

# **ENERGY RESOURCES**

# **ENGINEERING**

Request for Quote #320-14122AG Rebid

15 KV Circuit Breakers for Substation No.1

**Date of Issue: 1/3/2023** 

**Quote Opening Date: 1/13/2023** 

At 02:00 PM ET

Direct all inquiries concerning this RFQ to:

Alicia Gaines

Purchasing Associate I

Email: Alicia.Gaines@rockymountnc.gov

Phone: 252-972-1227



UtilityEngineering, LLC 702 Oberlin Road, Suite 230 Raleigh, North Carolina 27605 Phone: (919) 906-0886



# CITY OF ROCKY MOUNT ROCKY MOUNT, NC

# SPECIFICATIONS AND BID DOCUMENTS FOR 15 KV CIRCUIT BREAKERS FOR THE SUBSTATION NO. 1 69 TO 15 KV SUBSTATION

# **REQUEST FOR BIDS**



UtilityEngineering, LLC 702 Oberlin Road, Suite 230 Raleigh, North Carolina 27605 Phone: (919) 906-0886

North Carolina Firm License#: F-1443

I hereby certify this document was prepared by me or under my direct supervision. I also certify I am a duly registered professional engineer under the laws of the State of North Carolina, Registration No. 7541.



December 29, 2022 H. Michael Taylor, PE



# Request for Quote # 320-14122AG Rebid

For purchasing division processing, please provide your company's Federal Employer Identification Number or alternate identification number (e.g. Social Security Number). Pursuant to North Carolina General Statute 132-1.10(b) this identification number shall not be released to the public. **This page will be removed and shredded, or otherwise kept confidential**, before the procurement file is made available for public inspection.

This page is to be filled out and returned with your bid. Failure to do so may subject your bid to rejection.

# **ID Number:**

Federal ID Number or Social Security Number

**Vendor Name** 

# CITY OF ROCKY MOUNT ENERGY RESOURCES/ENGINEERING

Refer  $\underline{\textit{ALL}}$  Inquiries regarding this RFQ to:

Alicia Gaines

Purchasing Associate I

Request for Quote # 320-141122AG Rebid

Bids will be publicly opened: 1/13/2023 2:00 PM

**Contract Type: Purchase** 

#### **EXECUTION**

In compliance with this Request for Quote (RFQ), and subject to all the conditions herein, the undersigned Vendor offers and agrees to furnish and deliver any or all items upon which prices are bid, at the prices set opposite each item within the time specified herein. By executing this quote, the undersigned Vendor certifies that this quote is submitted competitively and without collusion (G.S. 143-54), that none of its officers, directors, or owners of an unincorporated business entity has been convicted of any violations of Chapter 78A of the General Statutes, the Securities Act of 1933, or the Securities Exchange Act of 1934 (G.S. 143-59.2), and that it is not an ineligible Vendor as set forth in G.S. 143-59.1. False certification is a Class I felony. Furthermore, by executing this quote, the undersigned certifies to the best of Vendor's knowledge and belief, that it and its principals are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal or State department or the City. As required by G.S. 143-48.5, the undersigned Vendor certifies that it, and each of its sub-Contractors for any Contract awarded as a result of this RFQ, complies with the requirements of Article 2 of Chapter 64 of the NC General Statutes, including the requirement for each employer with more than 25 employees in North Carolina to verify the work authorization of its employees through the federal E-Verify system. G.S. 133-32 and Executive Order 24 (2009) prohibit the offer to, or acceptance by, any City Employee associated with the preparing plans, specifications, estimates for public Contract; or awarding or administering public Contracts; or inspecting or supervising delivery of the public Contract of any gift from anyone with a Contract with the City, or from any person seeking to do business with the City. By execution of this response to the RFQ, the undersigned certifies, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

Failure to execute/sign quote prior to submittal shall render quote invalid and it WILL BE REJECTED. Late quotes cannot be accepted.

COMPLETE/FORMAL NAME OF VENDOR:					
STREET ADDRESS:		P.O. BOX:	ZIP:		
CITY & STATE & ZIP:		TELEPHONE NUMBER:	TOLL FREE TEL. NO:		
PRINCIPAL PLACE OF BUSINESS ADDRESS IF DIFFERENT	T FROM ABOVE (SE	E INSTRUCTIONS TO VEND	ORS ITEM #12):		
PRINT NAME & TITLE OF PERSON SIGNING ON BEHALF C	F VENDOR:	FAX NUMBER:			
VENDOR'S AUTHORIZED SIGNATURE*:	DATE:	EMAIL:			
Offer valid for at least 60 days from date of quote opening	ng, unless otherwis	e stated here: da	ys.		
ACCEPTANCE OF QUOTE  If any or all parts of this quote are accepted by the City of Rocky Mount, an authorized representative of the City of Rocky Mount Purchasing Office shall affix his/her signature hereto and this document and all provisions of this Request for Quote along with the Vendor quote response and the written results of any negotiations shall then constitute the written agreement between the parties. A copy of this acceptance will be forwarded to the successful Vendor(s).					
FOR CITY USE ONLY: Offer accept, and Contract awarded this day of, 20 as indicated on the attached certification, by Purchasing Manager.					
PRE-AUDIT: This instrument has been preaudited in the manner required by the Budget and Fiscal Control Act.					
Finance Director Date					

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**TECHNICAL SPECIFICATIONS** 

# 1.0 PURPOSE AND BACKGROUND

Quotes shall be submitted in accordance with the terms and conditions of this RFQ and any addenda issued hereto. The 15 kV breakers specified herein will replace existing bus and feeder breakers.

# 2.0 GENERAL INFORMATION

# 2.1 REQUEST FOR QUOTE DOCUMENT

The RFQ is comprised of the base RFQ document, any attachments, and any addenda released before Contract award. All attachments and addenda released for this RFQ in advance of any Contract award are incorporated herein by reference.

## 2.2 NOTICE TO VENDORS REGARDING RFQ TERMS AND CONDITIONS

It shall be the Vendor's responsibility to read the Instructions, the City's terms and conditions, all relevant exhibits and attachments, and any other components made a part of this RFQ and comply with all requirements and specifications herein. Vendors also are responsible for obtaining and complying with all Addenda and other changes that may be issued in connection with this RFQ.

If Vendors have questions, issues, or exceptions regarding any term, condition, or other component within this RFQ, those must be submitted as questions in accordance with the instructions in Section 2.5 QUESTIONS ABOUT QUOTE. If the City determines that any changes will be made as a result of the questions asked, then such decisions will be communicated in the form of an RFQ addendum. The City may also elect to leave open the possibility for later negotiation and amendment of specific provisions of the Contract that have been addressed during the questionand-answer period. Other than through this process, the City rejects and will not be required to evaluate or consider any additional or modified terms and conditions submitted with Vendor's quote. This applies to any language appearing in or attached to the document as part of the Vendor's quote that purports to vary any terms and conditions or Vendors' instructions herein or to render the quote non-binding or subject to further negotiation. Vendor's quote shall constitute a firm offer. By execution and delivery of this RFQ Response, the Vendor agrees that any additional or modified terms and conditions, whether submitted purposely or inadvertently, shall have no force or effect, and will be disregarded. Noncompliance with, or any attempt to alter or delete, this paragraph shall constitute sufficient grounds to reject Vendor's quote as nonresponsive.

Contact with anyone working for or with the City regarding this RFQ other than the City Contract Specialist named on the face page of this RFQ in the manner specified by this RFQ shall constitute grounds for rejection of said Vendor's offer, at the City's election.

# 2.3 RFQ SCHEDULE

The table below shows the *intended* schedule for this RFQ. The City will make every effort to adhere to this schedule.

Event	Responsibility	Date and Time
Issue RFQ	City	Tuesday, 1/3/2023
Submit Written Questions	Vendor	Friday, 1/6/2023
Provide Response to Questions	City	Tuesday,1/10/2023
Submit Quotes	Vendor	Friday, 1/13/2023 2:00 pm



# **Bid Opening:**

Bids will be opened and read aloud at the Frederick E. Turnage Administrative Services Complex, first floor atrium, 331 South Franklin Street, Rocky Mount, North Carolina 27804 at the date and time specified on the cover sheet and RFQ schedule.

