



**REGIONAL PROCUREMENT HUB PROGRAM – REGION 7
 SUPPLEMENTAL BID BULLETIN NO. 24-04
 FOR THE
 PROCUREMENT OF SUPPLY AND DELIVERY OF CONDUCTORS
 (PB-ITB-R7-4-2024)**

In accordance with Section 4.3.2 of Annex "B" of the NEA Memorandum No. 2024-06, this Supplemental Bid Bulletin is hereby issued to clarify, modify or amend the following items for PB-ITB-R7-4-2024:

Section/Item No.	Issue in the Bidding Documents / Technical Specifications	Clarification / Amendment
Section II. Instructions To Bidders		
IB 6.4 to 6.5 Single Largest Completed Contract (SLCC)	Clarification on what constitutes "Similar Contracts"	IB Clause 6.5 is amended as follows: "For the purpose of this bidding a similar contract or project shall mean contracts for the 'consignment, supply and delivery of' or for 'supply and delivery of' Conductors within the Philippines."
Section VI. Terms of Reference		
TOR 6.1 (Detailed Technical Specifications for Items A and B)	<p>With respect to TOR 6.1, General Characteristics, First Bullet (Characteristics Table), there is a clerical error on the specifications and characteristics indicated for Item B [Conductor, Bare, ACSR #4/0, AWG 6/1 (Meters)].</p> <p>As per NEA Standard, the specifications and Characteristics currently indicated therein pertain to Size 336.4 Conductors (instead of Size 4/0 Conductors), to wit:</p> <p>Strand No. & Size-Inches (Aluminum) – 6 x .1137 Strand No. & Size-Inches (Steel) – 1 x .1137 Overall Diameter (Inches) – 0.721 DC Resistance Ohms/mile@25°C – 0.278</p>	<p>The relevant portion of TOR 6.1, General Characteristics, First Bullet (Characteristics Table), is corrected and amended to provide the following specifications and characteristics for Item B [Conductor, Bare, ACSR #4/0, AWG 6/1 (Meters)]</p> <p>Size AWG or MCM – 4/0 Strand No. & Size-Inches (Aluminum) – 6 x .1878 Strand No. & Size-Inches (Steel) – 1 x .1878 Overall Diameter (Inches) – 0.563 DC Resistance Ohms/mile@25°C – 0.441 Ultimate Strength Pounds – 8,420</p>




	<p>Ultimate Strength Pounds - 14,050</p>	
<p>Section VII. Bid Forms</p>		
<p>Form#4 - Statement of Ongoing and Completed Contracts</p>	<p>The Title of Bid Form #4 did not include "Completed" Contracts.</p> <p>Bid Form#4 was not definitive on the supporting documents to be submitted during post-qualification.</p>	<p>The Title of Bid Form #4 is amended to include "Completed" Contracts.</p> <p>Bid Form#4 (Statement of Ongoing and Completed Contracts) is amended to provide a definitive list of supporting documents to be submitted during post-qualification as follows: (a) Notice of Award (or equivalent document for private contracts; if no equivalent document print one page stating "NOT Applicable"); (b) Notice to Proceed (or equivalent document for private contracts; if no equivalent document print one page stating "NOT Applicable"); (c) Contract; (d) Purchase Order; (e) For on-going Contracts, Certification from the client / project owner that the performance is satisfactory as of the bidding date OR For Completed Contracts, Certification of Acceptance/Completion or equivalent document; and (f) Official Receipt or Sales Invoice issued for the Contract.</p> <p>Bid Form#4 was also amended to include the following statement: <i>"The NEA SBAC may request additional supporting documents during post-qualification to verify the Bidder's statements/representations herein"</i>.</p> <p>Please see revised Statement of Ongoing and Completed Contracts</p>

