN TO SAN MIGUEL NA MUNTI, TALAVERA.(TALAVERA - SAN JOSE ROAD)**

3 Phase = 7.504 Kms.
1 Phase = 0.052 Km.
U.B. = 7.452 Kms.

LOT. F

DESCRIPTION	PROJECT REQ'MNTS.
Anchor, Expanding, 8,000 Pounds, 4 Way, Galvanized Steel, HDG, JFI	34 pieces
Bolt, Thimble Eye 5/8" X 14" Angle Type, HDG, JFI	34 pieces
Bolt, Carriage 3/8" X 4-1/2", HDG, JFI	64 pieces
Bolt, Double Arming 5/8" X 24", HDG, JFI	112 pieces
Bolt, Double Upset 5/8" X 14", HDG, JFI	106 pieces
Bolt, Oval Eye 5/8" X 14", HDG, JFI	127 pieces
Bolt, Oval Eye, 5/8" X 18", HDG, JFI	16 pieces
Bolt, Machine, 1/2" X 6", HDG, JFI	186 pieces
Bolt, Machine 1/2" X 14", HDG, JFI	19 pieces
Bolt, Machine 5/8" X 14", HDG, JFI	184 pieces
Bolt, Machine 5/8" X 16", HDG, JFI	135 pieces
Brace, Crossarm, 28", Steel, HDG, JFI	64 each
Brace, Sidearm, Diagonal, 7 Feet, HDG, JFI	176 pieces
Bracket, Clevis Deadend Without Spool, HDG, JFI	22 pieces
Clamp, Hot Line, #2 - #4/0 ACSR, HDG, JFI	16 pieces
Clamp, Anchor Bonding, Single Eye Rod, HDG, JFI	34 pieces
Clamp, Loop Deadend, #1/0 ACSR, HDG, JFI	46 pieces
Clamp, Loop Deadend, #2/0 ACSR, HDG, JFI	286 pieces
Clamp, Deadend Strain, #1/0 ACSR, HDG, JFI	24 pieces
Clamp, Deadend Strain, #336.4 MCM , HDG, JFI	117 pieces
Clamp, Guy Straight, 3 Bolt, Heavy Duty Steel , HDG, JFI	68 pieces
Clevis, Secondary Swinging Without Spool , HDG, JFI	166 pieces
Shackle, Anchor, Forged Steel, Galvanized , HDG, JFI	40 pieces
Conductor, Bare, ACSR #1/0, AWG 6/1 , Phelps Dodge/AMWIRE	120 meters
Conductor, Bare, ACSR #2/0, AWG 6/1 , Phelps Dodge/AMWIRE	8,630 meters
Conductor, Bare, ACSR #336.4, MCM 26/7 STD (Meters) , Phelps Dodge/AMWIRE	25,889 meters
Conductor, Insulated, ACSR #2/0, AWG 6/1 , Phelps Dodge/AMWIRE	8,297 meters
Connector, Compression, #2/0 - #4/0 ACSR Run To #2/0 - #4/0	209 pieces
Connector, Ground Rod (Clamp) For 5/8" Steel Rod , HDG, JFI	68 pieces
Pin, Crossarm, Steel, 5/8" X 14-3/4"X 1-3/8", Hot Dip Galvanized, JFI, Nylon Thread	592 pieces
Insulator, Pin Type, Polymer, ANSI, Class 55 - 5 X 1-3/8", HENDRIX	592 pieces
Insulator, Spool, 1-3/4", ANSI, Class 53 - 2	230 pieces
Insulator, Spool, 3", ANSI, Class 53 - 4	188 pieces
Insulator, Suspension, 4 shed, Polymer,15KV , HENDRIX	141 pieces
Nut, Eye, 5/8", Conventional, HDG, JFI	180 pieces
Nut, Lock, Mf Type, 3/8", HDG, JFI	64 pieces
Nut, Lock, Mf Type, 1/2" , HDG, JFI	368 pieces
Nut, Lock, Mf Type, 5/8" , HDG, JFI	914 pieces
Rod, Anchor, Threaded, Single Eye, 5/8" X 7' , HDG, JFI	34 pieces
Rod, Tapping, Preformed, #1/0 ACSR	16 sets
Rod, Armor, Preformed, #2/0 ACSR, Single Support	238 sets
Rod, Armor, Preformed, #2/0 ACSR, Double Support	14 sets
Rod, Armor, Preformed, #336 MCM, Double Support	384 sets
Rod, Armor, Preformed, #336 MCM, Single Support	42 sets
Rod, Ground Steel, Galvanized, 5/8" X 10', HDG, JFI	68 pieces
Washer, Square, Flat, 2-1/4" X 2-1/4" X 3/16", 13/16" Diameter Hole , HDG, JFI	1,053 pieces
Washer, Round, 1-3/8" Diameter With 9/16" Diameter Hole , HDG, JFI	368 pieces
Wire, Tie, Aluminum Alloy, Soft, #4 AWG	5,648 feet
Wire, Tape, Armor, Aluminum Alloy, 0,5" X 0.3"	181 feet
Wire, Grounding, Aluminum Alloy, 3 Strand, #4 AWG	800 feet
Wire, Guy, Steel, 3/8", 7 Strand	1,700 feet
CONCRETE/STEEL MATERIAL	
Pole, Concrete, 30', Class 5, Minimum Break Load - 1000 kgs. , Approx. Weight -745 kgs. Top Dia. 201 mm, Bottom Dia. 310, Wall Thickness 50 mm, Depth in Ground 1500mm-TEH HSIN	3 pieces
Pole, Concrete, 35', Class 3, Minimum Break Load - 1400 kgs. , Approx. Weight -1125 kgs. Top Dia. 238 mm, Bottom Dia. 396, Wall Thickness 50 mm, Depth in Ground 1800mm-TEH HSIN	2 pieces
Pole, Concrete, 50', Class 3A, . Minimum Break Load- 1600 kgs, Approx. Weight - 1960kgs. Top Dia. 238 mm, Bottom Dia. 418, Wall Thickness 55 mm, Depth in Ground 2100mm-TEH HSIN	146 pieces
Crossarm, Steel, 3" X 4" X 8', Hot Dip Galvanized, HDG, JFI	208 pieces

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

STAKING SHEET

Sheet No. 1 of 14 | Map Ref.