# 2.4 QUESTIONS ABOUT QUOTE

Upon review of the RFQ documents, Vendors may have questions to clarify or interpret the RFQ in order to submit the best quote possible. To accommodate the Quote Questions process, Vendors shall submit any such questions by the above due date.

Written questions shall be emailed to Alicia.Gaines@rockymountnc.gov by the date and time specified above. Vendors should enter "RFQ # 320-14122AG Rebid: Questions" as the subject for the email. Question submittals should include a reference to the applicable RFQ section and be submitted in a format shown below:

Reference	Vendor Question
RFQ Section, Page Number	Vendor question?

Questions received prior to the submission deadline date, the City's response, and any additional terms deemed necessary by the City will be posted in the form of an addendum the City of Rocky Mount Purchasing web-page <a href="https://rockymountnc.gov/services-finance-bids/">https://rockymountnc.gov/services-finance-bids/</a> and/or to the Interactive Purchasing System (IPS), <a href="https://www.ips.state.nc.us">https://www.ips.state.nc.us</a>, and shall become an Addendum to this RFQ. No information, instruction or advice provided orally or informally by any City personnel, whether made in response to a question or otherwise in

connection with this RFQ, shall be considered authoritative or binding. Vendors shall rely *only* on written material contained in an Addendum to this RFQ.

# 2.5 QUOTES SUBMITTAL

**IMPORTANT NOTE:** This is an absolute requirement. Vendor shall bear the risk for late submission due to unintended or unanticipated delay—whether delivered by hand, U.S. Postal Service, courier or other delivery service. It is the Vendor's sole responsibility to ensure its quote has been submitted to this Office by the specified time and date of opening. The time and date of submission will be marked on each quote when received. Any quotes submitted after the submission deadline will be rejected. For hand delivered bids please note that the Frederick E. Turnage Municipal Building requires all visitors to sign in with the guard stationed on the first floor. Visitors will only have access through the building accompanied with a City employee.

MAILING ADDRESS FOR DELIVERY OF QUOTE VIA U.S. POSTAL SERVICE	OFFICE ADDRESS FOR DELIVERY BY ANY OTHER MEANS, SPECIAL DELIVERY, HAND DELIVERY, OVERNIGHT DELIVERY OR BY ANY OTHER CARRIER
QUOTE NUMBER: 320-14122AG Rebid	QUOTE NUMBER: 320-14122AG Rebid
Attn: Alicia Gaines	Attn: Alicia Gaines
City of Rocky Mount	City of Rocky Mount
PO BOX 1180	331 S. Franklin Street
Rocky Mount, NC 27802	Rocky Mount, NC 27804

For quotes submitted via U.S. mail, please note that the U.S. Postal Service generally does not deliver mail to a specified street address but to the City's Mail Service Center. Vendors are cautioned that quotes sent via U.S. Mail, including Express Mail, may not be delivered by the Mail Service Center to the department 's purchasing office on the due date in time to meet the



quote deadline. All Vendors are urged to take the possibility of delay into account when submitting a quote by U.S. Postal Service, courier, or other delivery service. Attempts to submit a quote via facsimile (FAX) machine, telephone or email in response to this RFQ shall NOT be accepted.

- a) Submit **one (1) signed original executed quote** to the address identified in the table above.
- b) Submit your quote in a sealed package. Clearly mark each package with: (1) Vendor name; (2) the RFQ number; and (3) the due date. Address the package(s) for delivery as shown in the table above. If Vendor is submitting more than one (1) quote, each quote shall be submitted in separate sealed envelopes and marked accordingly. For delivery purposes, separate sealed envelopes from a single Vendor may be included in the same outer package. Quotes are subject to rejection unless submitted with the information above included on the outside of the sealed quote package.

## 2.6 QUOTE CONTENT

Vendors shall populate all attachments of this RFQ that require the Vendor to provide information and include an authorized signature where requested. Vendor RFQ responses shall include the following items and those attachments should be arranged in the following order:

- a) Completed and signed version of EXECUTION PAGES, along with the body of the RFQ and signed receipt pages of any addenda released in conjunction with this RFQ (if required to be returned).
- b) ACCEPTANCE OF GENERAL TERMS AND CONDITIONS
- c) Completed version of QUOTE PRICING SHEET

# 2.7 DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

- a) **OWNER:** The employee of the City or Other Eligible Entity that places an order with the Vendor.
- b) CONTRACT LEAD: Representative of the City of Rocky Mount Purchasing Office who corresponds with potential Vendors in order to identify and contract with that Vendor providing the greatest benefit to the City and who will administer this contract for the City.
- c) **QUALIFIED QUOTE:** A responsive quote submitted by a responsible Vendor.
- d) RFQ: Request for Quote
- e) **SERVICES or SERVICE DELIVERABLES:** The tasks and duties undertaken by the Vendor to fulfill the requirements and specifications of this solicitation.
- f) **VENDOR:** Supplier, bidder, proposer, company, firm, corporation, partnership, individual or other entity submitting a response to a Request for Quote.

# 3.0 METHOD OF AWARD AND QUOTE EVALUATION PROCESS

# 3.1 METHOD OF AWARD

Pursuant to North Carolina General Statutes Section 143-131, "award shall be made to the lowest responsible, responsive bid or bidders, taking into consideration quality, performance and the time specified in the quote for the performance of the contract."

While the intent of this RFQ is to award a Contract(s) to single Vendor, the City reserves the right to make separate awards to different Vendors for one or more line items, to not award one or more



line items or to cancel this RFQ in its entirety without awarding a Contract, if it is considered to be most advantageous to the City to do so.

The City reserves the right to waive any minor informality or technicality in quotes received.

**Local Preference Policy.** The only exception to the lowest responsive, responsible bidder method of award will be the local preference policy. The preference will allow an Eligible Local Bidder to match the price and terms of the lowest responsible, responsive bidder who is a Non-Local Bidder, if the Eligible Local Bidder's price is within five percent (5%) or \$25,000, whichever is less, of the lowest responsible, responsive Non-Local Bidder's price. An eligible local vendor is one that is current on property taxes in the City of Rocky Mount and meets the qualifications set forth in the policy. An application can be found at <a href="https://rockymountnc.gov/services-finance-vendor-registration/">https://rockymountnc.gov/services-finance-vendor-registration/</a>

# 3.2 CONFIDENTIALITY AND PROHIBITED COMMUNICATIONS DURING EVALUATION

During the evaluation period—from the date guotes are opened through the date the contract is awarded—each Vendor submitting a quote (including its representatives, sub-contractors and/or suppliers) is prohibited from having any communications with any person inside or outside the using department, issuing department, other government department office, or body (including the purchaser named above, department secretary, department head, members of the general assembly and/or governor's office), or private entity, if the communication refers to the content of Vendor's quote or qualifications, the contents of another Vendor's quote, another Vendor's qualifications or ability to perform the contract, and/or the transmittal of any other communication of information that could be reasonably considered to have the effect of directly or indirectly influencing the evaluation of quote and/or the award of the contract. A Vendor not in compliance with this provision shall be disqualified from contract award, unless it is determined in the City's discretion that the communication was harmless, that it was made without intent to influence and that the best interest of the City would not be served by the disqualification. A Vendor's quote may be disqualified if its sub-contractor and supplier engage in any of the foregoing communications during the time that the procurement is active (i.e., the issuance date of the procurement to the date of contract award). Only those discussions, communications or transmittals of information authorized or initiated by the issuing department for this RFQ or general inquiries directed to the purchaser regarding requirements of the RFQ (prior to quote submission) or the status of the contract award (after submission) are excepted from this provision.