		attached herein as Annex "A" .
Form#5 - SLCC	Bid Form#5 (SLCC) was not definitive on the supporting documents to be submitted together with the form.	<p>Bid Form#5 (SLCC) is amended to provide a definitive list of supporting documents to be submitted together with the form as follows: (a) Notice of Award (or equivalent document for private contracts; if no equivalent document print one page stating "NOT Applicable"); (b) Notice to Proceed (or equivalent document for private contracts; if no equivalent document print one page stating "NOT Applicable"); (c) Contract; (d) Purchase Order; (e) Certification of Acceptance/Completion or equivalent document; and (f) Official Receipt or Sales Invoice issued for the Contract.</p> <p>Bid Form#5 was also amended to include the following statement: <i>"The NEA SBAC may request additional supporting documents during post-qualification to verify the Bidder's statements/representations herein"</i>.</p> <p>Please see revised SLCC Form attached herein as Annex "B".</p>
Form#4 - Statement of Ongoing and Completed Contracts Form#5 - SLCC	Clarification on protocol to follow in the event that the contract(s) to be declared as part of Bid Form Form#4 or to be declared and submitted as the SLCC under Bid Form#5 are denominated in US Dollar.	In the event, that the contracts are denominated in foreign currency the following protocol shall be followed in accomplishing Bid Form#4 : (a) the Contract Amount must be converted to Philippine Peso using the applicable exchange rate as of Invoice Date; and (b) the exchange rate to be used must be based on the Daily

		<p>Reference Exchange Rate Bulletin (RERB) issued by the Bangko Sentral ng Pilipinas (BSP); and (c) the Bidder must submit the relevant Daily RERB issued by the BSP during the post-qualification stage.</p> <p>In the event, that the SLCC is denominated in foreign currency the following protocol shall be followed in accomplishing Bid Form#5: (a) the Contract Amount must be converted to Philippine Peso using the applicable exchange rate as of Invoice Date; and (b) the exchange rate to be used must be based on the Daily Reference Exchange Rate Bulletin (RERB) issued by the Bangko Sentral ng Pilipinas (BSP); and (c) the Bidder must attach the relevant Daily RERB issued by the BSP together with the SLCC Form.</p> <p>Please see revised Statement of Ongoing and Completed Contracts and SLCC Forms attached herein as Annexes "A" and "B".</p>
Form#6 - NFCC	Bid Form#6 (NFCC) does not include the "Value of all outstanding/uncompleted contracts" as one of the Particulars required to be indicated.	<p>Bid Form#6 (NFCC) is amended to include "Value of all outstanding/uncompleted contracts" as one of the Particulars required to be indicated.</p> <p>Please see revised NFCC Form attached herein as Annex "C".</p>
Form#10 - Details of Technical Specifications	Bid Form#10 (Details of Technical Specifications) requires revisions to conform with the revisions to Clause 6.1 of the TOR as provided above.	Bid Form#10 (Details of Technical Specifications) is amended to conform with the revisions to Clause 6.1 of the TOR.


		Please see revised Details of Technical Specifications Form attached herein as Annex "D" .
Section III. Instructions to Bidders & Section VI. Checklist of Eligibility Requirements and Bid Proposals		
IB Clause 12.3 & Item II (E) of Checklist of Eligibility Requirements and Bid Proposals.	<p>1. The Second Form of Bid Security provides: "Bank draft/ Guarantee or irrevocable letter of credit issued by a universal or commercial bank". However, it does not contain the following statement which is found for the similar form of Performance Securities: "Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank".</p> <p>2. The Amounts for the Second and Third Forms of Bid Securities respectively state: "2% of the ABC of the Members EC's Respective Share in the Total ABC as provided for under IB Clause 2.3" and "5% of the ABC of the Members EC's Respective Share in the Total ABC as provided for under IB Clause 2.3".</p>	<p>1. The Second Form of Bid Security under IB Clause 12.3 & Item II (E) of the Checklist of Eligibility Requirements and Bid Proposals is amended as follows: "Bank draft/ Guarantee or irrevocable letter of credit issued by a universal or commercial bank. Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank."</p> <p>2. The Amounts for the Second and Third Forms of Bid Securities under IB Clause 12.3 & Item II (E) of the Checklist of Eligibility Requirements and Bid Proposals is respectively amended as follows: "2% of the Members EC's Respective Share in the Total ABC as provided for under IB Clause 2.3" and "5% of the Members EC's Respective Share in the Total ABC as provided for under IB Clause 2.3".</p> <p>Please see revised Table for the Form and Amount of Bid Securities attached herein as Annex "E".</p>