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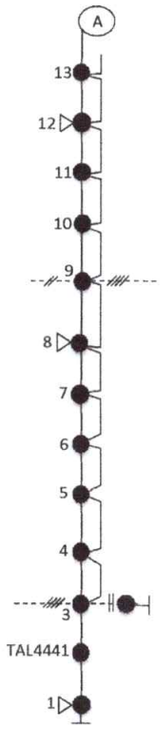
Checked by: ENGR. R.M. PUNO | Staked by: STAKING CREW
Date: ____ | Date: ____ (5)
Released by: ____ | Final Inv. By: ____
Date: ____ | Date: ____ (8)

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA - MUÑOZ ROAD
AS BUILT STAKING SHEET

SKETCH

See Sheet No. START



SAN MIGUEL NA MUNTI

See Sheet No 1

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	COMPUTER CODING
1			1	35	C	1	A5		1	G105	1	M2-11A	1	E1-2		1	F1-2															
										G		M2		E			F					J		S		K		M		R1		
TAL4441	40	1	1	35	C	1	A6		1	G105	1	M2-11A						40														
3	12	1	1	50	C	2	C7						2	E1-2		2	F1-2	12														
4	85	3	1	50	C	1	C14											85	UB	D2/0	1	J5										
5	81	3	1	50	C	1	C14											81	UB	D2/0	1	J5										
6	57	3	1	50	C	1	C14											57	UB	D2/0	1	J5										
						1	A5-2						1	E1-2		1	F1-2															
7	57	3	1	50	C	1	C14											57	UB	D2/0	1	J5										
8	45	3	1	50	C	1	C14		1	G105	1	M2-11A						45	UB	D2/0	1	J5										
9	78	3	1	50	C	1	C14											78	UB	D2/0	1	J5										
						1	C7														1	J6										
						1	A5-2														1	J15										
10	60	3	1	50	C	1	C14											60	UB	D2/0	1	J5										
11	62	3	1	50	C	1	C14											62	UB	D2/0	1	J5										
12	92	3	1	50	C	1	C14		1	G105	1	M2-11A						92	UB	D2/0	1	J5										
13	71	3	1	50	C	1	C8						1	E1-2		1	F1-2	71	UB	D2/0	2	J6										

QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
52	1-Phase				1	A5		4	G105	4	M2-11A	4	E1-2	4	F1-2		2W		9	J5					K		M		R1-		R	2116	ACSR	ACSR
0	2-Phase	2	35		2	A5-2												ACSR	3	J6		2S	D		K		M		R1-		C			ACSR
688	3-Phase	11	40		1	A6										740		ACSR	1	J15					K		M		R1-		PB			
0	D-Ckt.				7	C1										688	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
					3	C7																									IR			Duplex
2116	Total				1	C8																									SL			

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

STAKING SHEET

Sheet No. 2 of 14

Map Ref.

Proj. No. ____ (c) Page No. ____ (c)

Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW

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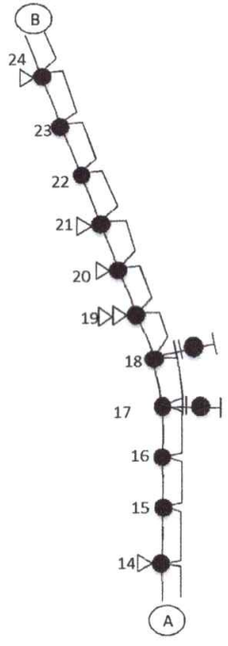
Released by: Final Inv. By:

Date: Date: (8)

SKETCH



See Sheet No. 1

See Sheet No 2

PRIMARY COND. ACSR # 1/0 6/1 ACSR

NEUTRAL COND. ACSR # 1/0 6/1 ACSR

RULING SPAN 50 METERS

SUBSTATION TALAVERA SUBSTATION

LINE RELOCATION OF LINE AT TALAVERA - MUÑOZ ROAD

AS BUILT STAKING SHEET

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE						MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
			H	C													SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"						
	QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	COMPUTER CODING
14	54	3	1	50 C	1	C14		1	G105	1	M2-11A						54	UB	D2/0	1	J5											
									G		M2		E			F					J		S			K		M		R1		
15	47	3	1	50 C	1	C14		1	G105	1	M2-11A						47	UB	D2/0	1	J5											
					1	C7																										
16	55	3	1	50 C	1	C14											55	UB	D2/0	1	J6											
																				1	J15											
17	61	3	1	50 C	1	C8											61	UB	D2/0	1	J5											
18	74	3	1	50 C	1	C2						1	E1-2		1	F1-2	74	UB	D2/0	1	J5											
19	65	3	1	50 C	1	C14		2	G105	1	M2-11A						65	UB	D2/0	1	J5											
20	54	3	1	50 C	1	C14		1	G105	1	M2-11A						54	UB	D2/0	1	J5											
21	72	3	1	50 C	1	C14		1	G105	1	M2-11A						72	UB	D2/0	1	J6											
																				1	J15											
22	40	3	1	50 C	1	C14											40	UB	D2/0	1	J5											
					1	A5														1	J6											
23	61	3	1	50 C	1	C14											61	UB	D2/0	1	J5											
																				1	J6											
24	57	3	1	50 C	1	C14		1	G105	1	M2-11A	1	E1-2		1	F1-2	57	UB	D2/0	1	J5											

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase			1	A5	7	G105	6	M2-11A	1	E1-2	1	F1-2		2W		9	J5					K		M		R1-		R	1920	ACSR	ACSR
0	2-Phase			4	C1											ACSR	4	J6		2S	D		K		M		R1-		C			ACSR
640	3-Phase	11	40	1	C2									640		ACSR	2	J15					K		M		R1-		PB			
0	D-Ckt.			1	C7									640	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
				1	C8																								IR			Duplex
1920	Total			5	C14																								SL			

STAKING SHEET

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 3 of 14

Map Ref.