# 3.3 INTERPRETATION OF TERMS AND PHRASES

This Request for Quote serves two functions: (1) to advise potential Vendors of the parameters of the solution being sought by the Department; and (2) to provide (together with other specified documents) the terms of the Contract resulting from this procurement. As such, all terms in the Request for Quoter shall be enforceable as contract terms in accordance with the General Contract Terms and Conditions. The use of phrases such as "shall," "must," and "requirements" are intended to create enforceable contract conditions. In determining whether quotes should be evaluated or rejected, the Department will take into consideration the degree to which Vendors have proposed or failed to propose solutions that will satisfy the Department's needs as described in the Request for Quote. Except as specifically stated in the Request for Quote, no one requirement shall automatically disqualify a Vendor from consideration. However, failure to comply with any single requirement may result in the Department exercising its discretion to reject a quote in its entirety.



# 4.0 REQUIREMENTS

This Section lists the requirements related to this RFQ. By submitting a quote, the Vendor agrees to meet all stated requirements in this Section as well as any other specifications, requirements and terms and conditions stated in this RFQ. If a Vendor is unclear about a requirement or specification or believes a change to a requirement would allow for the City to receive a better quote, the Vendor is urged and cautioned to submit these items in the form of a question during the question-and-answer period in accordance with Section 2.5.

## 4.1 PRICING

Quote price shall constitute the total cost to Owner for complete performance in accordance with the requirements and specifications herein, including all applicable charges handling, administrative and other similar fees. Vendor shall not invoice for any amounts not specifically allowed for in this RFQ. Complete ATTACHMENT A: PRICING FORM and include with Quote.

## 4.2 INVOICES

- a) The successful Bidder shall submit one monthly invoice within fifteen (15) calendar days following the end of each month in which work was performed.
- b) Invoices shall be submitted in triplicate to Accounts Payable, City of Rocky Mount for review and approval. The address for submittal of all invoices is: City of Rocky Mount, Attn: Accounts Payable, PO Box 1180, Rocky Mount, NC 27802.
- c) Payment amounts will be made on a NET 30-day period upon submission of an invoice and appropriate pick tickets to support such invoice.
- d) There shall be a ten percent (10%) retainage on invoices until all equipment, with proper instruction books per Specifications, certified test reports, and drawings have been approved and accepted by the Owner and the Engineer. The Owner reserves the right to hold this retainage for a period of up to ninety (90) days without penalty to verify completeness of delivery. A ten percent (10%) Performance Bond may be provided in lieu of retainage provisions. Deviation from the foregoing payment provisions will be considered less than responsive.

## 4.3 MINORITY BUSINESS PARTICIPATION

The Bidder has the responsibility to make a good faith effort to solicit minority quotes and to attain the aspirational ten percent (10%) goal. We encourage all Bidders even MWBE/HUBs to obtain the aspirational goal where sub-contracting and supplier opportunities exist. Use the table below to note the MWBE businesses that will be used as suppliers or subcontractors for this contract.

OWNERSHIP STATUS	ADDRESS	WORK TYPE
	OWNERSHIP STATUS	OWNERSHIP STATUS ADDRESS



If the goal of 10% participation by HUB Certified or minority businesses is not achieved, the Bidder shall provide the following documentation to the City of his/her good faith efforts:

Examples of documentation that may be required to demonstrate the Bidder's good faith efforts to meet the goals set forth in these provisions include, but are not necessarily limited to, the following:

- a) Copies of solicitations for quotes to at least three (3) minority business firms from the source list provided by the State for each subcontract to be let under this contract (if 3 or more firms are shown on the source list). Each solicitation shall contain a specific description of the work to be subcontracted, location where bid documents can be reviewed, representative of the Prime Bidder to contact, and location, date and time when quotes must be received.
- b) Copies of quotes or responses received from each MWBE responding to the solicitation.
- c) A telephone log of follow-up calls to each firm sent a solicitation.
- d) For subcontracts where a minority business is not considered the lowest responsible subbidder, copies of quotes received from all firms submitting quotes for that particular subcontract.
- e) Documentation of any contacts or correspondence to minority business, community, or contractor organizations in an attempt to meet the goal.
- f) Copy of pre-bid roster
- g) Letter documenting efforts to provide assistance in obtaining required bonding or insurance for minority business.
- h) Letter detailing reasons for rejection of minority business.
- Letter documenting proposed assistance offered to minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letter of credit, including waiving credit that is ordinarily required.

Failure to provide the documentation as listed in these provisions may result in a non-responsive bid.

#### 4.4 VENDOR EXPERIENCE

In its Quote, Vendor shall demonstrate experience with public and/or private sector clients with similar or greater size and complexity to the City of Rocky Mount. Vendor shall provide information as to the qualifications and experience of the manufacturer.

#### 4.5 REFERENCES

Vendors shall provide at least three (3) references for which your company has provided Services of similar size and scope to that proposed herein. The City may contact these users to determine the Services provided are substantially similar in scope to those proposed herein and Vendor's performance has been satisfactory. The information obtained may be considered in the evaluation of the quote.



COMPANY NAME	CONTACT NAME	COMPANY EMAIL	TELEPHONE NUMBER
Optional: City of Rocky Mount			

# 5.0 SUPPLEMENTAL VENDOR INFORMATION

# 5.1 HISTORICALLY UNDERUTILIZED BUSINESSES

Historically Underutilized Businesses (HUBs) consist of minority, women and disabled business firms that are at least fifty-one percent owned and operated by an individual(s) of the categories. Also included in this category are disabled business enterprises and non-profit work centers for the blind and severely disabled.

Pursuant to G.S. 143B-1361(a), 143-48 and 143-128.4, the City invites and encourages participation in this procurement process by businesses owned by minorities, women, disabled, disabled business enterprises and non-profit work centers for the blind and severely disabled. This includes utilizing subcontractors to perform the required functions in this IFB. Any questions concerning NC HUB certification, contact the **North Carolina Office of Historically Underutilized Businesses** at (919) 807-2330. The Vendor shall respond to question #1 and #2 below.

a)	Is Vendor a Historically Underutilized Business?   Yes No
b)	Is Vendor Certified with North Carolina as a Historically Underutilized Business?   Yes No
	If so, state HUB classification

# 5.2 NEW VENDOR REGISTRATION

New vendors must complete a vendor registration form using the link below. If you are a current vendor that needs to update, contact information you may also complete the online vendor registration form. Once registration is complete email a copy of your W9 an E-Verify Affidavit to the contact person listed on the coversheet.

https://rockymountnc.gov/services-finance-vendor-registration/

# 5.3 HOW TO DO BUSINESS WITH THE CITY OF ROCKY MOUNT

Becoming a Vendor https://youtu.be/MGOjZxl4iQc

Competing in the Bid Process <a href="https://youtu.be/yy8dYzPOCUs">https://youtu.be/yy8dYzPOCUs</a>

Purchase Order, Payment and Performance https://youtu.be/wA5zVTizZQM



ATTACHMENT
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# **GENERAL TERMS & CONDITIONS**

PERFORMANCE AND DEFAULT: If, through any cause, Contractor shall fail to fulfill in timely and proper manner the obligations under The Contract, the City shall have the right to terminate The Contract by giving written notice to the Contractor and specifying the effective date thereof. In that event, any or all finished or unfinished deliverable items under The Contract prepared by the Contractor shall, at the option of the City, become its property, and the Contractor shall be entitled to receive just and equitable compensation for any acceptable work completed as to which the option is exercised. Notwithstanding, Contractor shall not be relieved of liability to the City for damages sustained by the City by virtue of any breach of The Contract, and the City may withhold any payment due the Contractor for the purpose of setoff until such time as the exact amount of damages due the City from such breach can be determined. The City reserves the right to require at any time a performance bond or other acceptable alternative performance guarantees from a Contractor without expense to the City.

In the event of default by the Contractor, the City may procure the goods and services necessary to complete performance hereunder from other sources and hold the Contractor responsible for any excess cost occasioned thereby. In addition, in the event of default by the Contractor under The Contract, or upon the Contractor filing a petition for bankruptcy or the entering of a judgment of bankruptcy by or against the Contractor, the City may immediately cease doing business with the Contractor, immediately terminate The Contract for cause, and may take action to debar the Contractor from doing future business with the City.