Issued this 15th day of July 2024 for the guidance and information of all concerned.


ATTY. OSWALDO F. GABAT
 Member
 NEA RPH SBAC


MS. IRENE C. MARTIN
 Member
 NEA RPH SBAC


ENGR. EXEQUIEL T. EVALE, JR.
Member
NEA RPH SBAC



MS. ROSIE M. ALAMILLO
Member
NEA RPH SBAC

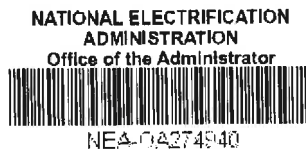

ENGR. RODERICK N. PADUA
Member
NEA RPH SBAC


ATTY. ALEXANDER PAUL T. RIVERA
Vice-Chairperson
NEA RPH SBAC


ENGR. ERNESTO O. SILVANO, JR.
Chairperson
NEA RPH SBAC

APPROVED:


ANTONIO MARIANO C. ALMEDA
Administrator



CONFORME:


VIRGILIO C. FORTICH
President
Region VII Electric Cooperative Association, Inc.
Confirmed Regional Association.

Form#4: Statement of Ongoing and Completed Contracts

Statement of all Completed and Ongoing Government & Private Contracts including Contracts Awarded But Not Yet Started

The bidder shall declare in this form all on going government and private contracts including contracts where the bidder is a partner in a Joint Venture agreement other than his current Joint Venture where he is a partner. Non-declaration will be a ground for the disqualification of bid.

Business Name : [Name of Bidder]
 Business Type : [Manufacturer, Distributor or Supplier]
 Business Address : _____

Name of Contract / Project Cost	Date of Contract	Contract Duration	Owner's Name and Address	Kinds of Goods	Date of Delivery/Completion	Amount		End user's acceptance or official receipt(s) or sales invoice issued for the contract
						Contract	Value of Outstanding Contract	
GOVERNMENT								
PRIVATE								
					TOTAL COST			

- Note:** 1. This statement shall be supported with the following documents for all contracts stated in this form **which shall be submitted during post-qualification:**
 (a) Notice of Award (or equivalent document for private contracts; if no equivalent document print one page stating "NOT Applicable"); (b) Notice to Proceed (or equivalent document for private contracts; if no equivalent document print one page stating "NOT Applicable"); (c) Contract; (d) Purchase Order; (e) For on-going Contracts, Certification from the client / project owner that the performance is satisfactory as of the bidding date OR For Completed Contracts, Certification of Acceptance/Completion or equivalent document; and (f) Official Receipt or Sales Invoice issued for the Contract.
2. In the event, that the contracts are denominated in foreign currency the following protocol shall be followed in accomplishing this form: (a) the Contract Amount must be converted to Philippine Peso using the applicable exchange rate as of Invoice Date; and (b) the exchange rate to be used must be based

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on the Daily Reference Exchange Rate Bulletin (RERB) issued by the Bangko Sentral ng Pilipinas (BSP); and (c) the Bidder must submit the relevant Daily RERB issued by the BSP during the post-qualification stage.