Proj. No. ____ (c) Page No. ____ (c)

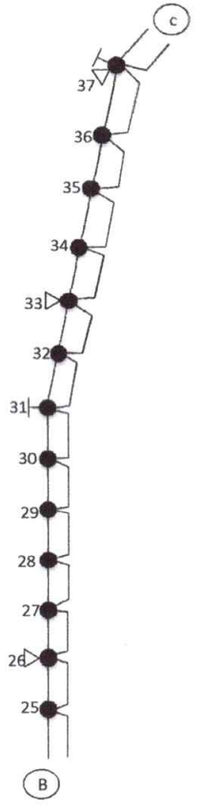
Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW

Date: Date: (5)

Released by: Final Inv. By:

Date: Date: (8)

SKETCH



PRIMARY COND. ACSR # 1/0 6/1 ACSR

NEUTRAL COND. ACSR # 1/0 6/1 ACSR

RULING SPAN 50 METERS

SUBSTATION TALAVERA SUBSTATION

LINE RELOCATION OF LINE AT TALAVERA - MUÑOZ ROAD

AS BUILT STAKING SHEET

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
25	58	3	1	50	C	1	C14											58	UB	D2/0	1	J6											
										G		M2		E			F				1	J15		S			K		M		R1			
26	60	3	1	50	C	1	C14		1	G105	1	M2-11A						60	UB	D2/0	1	J6											
27	37	3	1	50	C	1	C8											37	UB	D2/0	1	J5											
28	33	3	1	50	C	1	C14											33	UB	D2/0	1	J5											
29	53	3	1	50	C	1	C14											53	UB	D2/0	1	J5											
						1	A5-2														1	J6											
																					1	J15											
30	42	3	1	50	C	1	C14											42	UB	D2/0	1	J5											
31	46	3	1	50	C	1	C2						1	E1-2		1	F1-2	46	UB	D2/0	1	J10											
32	41	3	1	50	C	1	C14											41	UB	D2/0	1	J5											
33	40	3	1	50	C	1	C14		1	G105	1	M2-11A						40	UB	D2/0	1	J5											
34	33	3	1	50	C	1	C14											33	UB	D2/0	1	J5											
35	66	3	1	50	C	1	C14											66	UB	D2/0	1	J5											
36	92	3	1	50	C	1	C14											92	UB	D2/0	1	J5											
37	61	3	1	50	C	1	C2		1	G105	1	M2-11A	1	E1-2		1	F1-2	61	UB	D2/0	1	J10											

QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase				1	A5-2		3	G105	3	M2-11A	2	E1-2	2	F1-2		2W		9	J5				K		M		R1-		R	1986	ACSR	ACSR
0	2-Phase				7	C1												ACSR	3	J6		2S	D	K		M		R1-		C			ACSR
662	3-Phase	13	40		2	C2										662		ACSR	2	J10				K		M		R1-		PB			
0	D-Ckt.				1	C8										662	1UB	D1/0	2	J15		3S	D	K		M		R1-		LP			Insulated
					3	C14																								IR			Duplex
1986	Total																													SL			

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

STAKING SHEET

Sheet No. 4 of 14

Map Ref.

Proj. No. ____ (c) Page No. ____ (c)

Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW

Date: Date: (5)

Released by: Final Inv. By:

Date: Date: (8)