- 2. GOVERNMENTAL RESTRICTIONS: In the event any Governmental restrictions are imposed which necessitate alteration of the material, quality, workmanship or performance of the goods or services offered prior to their delivery, it shall be the responsibility of the Contractor to notify the Contract Lead at once, in writing, indicating the specific regulation which required such alterations. The City reserves the right to accept any such alterations, including any price adjustments occasioned thereby, or to cancel the Contract.
- 3. <u>AVAILABILITY OF FUNDS</u>: It is understood and agreed between Contractor and the City that the City's payment obligation under this Contract is contingent upon the availability of appropriated funds from which payment for Contract purposes can be made.
- **4. TAXES**: Contractor shall pay all federal, state, and FICA taxes for all employees participating in the provision of services under this Contract.
- 5. <u>SITUS AND GOVERNING LAWS</u>: This Contract is made under and shall be governed and construed in accordance with the laws of the State of North Carolina, without regard to its conflict of laws rules, and within which State all matters, whether sounding in Contract or tort or otherwise, relating to its validity, construction, interpretation and enforcement shall be determined.
- 6. PAYMENT TERMS: Payment terms are Net not later than 30 days after receipt of correct invoice or acceptance of goods, whichever is later. The using Department is responsible for all payments to the Contractor under the Contract. For services the Contractor shall submit to the City monthly invoices itemized by service provided, the number of hours worked and by whom, the date(s) that services were provided, and the amount owed, along with any supporting documentation that may be requested in advance by the City. Such invoices shall be submitted within thirty (30) days of the rendering of services. The City shall process payments to Contractor within thirty (30) days of submission of such invoices. Invoices should be sent to City of Rocky Mount, Attn: Accounts Payable, PO Box 1180, Rocky Mount, NC 27802-1180, for review and approval.
- 7. EQUAL OPPORTUNITY CLAUSE:

- a. The non-discrimination clause contained in Section 202 (Federal) Executive Order 11246, as amended by Executive Order 11375, relative to equal employment opportunity for all persons without regard to race, color, religion, sex or national origin, and the implementing rules and regulations prescribed by the secretary of Labor, are incorporated herein.
- b. The Contractor(s) agree not to discriminate against any employee or applicant for employment because of physical or mental disabilities in regard to any position for which the employee or applicant is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified individuals with such disabilities without discrimination based upon their physical or mental disability in all employment practices.
- 8. <u>CONDITION AND PACKAGING</u>: Unless otherwise provided by special terms and conditions or specifications, it is understood and agreed that any item offered or shipped has not been sold or used for any purpose and shall be in first class condition. All containers/packaging shall be suitable for handling, storage or shipment.

#### 9. INTELLECTUAL PROPERTY WARRANTY:

- a. Contractor warrants that:
  - i. Performance under The Contract will not infringe upon any intellectual property rights of any third party; and
  - ii. There are no actual or threatened actions against the Contractor arising from, or alleged under, any intellectual property rights of any third party;
- b. Should any deliverables supplied by Contractor become the subject of a claim of infringement of a patent, copyright, trademark or a trade secret in the United States, the Contractor, shall at its option and expense, either procure for the City the right to continue using the deliverables, or replace or modify the same to become non-infringing. If neither of these options can reasonably be taken in Contractor's judgment, or if further use shall be prevented by injunction, the Contractor agrees to cease provision of any affected deliverables and refund any sums the City has paid Contractor and make every reasonable effort to assist the City in procuring substitute deliverables. If, in the sole opinion of the City, the cessation of use by the City of any such deliverables due to infringement issues makes the retention of other items acquired from the Contractor under this Agreement impractical, the City shall then have the option of terminating the Agreement, or applicable portions thereof, without penalty or termination charge; and Contractor agrees to refund any sums the City paid for unused Services or Deliverables.
- 10. <u>TERMINATION FOR CONVENIENCE</u>: If this contract contemplates deliveries or performance over a period of time, the City may terminate this contract at any time by providing 30 days' notice in writing from the City to the Contractor. In that event, any or all finished or unfinished deliverable items prepared by the Contractor under this contract shall, at the option of the City, become its property. If the contract is terminated by the City as provided in this section, the City shall pay for those items for which such option is exercised, less any payment or compensation previously made.
- 11. <u>ADVERTISING</u>: Contractor agrees not to use the existence of The Contract or the name of the City of Rocky Mount as part of any commercial advertising or marketing of products or services. A Contractor may inquire whether the City is willing to act as a reference by providing factual information directly to other prospective customers.
- **12.** <u>ASSIGNMENT</u>: No assignment of the Contractor's obligations nor the Contractor's right to receive payment hereunder shall be permitted.

However, upon written request approved by the issuing purchasing authority and solely as a convenience to the Contractor, the City may:

- a) Forward the Contractor's payment check directly to any person or entity designated by the Contractor, and
- b) Include any person or entity designated by Contractor as a joint payee on the Contractor's payment check.

In no event shall such approval and action obligate the City to anyone other than the Contractor and the Contractor shall remain responsible for fulfillment of all Contract obligations. Upon advance written request, the City may, in its unfettered discretion, approve an assignment to the surviving entity of a merger, acquisition or corporate reorganization, if made as part of the transfer of all or substantially all of the Contractor's assets. Any purported assignment made in violation of this provision shall be void and a material breach of The Contract.

13. <a href="INSURANCE">INSURANCE</a>: Contractor agrees to maintain Commercial General Liability</a> in amount of \$1,000,000 each occurrence in Personal & Advertising Injury with \$2,000,000 General Aggregate, and \$2,000,000 Products/Completed Operations Aggregate. Contractor shall maintain \$1,000,000 in automobile liability, and other appropriate insurance, as well as Workers Compensation in the required statutory amount for all employees participating in the provision of services under this Contract. Contractor also agrees to maintain \$1,000,000 in professional liability insurance if the Contractor is engaged in a professional service pursuant to this Contract. The City of Rocky Mount shall be named by endorsement as an additional insured on the General Liability and Automobile Liability policies. Certificates of such insurance shall be furnished by Contractor to the City and shall contain an endorsement to provide the City at least 30 days' written notice of any intent to cancel or terminate by either Contractor or the insuring company. Failure to furnish insurance certificates or maintain such insurance shall be a default under this contract and shall be grounds for immediate termination of this Contract.

**REQUIREMENTS** - Providing and maintaining adequate insurance coverage is a material obligation of the Contractor and is of the essence of The Contract. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized by the Commissioner of Insurance to do business in North Carolina. The Contractor shall at all times comply with the terms of such insurance policies, and all requirements of the insurer under any such insurance policies, except as they may conflict with existing North Carolina laws or The Contract. The limits of coverage under each insurance policy maintained by the Contractor shall not be interpreted as limiting the Contractor's liability and obligations under the Contract.

- 14. GENERAL INDEMNITY: The Contractor shall indemnify and hold the City, its officers, agents, and employees, harmless from and against liabilities, claims, actions, demands, costs, damages, losses, and/or expenses of any kind, or nature (including but not limited to court costs and attorney's fees, incurred in connection with the defense of the foregoing) resulting from the fault (as that term is defined in N.C. Gen. Stat. 22B-1) of the Contractor or its agents and/or employees that is a proximate cause of the loss, damage, or expense incurred by the City. The parties agree that this indemnification clause is an "evidence of indebtedness" for purpose of N. C. Gen. Stat. § 6-21.2.
- 17. <u>SUBCONTRACTING</u>: Performance under The Contract by the Contractor shall not be subcontracted without prior written approval of the City's assigned Contract Lead. Unless otherwise indicated, acceptance of a Contractor's bid shall include approval to use the subcontractor(s) that have been specified.
- **18. CONFIDENTIALITY:** Any City information, data, instruments, documents, studies or reports given to or prepared or assembled by or provided to the Contractor under The Contract shall be kept as confidential, used only for the purpose(s) required to perform The Contract and not divulged or made available to any individual or organization without the prior written approval of the City.