3. The NEA SBAC may request additional supporting documents during post-qualification to verify the Bidder's statements/representations herein

Submitted by : _____
Printed Name & Signature
Designation : _____
Date : _____

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Form#5: SLCC


Statement of Bidder's Single Largest Completed Contract (SLCC)

Business Name : _____ [Name of Bidder]
 Business Type : _____ [Manufacturer, Distributor or Supplier]
 Business Address : _____

Name of Contract	Nature and description of the project	Owner's Name and Address	Date of Contract	Contract Duration	Date of Delivery/ Completion	Contract Amount	End user's acceptance or official receipt(s) or sales invoice issued for the contract

- Note:** 1. The bidder must state only one (1) Single Largest Completed Contract (SLCC) Similar to the contract to be bid.
2. This statement shall be supported the following documents for the contract stated in this form **which shall be submitted together with this form as part of Envelope 1:** (a) Notice of Award (or equivalent document for private contracts; if no equivalent document print one page stating "NOT Applicable"); (b) Notice to Proceed (or equivalent document for private contracts; if no equivalent document print one page stating "NOT Applicable"); (c) Contract; (d) Purchase Order; (e) Certification of Acceptance/Completion or equivalent document; and (f) Official Receipt or Sales Invoice issued for the Contract.
3. In the event, that the SLCC is denominated in foreign currency the following protocol shall be followed in accomplishing this form: (a) the Contract Amount must be converted to Philippine Peso using the applicable exchange rate as of Invoice Date; and (b) the exchange rate to be used must be based on the Daily Reference Exchange Rate Bulletin (RERB) issued by the Bangko Sentral ng Pilipinas (BSP); and (c) the Bidder must attach the relevant Daily RERB issued by the BSP together with the SLCC Form.
4. The NEA SBAC may request additional supporting documents during post-qualification to verify the Bidder's statements/representations herein.

Submitted by : _____
 Printed Name & Signature
 Designation : _____
 Date : _____

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Form#6: NFCC

Net Financial Contracting Capacity (NFCC)

- A. Summary of the Applicant Supplier's/Distributor's/Manufacturer's assets and liabilities on the basis of the attached income tax return and audited financial statement, stamped "RECEIVED" Bureau of Internal Revenue or BIR authorized collecting agent, for the immediately preceding year.

	PARTICULARS	AMOUNT
1	Total Assets	
2	Current Assets	
3	Total Liabilities	
4	Current Liabilities	
5	Net Worth (1-3)	
6	Net Working Capital (2-4)	
7	Value of all Outstanding/Uncompleted Contracts*	

**Item No. 7 shall be based on the Total value of Outstanding Contracts indicated in the Bidder's Form No. 4 (Statement of Ongoing and Completed Contracts).*

- B. The Net Financial Contracting Capacity (NFCC) based on the above data is computed as follows:

NFCC = [(Current assets minus current liabilities) (15)] 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.

NFCC =

Submitted by:

Name of Supplier/Distributor/Manufacturer

Signature of Authorized Representative

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Form#10: Details of Technical Specifications

(Letterhead of the Bidder)

Date: _____, 2024

NEA Special Bids and Awards Committee (NEA SBAC)

#57 NEA Building, NIA Road,
Barangay Pinyahan, Government Center Diliman,
Quezon City

Attention: **Engr. Ernesto O. Silvano, Jr.**
*Chairperson of the NEA SBAC
for the RPH Program*

Subject: Details of Technical Specifications of [Name of Bidder]

<i>Detailed Technical Specifications for: Conductors (Lot No. IV, Items A and B)</i>			
Particulars	Specifications Prescribed in Bidding Documents	Statement of Compliance	Details of Added Technical Specifications (if any)
Scope	<ul style="list-style-type: none"> • The conductors shall be bare coated steel-reinforced concentric-lay-stranded aluminum conductors (ACSR), to be used on electric cooperative distribution lines. These conductors are made of round aluminum wires wrapped around a central zinc-coated round steel-wire core.s • All conductors offered must conform and passed Philippine standard certified by the Department of Trade and Industry (DTI) and Philippine Electrical Code (PEC). • All conductor bare / Poly Aluminum Cable Steel Reinforce (ACSR) must conform to the AAAC conductors classified as class AA as designated in ASTM B399-86 standards .All conductor construction, strength, material density, weight in electrical resistance must conform to ASTM B399-86 and ASTM B398-85 standard. 		
General	<ul style="list-style-type: none"> • ACSR conductors shall conform in all respects to the dimensional and performance requirements provided herein, which covers: (a) Steel Core Wire; (b) Aluminum Wire. • The ACSR conductors shall be classified as Class A as designated in ASTM B232. 		