PRIMARY COND. ACSR # 1/0 6/1 ACSR

NEUTRAL COND. ACSR # 1/0 6/1 ACSR

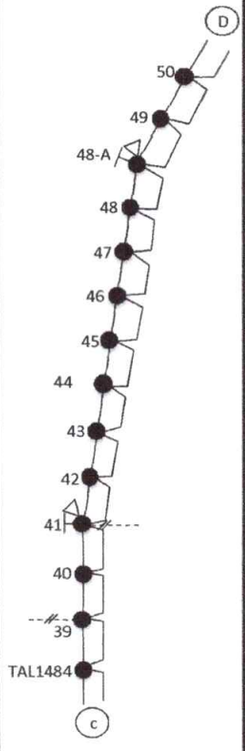
RULING SPAN 50 METERS

SUBSTATION TALAVERA SUBSTATION

LINE RELOCATION OF LINE AT TALAVERA - MUÑOZ ROAD

AS BUILT STAKING SHEET

SKETCH



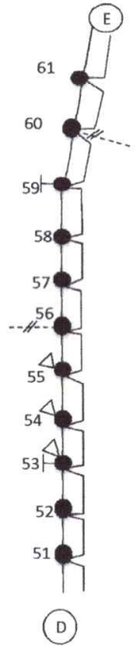
See Sheet No. 3

See Sheet No 4

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	COMPUTER CODING
TAL1484	48	3	1	50	C	1	C8											48	UB	D2/0	1	J6											
										G		M2		E			F				1	J15		S			K		M		R1		
39	33	3	1	50	C	1	C14											33	UB	D2/0	1	J5											
						1	A5														1	J6											
40	30	3	1	50	C	1	C14											30	UB	D2/0	1	J5											
41	48	3	1	50	C	1	C15		1	G105	1	M2-11A	1	E1-2		1	F1-2	48	UB	D2/0	1	J10											
						1	A5-2														1	J6											
42	59	3	1	50	C	1	C14											59	UB	D2/0	1	J5											
43	21	3	1	50	C	1	C14											21	UB	D2/0	1	J5											
44	57	3	1	50	C	1	C14		1	G105	1	M2-11A						57	UB	D2/0	1	J5											
45	76	3	1	50	C	1	C14		1	G105	1	M2-11A						76	UB	D2/0	1	J5											
46	76	3	1	50	C	1	C14											76	UB	D2/0	1	J5											
47	43	3	1	50	C	1	C8											43	UB	D2/0	1	J5											
48	45	3	1	50	C	1	C14											45	UB	D2/0	1	J5											
48-A	66	3	1	50	C	1	C2		1	G105	1	M2-11A	1	E1-2		1	F1-2	66	UB	D2/0	1	J10											
49	62	3	1	50	C	1	C14											62	UB	D2/0	1	J5											
50	81	3	1	50	C	1	C14											81	UB	D2/0	1	J5											
QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE	Q	CODE		QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	QUAN	CODE	
0	1-Phase				1	A5		4	G105	4	M2-11A	2	E1-2	2	F1-2			2W		11	J5					K		M		R1-		R	2235	ACSR	ACSR
0	2-Phase				1	A5-2													ACSR	3	J6		2S	D		K		M		R1-		C			ACSR
745	3-Phase	14	40		6	C1											745		ACSR	2	J10					K		M		R1-		PB			
0	D-Ckt.				1	C2											745	1UB	D1/0	1	J15		3S	D		K		M		R1-		LP			Insulated
					2	C8																										IR			Duplex
2235	Total				4	C14																										SL			

SKETCH

See Sheet No. 4



See Sheet No 5

STAKING SHEET

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 5 of 14

Map Ref.

Proj. No. ____ (c) Page No. ____ (c)

Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW

Date: Date: (5)

Released by: Final Inv. By:

Date: Date: (8)

PRIMARY COND. ACSR # 1/0 6/1 ACSR

NEUTRAL COND. ACSR # 1/0 6/1 ACSR

RULING SPAN 50 METERS

SUBSTATION TALAVERA SUBSTATION

LINE RELOCATION OF LINE AT TALAVERA - MUÑOZ ROAD

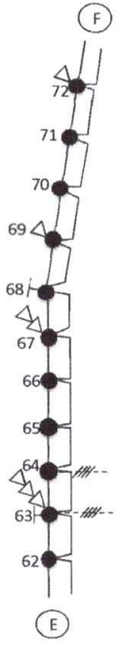
AS BUILT STAKING SHEET

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE						MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
			H	C													SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"						
	QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
51	79	3	1	50 C	1	C14											79	UB	D2/0	1	J5											
									G		M2		E			F				1	J6		S			K		M		R1		
																				1	J15											
52	37	3	1	50 C	1	C14											37	UB	D2/0	1	J6											
																				1	J15											
53	42	3	1	50 C	1	C14		1	G105	1	M2-11A	1	E1-2		1	F1-2	42	UB	D2/0	1	J6											
54	80	3	1	50 C	1	C14		1	G105	1	M2-11A						80	UB	D2/0	1	J5											
																				1	J6											
55	39	3	1	50 C	1	C14		1	G105	1	M2-11A						39	UB	D2/0	1	J6											
																				1	J15											
56	64	3	1	50 C	1	C14											64	UB	D2/0	1	J5											
57	25	3	1	50 C	1	C14											25	UB	D2/0	1	J5											
58	21	3	1	50 C	1	C14											21	UB	D2/0	1	J5											
					1	A5-2														1	J6											
																				1	J15											
59	63	3	1	50 C	1	C15						1	E1-2		1	F1-2	63	UB	D2/0	1	J10											
60	87	3	1	50 C	1	C14											87	UB	D2/0	1	J6											
					1	C7																										
61	74	3	1	50 C	1	C14																										

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase			1	A5-2	3	G105	3	M2-11A	2	E1-2	2	F1-2		2W		5	J5					K		M		R1-		R	1833	ACSR	ACSR
0	2-Phase			8	C1											ACSR	7	J6		2S	D		K		M		R1-		C			ACSR
611	3-Phase	11	40	1	C7									611		ACSR	1	J10					K		M		R1-		PB			
0	D-Ckt.			2	C14									537	1UB	D1/0	4	J15		3S	D		K		M		R1-		LP			Insulated
				1	C15																								IR			Duplex
1833	Total																												SL			

SKETCH

See Sheet No. 5



See Sheet No 6

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA - MUÑOZ ROAD
AS BUILT STAKING SHEET

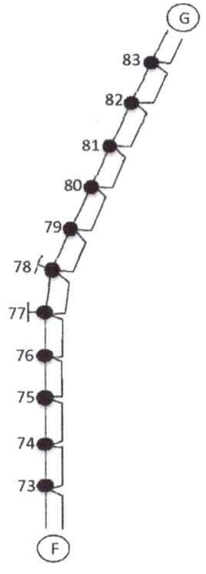
Sheet No. 6
of 14
Map Ref.

Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. R.M. PUNO
Staked by: STAKING CREW
Date: Date: (5)
Released by:
Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
62	88	3	1	50	C	1	C14		1	G105	1	M2-11A																					
										G		M2		E			F				J		S		K		M		R1				
63	66	3	1	50	C	1	C14		3	G105	1	M2-11A	1	E1-2		1	F1-2															
						1	C7																										
64	61	3	1	50	C	1	C14		3	G105	1	M2-11A							UB	D2/0	1	J6											
						1	C7																										
65	51	3	1	50	C	1	C14											51	UB	D2/0	1	J5											
66	49	3	1	50	C	1	C14											49	UB	D2/0	1	J5											
67	71	3	1	50	C	1	C14		2	G105	1	M2-11A						71	UB	D2/0	1	J5											
68	51	3	1	50	C	1	C2						1	E1-2		1	F1-2	51	UB	D2/0	1	J10											
69	51	3	1	50	C	1	C14		1	G105	1	M2-11A						51	UB	D2/0	1	J5											
70	27	3	1	50	C	1	C8											27	UB	D2/0	1	J6											
																					1	J15											
71	68	3	1	50	C	1	C14											68	UB	D2/0	1	J5											
																					1	J6											
72	66	3	1	50	C	1	C14		1	G105	1	M2-11A						66	UB	D2/0	1	J5											
																					1	J6											
QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase				8	C1		11	G105	6	M2-11A	1	E1-2		1	F1-2		2W		6	J5					K		M		R1-		R	1947	ACSR	ACSR
0	2-Phase				1	C2													ACSR	4	J6		2S	D		K		M		R1-		C			ACSR
649	3-Phase	11	40		2	C7											649		ACSR	1	J10					K		M		R1-		PB			
0	D-Ckt.				1	C8											434	1UB	D1/0	1	J15		3S	D		K		M		R1-		LP			Insulated
					1	C14																										IR			Duplex
1947	Total																															SL			