- 19. <u>CARE OF PROPERTY</u>: The Contractor agrees that it shall be responsible for the proper custody and care of any property furnished it by the City for use in connection with the performance of The Contract or purchased by or for the City for The Contract, and Contractor will reimburse the City for loss or damage of such property while in Contractor's custody.
- 20. <u>OUTSOURCING</u>: Any Contractor or subcontractor providing call or contact center services to the City of Rocky Mount or any of its agencies shall disclose to inbound callers the location from which the call or contact center services are being provided.
  - If, after award of a contract, the contractor wishes to relocate or outsource any portion of performance to a location outside the United States, or to contract with a subcontractor for any such the performance, which subcontractor and nature of the work has not previously been disclosed to the City in writing, prior written approval must be obtained from the City Department responsible for the contract.
  - Contractor shall give notice to the using Department of any relocation of the Contractor, employees of the Contractor, subcontractors of the Contractor, or other persons providing performance under a State contract to a location outside of the United States.
- 21. E-VERIFY: Contractor shall not employ any individuals to provide services to the City who are not authorized by federal law to work in the United States. Contractor represents and warrants that it is aware of and in compliance with the Immigration Reform and Control Act and North Carolina law (Article 2 of Chapter 64 of the North Carolina General Statutes) requiring use of the E-Verify system for employers who employ twenty-five (25) or more employees and that it is and will remain in compliance with these laws at all times while providing services pursuant to this Contract. Contractor shall also ensure that any of its subcontractors (of any tier) will remain in compliance with these laws at all times while providing subcontracted services in connection with this Contract. N.C.G.S. 143-3.
- 21. COMLIANCE WITH IRAN DIVESTMENT ACT OF 2015. Contractor certifies that as of the date of this Contract, Contractor is not listed on the Final Divestment List created by the North Carolina State Treasurer pursuant to N.C. Gen. Stat. § 147-86.58. Contractor understands that it is not entitled to any payments whatsoever under this Contract if this certification is false. The individual signing this Contract certifies that he or she is authorized by Contractor to make the foregoing statement.
- **22. COMPLIANCE WITH LAWS:** Contractor shall comply with all laws, ordinances, codes, rules, regulations, and licensing requirements that are applicable to the conduct of its business and its performance in accordance with The Contract, including those of federal, state, and City of Rocky Mount having jurisdiction and/or authority.
- 23. **ENTIRE CONTRACT**: This contract and any documents incorporated specifically by reference represent the entire agreement between the parties and supersede all prior oral or written statements or agreements. This contract, any addenda hereto, and the Contractor's bid are incorporated herein by reference as though set forth verbatim.
  - All promises, requirements, terms, conditions, provisions, representations, guarantees, and warranties contained herein shall survive the contract expiration or termination date unless specifically provided otherwise herein, or unless superseded by applicable Federal or State statutes of limitation.
- 24. <u>ELECTRONIC RECORDS</u>: The City will digitize all Contractor responses to this solicitation, if not received electronically, as well as any awarded contract together with associated procurement-related documents. These electronic copies shall constitute a preservation record and shall serve as the official record of this procurement with the same force and effect as the original written documents comprising such record. Any electronic copy, printout or other output readable by sight shown to reflect such record accurately shall constitute an "original."

- **25. AMENDMENTS**: This Contract may be amended only by a written amendment duly executed by the City and the Contractor.
- 26. NO WAIVER: Notwithstanding any other language or provision in The Contract, nothing herein is intended nor shall be interpreted as a waiver of any right or remedy otherwise available to the City under applicable law. The waiver by the City of any right or remedy on any one occasion or instance shall not constitute or be interpreted as a waiver of that or any other right or remedy on any other occasion or instance.
- 27. FORCE MAJEURE: Neither party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations as a result of events beyond its reasonable control, including without limitation, fire, power failures, any act of war, hostile foreign action, nuclear explosion, riot, strikes or failures or refusals to perform under subcontracts, civil insurrection, earthquake, hurricane, tornado, or other catastrophic natural event or act of God.
- 28. <u>SOVEREIGN IMMUNITY</u>: Notwithstanding any other term or provision in The Contract, nothing herein is intended nor shall be interpreted as waiving any claim or defense based on the principle of sovereign immunity or other State or federal constitutional provision or principle that otherwise would be available to the City under applicable law.

# QUOTE PRICING SHEET

# SPECIFICATIONS AND BID DOCUMENTS FOR 15 KV CIRCUIT BREAKERS FOR THE SUBSTATION NO. 1 69 TO 15 KV SUBSTATION

# **QUOTE**

Bid Schedule No. 1	Quantity	<u>Unit Price</u>	Extended Price
15 kV Circuit Breaker - Main	1	\$	\$
Bid Schedule No. 2			
15 kV Circuit Breaker - Feeders	4	\$	\$
Freight			\$
Applicable Sales Tax			\$
Total Price			\$
Delivery (Weeks)			
Warranty Period (Years)			

Note: proposal will be considered less responsive if each line item is not fully completed.



# **COMPLIANCE AND EXCEPTIONS CHECKLIST – BID SCHEDULE NO. 1**

Description	Specified Rating	Units	Meets or Exceeds?	If no, state exception (alternatively, Manufacturer or Catalog No.)
BREAKER TYPE, RATINGS, AND CAPABILITIES				
Manufacturer				
Location of manufacturing facility				
Catalog No./model and type				
Frequency	60	Hz		
Phases	3			
Paint color				
Rated BIL	110	kV		
Rated maximum voltage, rms	15	kV		
Rated continuous current, rms	2000	А		
Max symmetrical interrupting, rms	20	kA		
Nominal 3-phase MVA class		MVA		
3-second short circuit, rms		kA		
Closing and latching, rms		kA		
Closing time		cycles		
Adjustable reclosing range		cycles		
Open time to part contacts		cycles		
Number of stored close- open operations				
Operating mechanism catalog no./type				
Interrupting Time				
25-100% of rating		cycles		
0-25% of rating		cycles		
Capacitance Switching Currer	nt			
Overhead line charging		Α		
Shunt capacitor bank or cable shunt reactor switching		А		



# **COMPLIANCE & EXCEPTIONS CHECKLIST – BID SCHEDULE NO. 1 (Cont.)**

Description	Specified Rating	Units	Meets or Exceeds?	If no, state exception (alternatively, Manufacturer or Catalog No.)		
	BUSHINGS					
Manufacturer						
Catalog No.						
BIL	110	kV				
Current Rating	2000	Α				
Minimum Creepage Distance	IEEE C57.19.01	in				
Color	ANSI 70 Gray					
Terminals	Threaded Stud					
NEMA 4-Hole pad included?	Yes					
	BUSHING CL	JRRENT	TRANSFORM	MERS		
Quantity, bushings 1, 3, 5	2					
Quantity, bushings 2, 4,6	2					
Ampere Ratio	2000:5	Α				
Accuracy Class	C400					
Thermal Rating	2.0					
	AUXILIAF	RY SOUR	CE VOLTAGE	S S		
AC	120/240	V				
DC	48	V				
<b>Control Power Requirements</b>						
Closing current at rated 48V dc voltage		А				
Tripping current at rated 48V dc voltage		А				
Auxiliary power requirements, volts/amps/watts				V/ A/ W		

# **COMPLIANCE & EXCEPTIONS CHECKLIST – BID SCHEDULE NO. 1 (Cont.)**

Description	Specified	Units	Meets or	If no, state exception (alternatively,	
	Rating		Exceeds?	Manufacturer or Catalog No.)	
D: (A )	Р	HYSICAL	DATA		
Dimensions (Approximate)					
Height		ft-in			
Width		ft-in			
Depth		ft-in			
Distance between lowest live part and ground level		ft-in			
(Attach outline drawing s	howing principa	l dimens	sions and foc	otprint with anchor bolt spacings)	
Weight (Approximate)					
Total weight		lbs			
	М	ISCELLA	NEOUS		
If not shipped completely					
assembled as required,					
describe field assembly					
required					
Maintenance interval					
(number of close-open					
operations) as defined by					
ANSI C37.06					
Describe maintenance					
procedures					
		COMMEI	RCIAL		
Warranty	5	yr			
Drawings after Order		wks			
Approval		wks			
Shipment After Approval		wks			
Cancellation Policy					