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Steel Core	<p><u>Material</u></p> <p>The steel wire shall be fabricated from steel obtained by the open-hearth, electric furnace, of basic oxygen process and conforms to the chemical composition specified in Section 3 of ASTM B498 as follows:</p> <table border="1" data-bbox="401 326 1380 500"> <thead> <tr> <th>Element</th> <th>Composition, Percent (%)</th> </tr> </thead> <tbody> <tr> <td>Carbon</td> <td>0.50 to 0.85</td> </tr> <tr> <td>Manganese</td> <td>0.50 to 1.10</td> </tr> <tr> <td>Phosphorous, max.</td> <td>0.035</td> </tr> <tr> <td>Sulphur, max.</td> <td>0.045</td> </tr> <tr> <td>Silicon</td> <td>0.10 to 0.35</td> </tr> </tbody> </table> <p><u>Testing</u></p> <p>The steel wire shall be tested in accordance with Section 5, 6 and 10 of ASTM B498.</p> <p><u>Corrosion Protection</u></p> <ul style="list-style-type: none"> • The steel wire shall be coated with Zinc to Class A requirements with coating weight described in Table 4 of ASTM B498. • Additional protection for ACSR conductor against corrosion of the steel core shall be provided by use of a suitable corrosion inhibition, grease or oil. 	Element	Composition, Percent (%)	Carbon	0.50 to 0.85	Manganese	0.50 to 1.10	Phosphorous, max.	0.035	Sulphur, max.	0.045	Silicon	0.10 to 0.35		
Element	Composition, Percent (%)														
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Aluminum Wires	<p><u>Material</u></p> <p>The round aluminum wire shall be drawn from rods that conform to the chemical requirements of Table 2, ASTM B230.</p> <p><u>Testing</u></p> <p>The aluminum wire shall have tensile strengths depending on temper as shown in Table 1 of ASTM B233.</p> <p><u>Resistivity</u></p> <p>The electrical resistivity limits and values of the aluminum rods are presented in Table 4 of ASTM B230.</p> <p><u>General</u></p> <p>The aluminum wires used shall meet the requirements of ASTM B230.</p>														
Lay Factor	<p>The lay factor of the aluminum alloy wire shall be in a right-hand direction and shall be not less than 10 or more than 16 times the outside diameter of the conductor. The preferred lay factor is 13.5 times the diameter.</p>														