SKETCH

See Sheet No. 6



See Sheet No 7

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.
Calipahan, Talavera, Nueva Ecija

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA - MUÑOZ ROAD
AS BUILT STAKING SHEET

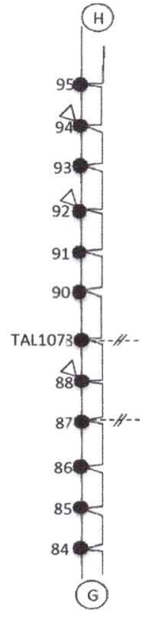
Sheet No. 7 of 14
Map Ref.

Proj. No. (c) Page No. (c)
Checked by: ENGR. R.M. PUNO
Staked by: STAKING CREW
Date: Date: (5)
Released by:
Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE					MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
			H	C													SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"						
	QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	C	COMPUTER CODING
73	64	3	1	50 C	1	C14						1	E1-2		1	F1-2	64	UB	D2/0	1	J5										
																				1	J6		S			K		M		R1		
74	56	3	1	50 C	1	C14											56	UB	D2/0	1	J6										
																				1	J15										
75	47	3	1	50 C	1	C14											47	UB	D2/0	1	J6										
76	34	3	1	50 C	1	C14											34	UB	D2/0	1	J5										
																				1	J6										
77	28	3	1	50 C	1	C15		1	G105	1	M2-11A	1	E1-2		1	F1-2	28	UB	D2/0	1	J10										
78	58	3	1	50 C	1	C2						1	E1-2		1	F1-2	58	UB	D2/0	1	J5										
					1	C8														1	J15										
79	85	3	1	50 C	1	C14		1	G105	1	M2-11A						85	UB	D2/0	1	J5										
80	91	3	1	50 C	1	C14		1	G105	1	M2-11A						91	UB	D2/0	1	J5										
																					J6										
81	89	3	1	50 C	1	C8											89	UB	D2/0	1	J6										
																				1	J15										
82	60	3	1	50 C	1	C14		1	G105	1	M2-11A						60	UB	D2/0	1	J5										
																					J6										
83	41	3	1	50 C	1	C14											41	UB	D2/0	1	J5										
QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	C	QUAN CODE
0	1-Phase				7	C1		4	G105	4	M2-11A	2	E1-2		2	F1-2		2W		7	J5					K		M		R	1959 ACSR
0	2-Phase				1	C2													ACSR	5	J6		2S	D		K		M		C	ACSR
653	3-Phase	11	40		2	C8											653		ACSR	1	J10					K		M		PB	
0	D-Ckt.				1	C14											653	1UB	D1/0	3	J15		3S	D		K		M		LP	Insulated
					1	C15																								IR	Duplex
1959	Total																													SL	

SKETCH

See Sheet No. 7



See Sheet No 8

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

Sheet No. 8
of 14
Map Ref.

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA - MUÑOZ ROAD
AS BUILT STAKING SHEET

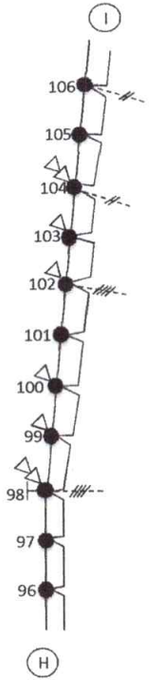
Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. R.M. PUNO
Staked by: STAKING CREW
Date: Date: (5)
Released by:
Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	C	COMPUTER CODING
84	11	3	1	50	C	1	C14						1	E1-2		1	F1-2	11	UB	D2/0	1	J5											
																					1	J6		S			K		M		R1		
85	52	3	1	50	C	1	C14											52	UB	D2/0	1	J5											
86	53	3	1	50	C	1	C14											53	UB	D2/0	1	J5											
																					1	J15											
87	25	3	1	50	C	1	C14											25	UB	D2/0	1	J5											
						1	A5														1	J15											
88	52	3	1	50	C	1	C14		1	G105	1	M2-11A						52	UB	D2/0	1	J5											
																					1	J15											
TAL1078	47	3	1	50	C	1	C14						1	E1-2		1	F1-2	47	UB	D2/0	1	J6											
						1	A5-2																										
90	39	3	1	50	C	1	C14											39	UB	D2/0	1	J6											
91	45	3	1	50	C	1	C14											45	UB	D2/0	1	J5											
92	36	3	1	50	C	1	C14		1	G105	1	M2-11A						36	UB	D2/0	1	J5											
93	53	3	1	50	C	1	C14											53	UB	D2/0	1	J5											
																					1	J15											
94	58	3	1	50	C	1	C14		1	G105	1	M2-11A						58	UB	D2/0	1	J5											
																					1	J15											
95	34	3	1	50	C	1	C14						1	E1-2		1	F1-2	34	UB	D2/0	1	J5											

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase			1	A5	3	G105	3	M2-11A						2W		10	J5					K		M		R1-		R	1515	ACSR	ACSR
0	2-Phase			1	A5-2											ACSR	3	J6		2S	D		K		M		R1-		C			ACSR
505	3-Phase	12	40	2	C1									505		ACSR	5	J15					K		M		R1-		PB			
0	D-Ckt.			10	C14									505	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
																													IR			Duplex
1515	Total																												SL			

SKETCH

See Sheet No. 8



See Sheet No 9

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.
Calipahan, Talavera, Nueva Ecija

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA - MUÑOZ ROAD
AS BUILT STAKING SHEET

Sheet No. 9
of 14
Map Ref.