# **COMPLIANCE AND EXCEPTIONS CHECKLIST – BID SCHEDULE NO. 2**

Description	Specified Rating	Units	Meets or Exceeds?	If no, state exception (alternatively, Manufacturer or Catalog No.)	
BREAKER TYPE, RATINGS, AND CAPABILITIES					
Manufacturer					
Location of manufacturing facility					
Catalog No./model and type					
Frequency	60	Hz			
Phases	3				
Paint color					
Rated BIL	110	kV			
Rated maximum voltage, rms	15	kV			
Rated continuous current, rms	1,200	А			
Max symmetrical interrupting, rms	20	kA			
Nominal 3-phase MVA class		MVA			
3-second short circuit, rms		kA			
Closing and latching, rms		kA			
Closing time		cycles			
Adjustable reclosing range		cycles			
Open time to part contacts		cycles			
Number of stored close- open operations					
Operating mechanism catalog no./type					
Interrupting Time					
25-100% of rating		cycles			
0-25% of rating		cycles			
Capacitance Switching Currer	nt	•			
Overhead line charging		Α			
Shunt capacitor bank or cable shunt reactor switching		А			



# **COMPLIANCE & EXCEPTIONS CHECKLIST – BID SCHEDULE NO. 2 (Cont.)**

Description	Specified Rating	Units	Meets or Exceeds?	If no, state exception (alternatively, Manufacturer or Catalog No.)	
BUSHINGS					
Manufacturer					
Catalog No.					
BIL	110	kV			
Current Rating	1200	Α			
Minimum Creepage Distance	IEEE C57.19.01	in			
Color	ANSI 70 Gray				
Terminals	Threaded Stud				
NEMA 4-Hole pad included?	Yes				
	BUSHING CU	JRRENT	TRANSFORM	MERS	
Quantity, bushings 1, 3, 5	1				
Quantity, bushings 2, 4,6	1				
Ampere Ratio	1200:5	Α			
Accuracy Class	C400				
Thermal Rating	2.0				
	AUXILIAF	RY SOUR	CE VOLTAGE	S .	
AC	120/240	V			
DC	48	V			
<b>Control Power Requirements</b>					
Closing current at rated 48V					
dc voltage		Α			
Tripping current at rated 48V dc voltage		Α			
Auxiliary power requirements, volts/amps/watts				V/ A/ W	

# **COMPLIANCE & EXCEPTIONS CHECKLIST – BID SCHEDULE NO. 2 (Cont.)**

Description	Specified	Units	Meets or	If no, state exception (alternatively,		
- Coon parent	Rating		Exceeds?	Manufacturer or Catalog No.)		
PHYSICAL DATA						
Dimensions (Approximate)						
Height		ft-in				
Width		ft-in				
Depth		ft-in				
Distance between lowest live part and ground level		ft-in				
(Attach outline drawing s	showing principa	l dimens	sions and foo	otprint with anchor bolt spacings)		
Weight (Approximate)						
Total weight		lbs				
	М	ISCELLA	NEOUS			
If not shipped completely assembled as required, describe field assembly required  Maintenance interval (number of close-open operations) as defined by ANSI C37.06  Describe maintenance procedures						
	(	COMME	RCIAL			
Warranty	5	yr				
Drawings after Order		wks				
Approval		wks				
Shipment After Approval		wks				
Cancellation Policy						



- The Owner may accept or reject any Schedule or portion thereof, adder, or deduct quoted above or purchase additional quantities of any quoted materials. The Owner may also choose to evaluate any alternate proposal that in the sole judgment of the Owner is deemed advantageous.
- 2. The prices of equipment set forth herein do not include any sums which are or may be payable by the Materialman for taxes imposed by any taxing authority upon the sale, purchase, or use of equipment. If any such tax is applicable to the sale, purchase, or use of the equipment hereunder, the amount thereof shall be added to the purchase price and paid by the Owner.
- 3. The materials quoted conform to the Specifications, or any exceptions or clarifications are clearly noted under paragraph 15 of this proposal. (Exceptions or clarifications included elsewhere in the Bidder's Proposal will not be accepted unless they are clearly noted in Paragraph 15. Exceptions and clarifications may be listed in a separate proposal, but will not be considered valid unless noted in paragraph 15 and clearly marked as "Exceptions to Specifications" in the separate proposal.)
- 4. The prices quoted shall include delivery of the materials and equipment by truck or rail DDP substation site, assuming unloading by the Vendor.
- 5. Price Policy: The prices quoted herein are firm.
- 6. Proposals shall include the following:
  - a. Catalog numbers, manufacturer, ratings, characteristics, types, sizes, etc., of all materials and equipment included. A simple statement that all necessary materials and equipment will be provided is not satisfactory.
  - b. Outline drawing indicating proposed physical size, weight, and anchor bolt pattern.
  - c. Equipment data for the items as set forth in the Proposal pages
- 7. Proposals shall include a list of recommended spare parts which the Purchaser should stock for normal maintenance purposes. The spare parts list shall be organized in the following format.

<u>lo. Required</u>	<u>Unit Price</u>
	lo. Required



The time of delivery shall be as follows:		(Weeks)*
a. Approval Drawings		(WCCRS)
b. Final Drawings**		(Weeks)*
c. Delivery**		(Weeks)*

The time for delivery shall be extended for the period of any reasonable delay due exclusively to causes beyond the control and without the fault of the Materialman, including acts of God, fires, floods, strikes, and delays in transportation.

- 9. Delivery of all items of equipment to the Owner's designated delivery point shall be made to permit unloading between the hours of 8:00 a.m. and 3:00 p.m., local time Monday through Thursday, holidays excluded.
- 10. Receipt of Approval Drawings deemed approved by the Owner or his Engineer constitutes authorization for manufacture predicated upon the approved Drawings and corrections found thereon. After the return of Approval Drawings, release for shipment is to be granted by the Engineer based upon the manufacturer's compliance with the following:
  - a. Furnishing of the requested number of copies of the Final Drawings as called for in the Specifications.
  - b. Thirty (30) days' notification of tentative shipping schedule and forty-eight (48) hours' notification prior to all deliveries.
- 11. Title to the equipment shall pass to the Owner upon delivery to the point specified herein and declaration by Materialman's certified representative that breakers are ready to be energized.
- 12. This Proposal is made pursuant to the provisions of the Notice and Instructions to Bidders, the Specifications, and the Materialman agrees to the terms and conditions thereof.
- 13. The Materialman warrants the accuracy of all statements contained in the Materialman's Proposal, and agrees that the Purchaser shall rely upon such accuracy as a condition of the contract in the event Proposal is accepted.
- 14. The Materialman warrants that the Materials will conform to the specifications, drawings, equipment data, and any attachments which are included.
- 15. The following Exceptions / Clarifications to the Specifications are applicable to the materials proposed:



<sup>\*</sup>Number of consecutive calendar weeks after receipt of a written purchase order.

<sup>\*\*</sup>Allow two (2) weeks for receipt and return of Approval Drawings.

Proposal / Specification Reference	
Specification Reference	Exception

- 16. <u>Non-Collusive Bid Certification</u>: By the submission of this bid, the Materialman certifies that:
  - a. This bid has been arrived at by the Materialman independently and has been submitted without collusion with any other manufacturer of materials, supplies, or equipment of the type described in the Notice to Prospective Bidders or the Specifications.
  - b. The contents of the bid have not been communicated by the Materialman or, to his best knowledge and belief, by any of his employees or agents to any person not an employee or agent of the Materialman, and will not be communicated to any person prior to the official opening of the bid.
- 17. If, in submitting this Proposal, the Materialman has made any change(s) from the Specifications to offer an alternate proposal(s), the Materialman understands that the Owner may evaluate the effect of such change as it seesfit, or may exclude the Proposal from consideration in determining the award of the Purchase Order.