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Construction	The number and diameter of aluminum alloy wires and the stranding shall conform to the requirements of Tables 1, 2 and 3 of ASTM B399-86.																																																
Conductor Strength	The rated conductor strength shall be the aggregate strength of the aluminum wires determined by the methods described in ASTM B399-86																																																
Material Density	In accordance with Section 10 of ASTM B399-86, the density of aluminum alloy wire is assumed to be 2.690 gm/cm ³ (0.097 lb/in. ³) at 20°C based on the chemical composition as given in ASTM B398-85.																																																
Weight and Electrical Resistance	The weight and electrical resistance of the stranded conductor shall be determined by the methods described in ASTM B399-86.																																																
Variation	Limits of variation of the cross section of the aluminum wires shall be as described in ASTM B399-86.																																																
General Characteristics	<ul style="list-style-type: none"> ACSR conductors shall have the following characteristics: <table border="1" data-bbox="401 634 1452 829"> <thead> <tr> <th rowspan="2">SIZE AWG or MCM</th> <th colspan="2">STRANDS No. & Size-Inches</th> <th rowspan="2">OVERALL DIAMETER (inches)</th> <th rowspan="2">DC Resistance Ohms/mile @ 25°C</th> <th rowspan="2">Ultimate Strength Pounds</th> </tr> <tr> <th>Aluminum</th> <th>Steel</th> </tr> </thead> <tbody> <tr> <td>#1/0</td> <td>6 x .1327</td> <td>1 x .1327</td> <td>0.398</td> <td>0.885</td> <td>4,280</td> </tr> <tr> <td>#4/0</td> <td>6 x .1878</td> <td>1 x .1878</td> <td>0.563</td> <td>0.441</td> <td>8,420</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Bare Aluminum Conductor Steel Reinforced. Reference: ASTM B232-01 (Standard Handbook for Electrical Engineers) <table border="1" data-bbox="401 927 1422 1174"> <thead> <tr> <th rowspan="2">Size AWG</th> <th rowspan="2">Code Name</th> <th colspan="2">CONSTRUCTION</th> <th rowspan="2">STRANDED BARE DIAMETER (mm)</th> <th rowspan="2">TOTAL WEIGHT (Kg/Km)</th> <th rowspan="2">DC RESISTANCE @ 20 Deg. (Ohm/Km)</th> <th rowspan="2">CURRENT AMPACITY (Amp.)</th> </tr> <tr> <th>ALUMINUM (pc X mm)</th> <th>STEEL (pc X mm)</th> </tr> </thead> <tbody> <tr> <td>1/0</td> <td>Raven</td> <td>6 X 3.371</td> <td>1 X 3.371</td> <td>10.110</td> <td>216</td> <td>0.538</td> <td>230</td> </tr> <tr> <td>4/0</td> <td>Penguin</td> <td>6 X 4.770</td> <td>1 X 4.770</td> <td>14.300</td> <td>433</td> <td>0.268</td> <td>340</td> </tr> </tbody> </table> <ul style="list-style-type: none"> All Conductors must be aluminum cable steel-reinforced (ACSR), Steel wire must be coated with zinc. Additional protection of conductor against corrosion must be provided by corrosion inhibition. Diameter and strength of conductor shall conform to ANSI/IEC standards, guy wire must be galvanized, 3/8" dia., 7-strand, high strength. The conductor / wire cable shall be free of imperfections, sharp protrusions and blemishes not consistent with good commercial practice. Test for the individual aluminum alloy wire shall include, but not limited to: 	SIZE AWG or MCM	STRANDS No. & Size-Inches		OVERALL DIAMETER (inches)	DC Resistance Ohms/mile @ 25°C	Ultimate Strength Pounds	Aluminum	Steel	#1/0	6 x .1327	1 x .1327	0.398	0.885	4,280	#4/0	6 x .1878	1 x .1878	0.563	0.441	8,420	Size AWG	Code Name	CONSTRUCTION		STRANDED BARE DIAMETER (mm)	TOTAL WEIGHT (Kg/Km)	DC RESISTANCE @ 20 Deg. (Ohm/Km)	CURRENT AMPACITY (Amp.)	ALUMINUM (pc X mm)	STEEL (pc X mm)	1/0	Raven	6 X 3.371	1 X 3.371	10.110	216	0.538	230	4/0	Penguin	6 X 4.770	1 X 4.770	14.300	433	0.268	340		
SIZE AWG or MCM	STRANDS No. & Size-Inches		OVERALL DIAMETER (inches)	DC Resistance Ohms/mile @ 25°C				Ultimate Strength Pounds																																									