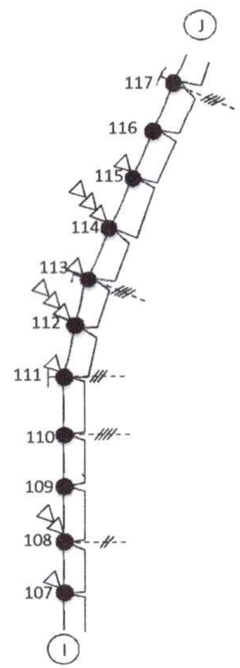
Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. R.M. PUNO
Staked by: STAKING CREW
Date: Date: (5)
Released by:
Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	C	COMPUTER CODING
96	73	3	1	50	C	1	C14											73	UB	D2/0	1	J5											
										G		M2		E			F					J		S			K		M		R1		
97	51	3	1	50	C	1	C14											51	UB	D2/0	2	J6											
																					1	J15											
98	49	3	1	50	C	1	C2		1	G105	1	M2-11A	1	E1-2		1	F1-2	49	UB	D2/0	2	J6											
						1	C7														1	J15											
99	71	3	1	50	C	1	C14		1	G105	1	M2-11A						71	UB	D2/0	1	J5											
100	51	3	1	50	C	1	C14		1	G105	1	M2-11A						51	UB	D2/0	1	J5											
101	51	3	1	50	C	1	C14											51	UB	D2/0	1	J5											
102	16	3	1	50	C	1	C14		1	G105	1	M2-11A						16	UB	D2/0	2	J6											
						1	C7														1	J15											
103	11	3	1	50	C	1	C14		1	G105	1	M2-11A						11	UB	D2/0	1	J5											
104	48	3	1	50	C	1	C14		2	G105	1	M2-11A	1	E1-2		1	F1-2	48	UB	D2/0	1	J5											
						1	A5-2														1	J6											
105	66	3	1	50	C	1	C14		1	G105	1	M2-11A						66	UB	D2/0	1	J5											
																					1	J6											
106	64	3	1	50	C	1	C14											64	UB	D2/0	1	J5											
						1	A5-2																										

QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE	Q	CODE		QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C		QUAN	CODE	
0	1-Phase			2	A5-2		8	G105	7	M2-11A	1	E1-2	1	F1-2			2W		8	J5					K		M		R1-		R		1653	ACSR	ACSR
0	2-Phase			1	C2													ACSR	8	J6		2S	D		K		M		R1-		C				ACSR
551	3-Phase	11	40	2	C7											551		ACSR	3	J15					K		M		R1-		PB				
0	D-Ckt.			10	C14											551	1UB	D1/0				3S	D		K		M		R1-		LP				Insulated
																															IR				Duplex
1653	Total																														SL				

N	SKETCH

See Sheet No. 9



See Sheet No 10

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA - MUÑOZ ROAD
AS BUILT STAKING SHEET

Sheet No. 10 of 14
Map Ref.

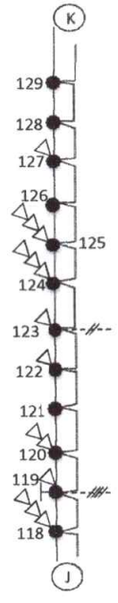
Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. R.M. PUNO
Staked by: STAKING CREW
Date: ____ Date: ____ (5)
Released by: ____ Final Inv. By: ____
Date: ____ Date: ____ (8)

POLE NO.	PRI. BACK SPAN MTRS. QUAN	C	POLE Q	POLE H C CODE	PRI. POLE TOP UNIT (ABC) Q	CODE	LINE ANGLE	TRANS-FORMER "G" Q	CODE	GND. "M2" Q	CODE	GUY "E" Q	CODE	LEAD	ANC. "F" Q	CODE	SECODARY SPAN MTRS. QUAN	SEC. OR U.B. CODE	WIRE SIZE	NO "J" Q	CODE	SERVICE DROP MTRS. QUAN	NO Q	WIRE SIZE	NO "K" Q CODE	MISC. UNIT "M" Q	CODE	R/W "R1" Q	CODE	CONS Q	C	MEMBER NAME AND NO. OR REMARKS / COMPUTER CODING
107	56	3	1	50 C	1	C14		1	G105	1	M2-11A						56	UB	D2/0	2	J6											
																				1	J15		S		K		M		R1			
108	47	3	1	50 C	1	C14		2	G105	1	M2-11A						47	UB	D2/0	1	J6											
					1	A5-2																										
109	34	3	1	50 C	1	C14											34	UB	D2/0	1	J6											
110	28	3	1	50 C	1	C8											28	UB	D2/0	1	J6											
					1	C7														1	J15											
111	24	3	1	50 C	1	C15		1	G105	1	M2-11A	1	E1-2		1	F1-2	24	UB	D2/0	1	J10											
					1	B7														1	J15											
112	40	3	1	50 C	1	C14		3	G105	1	M2-11A						40	UB	D2/0	1	J5											
113	38	3	1	50 C	1	C15		1	G105	1	M2-11A	1	E1-2		1	F1-2	38	UB	D2/0	1	J6											
					1	C7														1	J5											
114	35	3	1	50 C	1	C14		3	G105	1	M2-11A						35	UB	D2/0	1	J5											
115	55	3	1	50 C	1	C14		1	G105	1	M2-11A						55	UB	D2/0	1	J5											
116	30	3	1	50 C	1	C14											30	UB	D2/0	2	J6											
																				1	J15											
117	27	3	1	50 C	1	C14						1	E1-2		1	F1-2	27	UB	D2/0	1	J5											
					1	C7														1	J15											