Submitted this the	day of	, 2022.
Name of Firm		
Signature		
Printed or Typed Name		
Title		
Address of Materialman: _		
Telephone		
F-mail		



# SPECIFICATIONS AND BID DOCUMENTS FOR 15 KV CIRCUIT BREAKERS FOR THE SUBSTATION NO. 1 69 TO 15 KV SUBSTATION

# **TECHNICAL SPECIFICATIONS**

# 1. SCOPE

The work shall include furnishing all equipment and materials, as set forth in the Bid Schedule(s) and as specified herein.

## 2. GENERAL CONDITIONS

All materials and equipment shall be new. These Specifications describe the type, size, and characteristics of the various materials and equipment required to be furnished. Strict adherence to these general Specifications is required to facilitate review and consideration of the Proposal. Alternate proposals will be evaluated if deemed appropriate.

It is the intent of these Specifications that the breaker(s) shall be complete and fully operable. Any details or materials not mentioned in the Specifications, but required for satisfactory operation, shall be furnished and installed by the Materialman.

Station power available at the Owner's substation will be 120/240 volts, 60 Hz, single-phase. Control DC voltage at the substation will be 48 volts. The equipment on the breaker(s) shall coordinate with these voltages, as appropriate.

# 3. SPECIAL CONDITIONS

# 3.1 Defective Materials, Equipment, and Workmanship

All materials and equipment furnished hereunder shall be subject to the inspection, tests, and approval of the Engineer and the Materialman shall furnish all information required concerning the nature or source of all materials and equipment, as well as provide adequate facilities for testing and inspecting the materials and equipment at the plant of the Materialman.

The materials and equipment furnished hereunder shall become the property of the Owner when the breaker is sitting on the pad fully assembled and certified ready for energization by a certified



representative of the manufacturer, provided, however, that the Owner may reject any such materials and equipment which do not comply with the Specifications for materials and equipment and/or warranties of the Materialman and manufacturers. Recognition and subsequent rejection of any defective materials and equipment may occur either before or after incorporation of such materials and equipment into the facilities, provided such rejection is made within one year of date of delivery of the materials and equipment. Upon any such rejection, the Materialman shall replace the rejected materials and equipment with materials and equipment complying with the Specifications for materials and equipment and warranties, F.O.B. substation. The Owner shall return the rejected materials F.O.B. truck at the substation. In the event of the failure of the Materialman to so replace rejected materials and equipment, the Owner may make such replacement and the cost and expense thereof shall be paid by and recoverable from the Materialman.

# 3.2 Miscellaneous

The Materialman shall hold harmless and indemnify the Owner, its agents and employees, from any and all claims, suits and proceedings for infringement of any patent or patents covering materials and equipment purchased hereunder. The Materialman shall defend any suit or proceeding brought against the Owner, its agents or employees, based upon a claim that the materials and equipment or any part thereof constitute an infringement of any patent, or if the Materialman shall fail to defend such suit or proceeding, the Owner may do so and the Materialman shall make reimbursement for the expense of such litigation. If the materials and equipment, or any part thereof, are held to constitute infringement and the use thereof is enjoined, the Materialman shall, at its own expense, either procure for the Owner the right to continue to use the materials and equipment, or such part thereof, or shall replace the materials and equipment, with non-infringing materials and equipment.

## 3.3 Standards

All equipment and materials covered by these Specifications and all tests applied thereto shall, unless otherwise stated herein, be in accordance with the applicable provisions of the latest editions of ANSI and IEEE standards. Where the term "Standards" is used in the specifications, it shall be understood to refer to the above standards.



#### 4. DRAWINGS

# 4.1 Preliminary

Before proceeding with fabrication, the manufacturer shall submit for approval to the Engineer sufficient Drawings to demonstrate that all parts conform to the requirements and intent of these Specifications. The Drawings shall include outline, control cabinet front view and layout, nameplate, applicable equipment nameplates, material list with manufacturer part numbers, control schematics and wiring diagrams. Drawings shall be submitted electronically as AutoCAD ".dwg" drawings and in PDF format. Each drawing shall contain identifying information such as, but not limited to, customer and project name. Catalog cut sheets and details of instrument transformers, bushings, bushing terminal connectors, relays, and all accessories shall also be submitted for approval.

The Outline Drawing shall show dimensions of equipment, including bushings, bushing designations, base, and all other important external features. Outline Drawings shall be to scale and include plan view and elevations from all four (4) sides. These Drawings shall show weights, bushings, bushing catalog numbers and ampere ratings, description of top bushing terminals, and arrangement of all external accessory devices. Control schematic drawings shall clearly indicate the power requirements of DC circuits and AC auxiliary power (amps/volts/watts).

Approval of Drawings shall not be held to relieve the manufacturer of obligations to meet all requirements to the Specifications or responsibility for correctness of the Drawings, or responsibility to meet original shipping promise on the basis of customer being allowed two (2) weeks for approval.

The Engineer may require additional submittals of Shop Drawings if, in the opinion of the Engineer, such is required due to the extent of changes required on the previous submittal(s). If an extension of time is required due to a protracted drawing approval process, the price will remain as quoted for the quoted delivery.

Receipt of Approval Drawings by the Materialman constitutes authorization for manufacture based upon the corrections found thereon.

**No** changes shall be made in the final Drawings from the approved Approval Drawings. Any proposed changes from the approved drawings must go through the approval drawing process again **with the changes clearly denoted.** 



Following approval of drawings the Materialman shall submit a complete set of "For Construction" drawings to the Engineer.

# 4.2 Final Drawings and Instruction Manuals

Materialman shall furnish four (4) hard copies of instruction manuals **prior to the shipment of the equipment**. One (1) copy shall be sent to the Engineer and the other three (3) copies shall be sent to the Owner. Each instruction manual shall include a digital medium (such as a USB drive) that contains entire contents of instruction manual in PDF format. Final drawings are to be certified as "As-Built" and shall be provided in AutoCAD format in addition to PDF format.

Instruction manuals are to include, as a minimum, each of the following:

- 4.2.1 Materialman's installation and maintenance instructions for transformer
- 4.2.2 Manufacturer manuals, brochures, cut sheets, bulletins, etc. for components, fittings, valves, controls, and accessories
- 4.2.3 Manuals, brochures, cut sheets, bulletins, etc. for the breaker and replacement parts
- 4.2.4 Outline and assembly drawings
- 4.2.5 Control cabinet front view and layout drawing(s)
- 4.2.6 Nameplate drawing(s)
- 4.2.7 Material list drawing
- 4.2.8 Schematic and wiring diagram drawings for all control and accessory items
- 4.2.9 Details of bushing and bushing terminal connectors
- 4.2.10 Diagram of bushing current transformers indicating connection, number of turns, polarity marking, ratio, accuracy class, and thermal rating factor
- 4.2.11 Catalog cut sheets for instrument transformers, surge arresters, relays, and all control accessories
- 4.2.12 Certified test report



## 5. SHIPPING

The breakers shall be shipped fully assembled and ready to be placed in service to the station site. The shipping address for the substation is:

Substation No. 1 1590 River Drive Rocky Mount, NC 27804

# 6. CHARACTERISTICS

Breaker(s) shall be three-pole, 60 Hz, outdoor, free-standing, using one (1) vacuum interrupter per pole. Vacuum interrupter design shall not require oil for either interrupting or insulation.