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	<ul style="list-style-type: none"> a) Chemical composition test b) Tension Test c) Electrical Resistivity Test d) Dimensional Check <ul style="list-style-type: none"> • Certified test reports in two (2) copies shall be furnished for each conductor/ wire cables prior to shipment. The bidder shall furnish with his bid sufficient information to correct evaluation of the bid in relation to this specification. Such as: <ul style="list-style-type: none"> a) Manufacturers guaranteed chemical physical and electrical characteristic of the conductor offered. b) Shipping details dimension and construction details of the shipping reels offered. c) Complete catalog information. • Conductor shall be shipped on non-returnable reels constructed from new treated lumber which shall be square sawn, be of smooth surface, with no splits , warps, crooks, loose fibers, decay or insect infestation. • Tagging shall be attached to the inside and outside of the reel containing the following information: <ul style="list-style-type: none"> a) Gross and net weights b) Conductor size, type and number of strands c) Conductor length d) Manufacturers name and identification symbol. 														
Finish	The conductor shall be free of imperfections, sharp protrusions and blemishes no consistent with good commercial practice.														
Test & Inspection	The manufacturer shall conduct conductor tests and inspections in accordance with Section 16 of ASTM B232 or IEC 888, in so far as applicable. The Member ECs reserve the right to witness ANY OR ALL factory tests and the Supplier shall notify the Member ECs fifteen (15) days before each test is to be conducted. The manufacturer shall also conduct conductor reel tests and inspections and submit test reports before shipment to verify that the reels and lagging comply with the requirements of the Standards provided herein. The Member ECs shall have the prerogative to inspect conductor reels at any time to ensure compliance of this standard. Non-conforming reels and lagging are unacceptable.														
Packaging & Shipping	<ul style="list-style-type: none"> • Conductors shall be shipped on non-returnable reels manufactured from aluminum steel or export quality preservative treated wood lagging. Wood reels and all lagging shall be constructed from new lumber which shall be square sawn, be of smooth surface, with not splits, warps, crooks, loose fibers, decay or insect infestation. The lumber used for wood reels and all lagging shall be preservative treated in accordance with "American Wood Preservers Associates Standards" and as stipulated below: <table border="1" data-bbox="403 1269 1564 1425"> <thead> <tr> <th>Description</th> <th>Requirements/Methods</th> <th>AWPA Standards</th> </tr> </thead> <tbody> <tr> <td>Lumber:</td> <td>All Softwood Species</td> <td>C1-82, C-2-82 and C16-82</td> </tr> <tr> <td>Preservatives: (any one)</td> <td>Acid copper Chromate (ACC) Ammoniacal Copper Arsenate (ACA) Chromated Copper Arsenate Type C (CCA-C)</td> <td>C1-82, C2-83 and C16-82</td> </tr> <tr> <td>Treatment:</td> <td>Pressure treatment after all carpentry works</td> <td>C1-82, C2-83, and C16-82</td> </tr> </tbody> </table>	Description	Requirements/Methods	AWPA Standards	Lumber:	All Softwood Species	C1-82, C-2-82 and C16-82	Preservatives: (any one)	Acid copper Chromate (ACC) Ammoniacal Copper Arsenate (ACA) Chromated Copper Arsenate Type C (CCA-C)	C1-82, C2-83 and C16-82	Treatment:	Pressure treatment after all carpentry works	C1-82, C2-83, and C16-82		
Description	Requirements/Methods	AWPA Standards													
Lumber:	All Softwood Species	C1-82, C-2-82 and C16-82													
Preservatives: (any one)	Acid copper Chromate (ACC) Ammoniacal Copper Arsenate (ACA) Chromated Copper Arsenate Type C (CCA-C)	C1-82, C2-83 and C16-82													
Treatment:	Pressure treatment after all carpentry works	C1-82, C2-83, and C16-82													