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase			1	A5-2	12	G105	7	M2-11A	3	E1-2	3	F1-2		2W		5	J5				K		M		R1-		R	1242	ACSR	ACSR
0	2-Phase			1	B7											ACSR	8	J6		2S	D	K		M		R1-		C			ACSR
414	3-Phase	11	40	3	C7									414		ACSR	1	J10				K		M		R1-		PB			
0	D-Ckt.			1	C8									414	1UB	D1/0	5	J15		3S	D	K		M		R1-		LP			Insulated
				8	C14																							IR			Duplex
1242	Total			2	C15																							SL			

SKETCH

See Sheet No. 10



See Sheet No 11

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA - MUÑOZ ROAD
AS BUILT STAKING SHEET

Sheet No. 11
of 14
Map Ref.

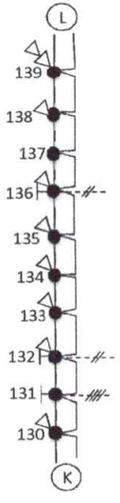
Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. R.M. PUNO
Staked by: STAKING CREW
Date: Date: (5)
Released by:
Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS.	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS	MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	COMPUTER CODING
118	46	3	1	50	C	1	C14	3	G105	1	M2-11A						46	UB	D2/0	1	J5										
									G		M2		E			F					J		S			K		M		R1		
119	42	3	1	50	C	1	C14					1	E1-2		1	F1-2	42	UB	D2/0	1	J6										
						1	C7													1	J15										
120	24	3	1	50	C	1	C14	2	G105	1	M2-11A						24	UB	D2/0	1	J5										
121	72	3	1	50	C	1	C14										72	UB	D2/0	1	J5										
122	51	3	1	50	C	1	C14	1	G105	1	M2-11A						51	UB	D2/0	1	J6										
																				1	J15										
123	40	3	1	50	C	1	C14	1	G105	1	M2-11A						40	UB	D2/0	1	J5										
						1	A5-2																								
124	12	3	1	50	C	1	C14	3	G105	1	M2-11A						12	UB	D2/0	1	J5										
125	67	3	1	50	C	1	C14	3	G105	1	M2-11A						67	UB	D2/0	1	J5										
126	16	3	1	50	C	1	C14					1	E1-2		1	F1-2	16	UB	D2/0	1	J5										
																				1	J6										
																				1	J15										
127	38	3	1	50	C	1	C14	1	G105	1	M2-11A						38	UB	D2/0	1	J5										
128	70	3	1	50	C	1	C14										70	UB	D2/0	1	J6										
																				1	J15										
129	59	3	1	50	C	1	C14	1	G105	1	M2-11A						59	UB	D2/0	1	J5										

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase			1	A5-2	15	G105	8	M2-11A	1	E1-2	1	F1-2		2W		9	J5					K		M		R1-		R	1611	ACSR	ACSR
0	2-Phase			1	C7											ACSR	4	J6		2S	D		K		M		R1-		C			ACSR
537	3-Phase	12	40	12	C14									537		ACSR	4	J15					K		M		R1-		PB			
0	D-Ckt.													537	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
																													IR			Duplex
1611	Total																												SL			

SKETCH

See Sheet No. 11



See Sheet No 12

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA - MUÑOZ ROAD
AS BUILT STAKING SHEET

Sheet No. 12
of 14
Map Ref.

Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. R.M. PUNO
Staked by: STAKING CREW
Date: Date: (5)
Released by:
Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	SERVICE DROP MTRS	NO	WIRE SIZE	NO	"K"	MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
	QUAN	C	Q	H	C	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	C	COMPUTER CODING
130	50	3	1	50	C	1	C14		1	G105	1	M2-11A						50	UB	D2/0	1	J5												
																					1	J15		S			K		M		R1			
131	58	3	1	50	C	1	C14											58	UB	D2/0	1	J5												
						1	C7														1	J6												
132	50	3	1	50	C	1	C8		1	G105	1	M2-11A	1	E1-2		1	F1-2	50	UB	D2/0	1	J6												
						1	A5-2														1	J15												
133	53	3	1	50	C	1	C14		1	G105	1	M2-11A						53	UB	D2/0	1	J5												
134	41	3	1	50	C	1	C14						1	E1-2		1	F1-2	41	UB	D2/0	1	J5												
						1	A5-2														1	J15												
135	53	3	1	50	C	1	C14		1	G105	1	M2-11A						53	UB	D2/0	1	J5												
																					1	J15												
136	63	3	1	50	C	1	C14		1	G105	1	M2-11A	1	E1-2		1	F1-2	63	UB	D2/0	1	J5												
						1	A5-2																											
137	44	3	1	50	C	1	C14											44	UB	D2/0	1	J5												
																					2	J15												
138	32	3	1	50	C	1	C14		1	G105	1	M2-11A						32	UB	D2/0	1	J5												
																					2	J15												
139	70	3	1	50	C	1	C14		2	G105	1	M2-11A						70	UB	D2/0	1	J5												
																					1	J15												

QUAN	C	Q	CODE		Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	C	QUAN	CODE	
0	1-Phase				3	A5-2		8	G105	7	M2-11A	3	E1-2		3	F1-2		2W		9	J5					K		M		R1-		R	1542	ACSR	ACSR
0	2-Phase				1	C7													ACSR	2	J6		2S	D		K		M		R1-		C			ACSR
514	3-Phase	10	40		1	C8											514		ACSR	9	J15					K		M		R1-		PB			
0	D-Ckt.				9	C14											514	1UB	D1/0				3S	D		K		M		R1-		LP			Insulated
																																IR			Duplex
1542	Total																															SL			

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

STAKING SHEET

Sheet No. 13 of 14
Map Ref.