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Results of Treatment:		
Penetration:	Minimum 0.4 inches from the surface of any face	C16-82
Assay Zone:	0-0.6 inch zone	C16-82
Retention:	0.62 bcf for ACC, 0.40 for ACA and CCA. Copper shall be calculated as CuO, Chromium as CrO ₃ and Arsenic as As ₂ O ₅	C1-82, C2-83, and C16-82
Tests:	1)Wet ash analysis for oxides 2)X-ray 3)Atomic Absorption	A7-75, A2-85 Section 2, 5, 6 A9-86 A7-75 and A11-83

- A typical wooden reel and lagging are shown in Figures 1A and 1B and shall have the following dimensions:

Reel Designation	Flange Diameter	Drum Diameter	Width		Arbor Hole Diameter
			Inside	Outside	
			NRX-30.22	30	
NRX-42.25	42	21	28	31.5	3
NRX 60.28	60	28	28	31.5	3

- The reel shall be prepared for shipping by:
 - a) Nailing one-inch (1") lagging strips to the flanges using two (2) eight-penny (8d) nails at each end.
 - b) Binding the lagging strips circumferentially with at least four (4) galvanized strips.

Reel Designation	Flange Diameter	Drum Diameter	Width		Arbor Hole Diameter
			Inside	Outside	
			NRX-30.22	30	
NRX-42.25	42	21	28	31.5	3
NRX 60.28	60	28	28	31.5	3

ACSR CONDUCTOR		REEL SIZE	WEIGHT lbs/1000FT	NOMINAL LENGTH (FT)	WEIGHT OF NOMINAL LENGTH (LB)
AWR OR	MCM				
1/0	6.1	30.22	145.2	3,300	480
4/0	6/1	30.22	291.1	1,900	550

- Cutting length shall be 2,000 Meters per Reel.
- Each reel shall contain one length of conductor. The Member ECs permit a variation in length of plus or minus five percent(+/- 5%) of the nominal shipping length.
- The Member ECs shall also allow an amount of conductor not exceeding ten percent (10%) of the total weight of the order to be shipped in random lengths none of which shall be shorter than fifty percent (50%) of the nominal shipping length.

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	<ul style="list-style-type: none"> • Metal tags shall be attached to the inside and outside of the reel containing the following information: <ul style="list-style-type: none"> a) Gross and net weights; b) Conductor size, number of strands; c) Length (Feet); d) Catalog number; e) Manufacturer's name and/or identification symbol; and f) Shipping data. 		
Other Standards	The dimensional and performance requirements of bare ACSR conductors, based on other internationally recognized standards, are acceptable only if the requirements of such standards are equivalent to or exceed the requirements quoted in this Technical Specifications.		
Applicable Standards	<p>ASTM B232 Standard Specification for Concentric-Lay-Stranded Aluminum Conductors, Coated-Steel Reinforced (ACSR).</p> <p>ASTM B498 Standard Specification for Zinc Coated (Galvanized) Steel Core Wire for Aluminum Conductors, Steel Reinforced (ACSR),</p> <p>ASTM B230 Standard Specification for Aluminum 1350 H19 Wire for Electrical Purposes.</p> <p>ASTM B233 Standard Specification for Aluminum 1350 Redraw Rod for Electrical Purposes.</p> <p>IEC 888 Zinc-coated steel wires for stranded conductor</p> <p>All other applicable standards</p>		

Company Name:

_____ [Name of Bidder] _____

Authorized Representative:

_____ [Name and Signature of Authorized Representative] _____

Contact Details:

ISC 

**Revised Table for
the Form and Amount of Bid Securities**

<u>Form of Security</u>	<u>Amount</u>
Cash, Cashier's check, Manager's check, issued by a Universal or Commercial Bank.	2% of the Member EC's respective share in the Total ABC as provided for under IB Clause 2.3
Bank draft/ Guarantee or irrevocable letter of credit issued by a universal or commercial bank. Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank.	2% of the Member EC's respective share in the Total ABC as provided for under IB Clause 2.3
Surety Bond, callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security.	5% of the Member EC's respective share in the Total ABC as provided for under IB Clause 2.3