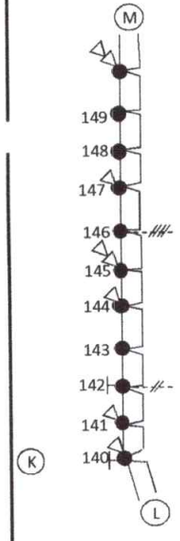
Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA - MUÑOZ ROAD
AS BUILT STAKING SHEET

SKETCH

See Sheet No. 12



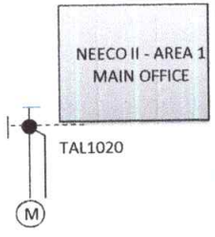
See Sheet No 13

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)	LINE ANGLE	TRANS-FORMER "G"	GND. "M2"	GUY "E"	LEAD M	ANC. "F"	SECODARY					SERVICE					MISC. UNIT "M"	R/W "R1"	CONS		MEMBER NAME AND NO. OR REMARKS
			H	C								SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"					
	QUAN	C	Q	CODE	Q CODE		Q CODE	Q CODE	Q CODE		Q CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q CODE	Q CODE	Q	C	COMPUTER CODING
140	39	3	1	50 C	1 C15		1 G105	1 M2-11A	1 E1-2		1 F1-2	39	UB	D2/0	1	J5										
					1 A5-2											J15		S			K	M	R1			
141	49	3	1	50 C	1 C14		1 G105	1 M2-11A				49	UB	D2/0	1	J5										
															1	J15										
142	38	3	1	50 C	1 C14				1 E1-2		1 F1-2	38	UB	D2/0	1	J5										
					1 A5-2											J15										
143	46	3	1	50 C	1 C14							46	UB	D2/0	1	J5										
																J15										
144	34	3	1	50 C	1 C14		1 G105	1 M2-11A				34	UB	D2/0	1	J5										
145	18	3	1	50 C	1 C14		2 G105	1 M2-11A				18	UB	D2/0	1	J5										
															1	J15										
146	30	3	1	50 C	1 C8							30	UB	D2/0	1	J5										
					1 C7										1	J15										
147	26	3	1	50 C	1 C14		1 G105	1 M2-11A				26	UB	D2/0	2	J6										
															1	J15										
148	13	3	1	50 C	1 C8							13	UB	D2/0	1	J6										
															1	J15										
149	27	3	1	50 C	1 C1				1 E1-2		1 F1-2	27	UB	D2/0	1	J5										
					1 A5-2										1	J15										

QUAN	C	Q	CODE	Q CODE	Q CODE	Q CODE	Q CODE	Q CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q CODE	Q CODE	Q	C	QUAN	CODE	
0	1-Phase			3 A5-2	6 G105	5 M2-11A	2 E1-2	2 F1-2		2W		8	J5					K	M	R1-		R	960	ACSR	ACSR
0	2-Phase			1 C1							ACSR	3	J6		2S	D		K	M	R1-		C			ACSR
320	3-Phase	10	40	1 C7					320		ACSR	6	J15					K	M	R1-		PB			
0	D-Ckt.			2 C8					320	1UB	D1/0				3S	D		K	M	R1-		LP			Insulated
				6 C14																		IR			Duplex
960	Total			1 C15																		SL			

SKETCH

See Sheet No. 13



See Sheet No 14

STAKING SHEET

PRIMARY COND. ACSR # 1/0 6/1 ACSR
NEUTRAL COND. ACSR # 1/0 6/1 ACSR
RULING SPAN 50 METERS

NUEVA ECIJA II ELECTRIC COOPERATIVE, INC.

Calipahan, Talavera, Nueva Ecija

SUBSTATION TALAVERA SUBSTATION
LINE RELOCATION OF LINE AT TALAVERA - MUÑOZ ROAD
AS BUILT STAKING SHEET

Sheet No. 14
of 14
Map Ref.

Proj. No. ____ (c) Page No. ____ (c)
Checked by: ENGR. R.M. PUNO Staked by: STAKING CREW
Date: Date: (5)
Released by: Final Inv. By:
Date: Date: (8)

POLE NO.	PRI. BACK SPAN MTRS.	POLE			PRI. POLE TOP UNIT (ABC)		LINE ANGLE	TRANS-FORMER "G"		GND. "M2"		GUY "E"		LEAD M	ANC. "F"		SECODARY					SERVICE					MISC. UNIT "M"		R/W "R1"		CONS		MEMBER NAME AND NO. OR REMARKS
			H	C													SPAN MTRS.	SEC. OR U.B.	WIRE SIZE	NO	"J"	DROP MTRS.	NO	WIRE SIZE	NO	"K"							
	QUAN	C	Q	CODE	Q	CODE		Q	CODE	Q	CODE	Q	CODE		Q	CODE	QUAN	CODE		Q	CODE	QUAN	Q		Q	CODE	Q	CODE	Q	CODE	Q	COMPUTER CODING
TAL1020	15	3	1	50	C 2	C7		1	G105	1	M2-11A						15	UB	D2/0	2	J6								R1			
																							S			K		M				

QUAN	C	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE		Q	CODE	QUAN	C		Q	CODE	Q	CODE	Q	CODE	Q	CODE	QUAN	CODE	
0	1-Phase			1	C1												2W		1	J5					K		M	R1-		R	45	ACSR	ACSR
0	2-Phase			1	C15													ACSR	1	J15		2S	D		K		M	R1-		C			ACSR
15	3-Phase	1	40													15		ACSR # 1/0							K		M	R1-		PB			
0	D-Ckt.															15	1UB	D1/0				3S	D		K		M	R1-		LP			Insulated
																														IR			Duplex
45	Total																													SL			