- 6.1 Operating Mechanism, Magnetically Actuated
  - 6.1.1 The breaker operating mechanism shall be magnetically actuated with trip-free functionality embedded in the controller electronics.
  - 6.1.2 The operating mechanism shall be capable of storing an Open Close Open operation, minimum.
- 6.2 Trip and Close Circuit Requirements
  - 6.2.1 Individual molded case circuit breakers shall be provided for trip and close circuits.
  - 6.2.2 Trip and close circuit operating voltage shall be as specified herein. Trip and close circuits shall operate properly within a range as specified in the latest revision of Table 8 in ANSI C37.06.
  - 6.2.3 Tripping and closing current of trip and close coil circuits and total power requirements shall be indicated on the drawings.
  - 6.2.4 The close path must have a block close path, per ANSI standards.
- 6.3 Construction Details
  - 6.3.1 Each circuit breaker shall be designed and constructed for operation on a 3-phase, 60 hertz, solidly grounded system, at an ambient temperature range from -30°C (-22°F) to + 40°C (104°F) at an altitude below 3,300 feet.



- 6.3.2 Each circuit breaker shall be dead-tank design.
- 6.3.3 Each circuit breaker shall be designed and built per the applicable seismic zone and associated requirements of the International Building Code (IBC) published by the International Code Council (ICC).
- 6.3.4 Minimum vertical clearance or taut-string distance from foundation to bottom of bushings shall be 8'-6". Frame extensions shall be provided if required.

# 6.4 Control Cabinet

- 6.4.1 The operating mechanism and necessary auxiliary devices shall be provided in one or more NEMA 4 type weatherproof, dust resistant enclosures, mounted on the breaker frame.
- 6.4.2 The breaker control cabinet will provide the internal wiring for the breaker system and the interface between the Owner's control and power circuits to the breaker.
- 6.4.3 The control cabinet shall allow sufficient space and provision for termination of Owner-furnished control and power circuits.
- 6.4.4 Provision for padlocking doors.

# 6.5 Bushings and Terminals

- 6.5.1 The breaker(s) shall be provided with bushings rated to meet or exceed the continuous current and BIL ratings of the breaker. Bushings shall be ANSI 70 gray.
- 6.5.2 Bushings shall have minimum creepage distance required by applicable contamination district, as specified herein.
- 6.5.3 Bushings shall have NEMA standard threaded terminal studs.
- 6.5.4 Bushings shall be furnished with terminal connectors with NEMA 4-hole pad suitable for aluminum or copper connector, one for each bushing.
- 6.5.5 Bushing designations (1, 3, 5 and 2, 4, 6) shall be labeled on breaker exterior and be clearly visible.

# 7. POWER AND CONTROL WIRING

7.1 Molded case circuit breakers shall be used for interruption and



- protection of low voltage circuits.
- 7.2 Marathon Catalog No. 1423123 power terminal block shall be provided for landing of Owner's ac control power leads.
- 7.3 Marathon Catalog No. 1422123 power terminal block shall be provided for landing of Owner's dc voltage control power leads.
- 7.4 Clearly indicate operating voltage and required field wiring of voltage supply to motor terminal blocks and on drawings.
- 7.5 Marathon heavy-duty short-circuiting terminal blocks, 1500 SC Series, or equal, shall be provided for landing of all bushing current transformer (BCT) leads. A separate terminal block shall be provided for each set of current transformer leads.
- 7.6 Marathon heavy duty terminal blocks, 1500 Series, or equal, shall be provided for landing of all other wiring.
- 7.7 A minimum of twelve (12) spare terminal block terminals shall be provided.
- 7.8 All terminal points shall be furnished with screws and lock washers.
- 7.9 All BCT leads shall be #12 AWG stranded copper.
- 7.10 All control wiring will be #14 AWG minimum stranded copper type SIS, except when larger wire is required by the circuit.
- 7.11 Bushing Current Transformer grounds: jumpers must be from the sixth pole of the shorting terminal block on the manufacturer's side directly to the ground bar. Jumpers between shorting terminal blocks are not acceptable unless jumpers are strictly between terminal blocks grouped together. An example of a grouping would be 1X-3X-5X.
- 7.12 All control devices and alarms shall be connected to terminal blocks located in the breaker control cabinet and clearly labeled on the drawings. All terminal blocks shall be situated such that they are clearly visible and easily accessible in case there is need of field modifications.
- 7.13 All terminal connections for conductor sizes #10 AWG in size and smaller shall be made with non-insulated full-ring tongue, crimp-type lugs. Lugs shall be AMP, Inc. "Solistrand Diamond-Grip" or approved equivalent. Spade-type terminals or slip-on connectors are not



acceptable.

7.14 Legible sleeve type wire markers shall be provided at each end of wires over six inches (6") in length.

#### 8. BUSHING CURRENT TRANSFORMERS

All current transformers shall be multi-ratio with standard taps with 10ampere continuously rated secondary and as specified herein.

#### 9. SCADA FEATURES

Supervisory control features shall include provisions for remote trip, close, block close, and reclosing (block/unblock).

Provisions shall be made for remote monitoring of breaker status (open/closed), Local/Remote switch position, instantaneous trip elements (enabled/blocked), reclosing status, and alarms (loss of AC, loss of DC, Ready/Not Ready, spring not charged, if applicable, etc.).

All contacts shall be wired out to a terminal block for customer use. Contacts indicating pass/failure status of relay self-test, if applicable, shall also be wired to a terminal block. Alarm contacts shall be normally closed for normal operation and open when blocked.

#### 10. ACCESSORIES

Standard accessories as required for operation of the breaker shall be provided with each breaker. Accessories shall, as a minimum, include the following:

- 10.1 Three-Phase Overcurrent/Reclosing (50/51/79) Protection Relay, programmable microprocessor-based, SEL Type 351S Cat# 0351S7XCE3H5221, Key 7046, or approved equal.
- 10.2 One (1) ABB test switch, type FT-14, style no. FT4A14T06CN4453, 14 Pole, 6 potentials, 8 currents, arrangement (W C-C R-R 7-7 9-9 P T Z O W) with clear cover, screw terminals, and standard depth.
- 10.3 One (1) two-position switch for enabling and disabling of remote-control functions clearly labeled "Remote" and "Local". Switch shall have two (2) normally open and two (2) normally closed contacts.

  Local function shall be enabled at all times regardless of the position of the Local/Remote switch.
- 10.4 An auxiliary switch with 10 "a" and 10 "b" contacts in addition to



- those required for control of breaker mechanism. All contacts shall be wired to terminal blocks. Contact surfaces shall be silver-plated. Contacts shall be rated to break 6 amperes at 135 volts dc.
- 10.5 One (1) push button for the trip function and one (1) push button for the close function.
- 10.6 Open (green) and Close (red) indicating lights.
- 10.7 Grounding pads with NEMA spacing terminals for attachment to the Owner's 1/0 AWG to 300 MCM stranded copper ground cables. Two (2) grounding pads shall be on diagonally opposite locations on each component of the frame and one (1) grounding pad shall be on the tank.
- 10.8 A mechanically actuated operation counter that is visible without opening a door.
- 10.9 Mechanical position indicator.
- 10.10 A primary contact erosion indicator shall be provided for ease of visual inspection to determine contact wear. Means for measuring and adjusting the primary contact gap and wipe shall be provided.
- 10.11 The control cabinet shall have internal, LED lighting controlled by a door-actuated switch. Operation of door-actuated switch shall be by entrance into cabinet. Operation by opening inner relay swing panel is not acceptable.
- 10.12 The control cabinet shall have a 120 VAC, 20 A, single phase, duplex receptacle. The receptacle shall be accessible from outside the cabinet and have a GFCI function.
- 10.13 Thermostatically/Hygrostatically controlled heater shall be provided in the low-voltage and high-voltage compartments in order to prevent condensation. Electronic Hygrometer shall be by STEGO type ETF 012 or approved equal.
- 10.14 A suitable nameplate showing all ratios of the bushing current transformers shall be mounted either on the circuit breaker frame or inside the control cabinet.
- 10.15 All relays, switches, contactors, starters, and other devices shall be identified by nameplates and shall be mounted on the accessible wiring side of device.



- 10.16 Clearly labeled externally operable emergency (69) trip mechanism equipped with an automatic lockout switch to prevent electrical reclosing.
- 10.17 Manual spring charging crank shall be provided and stored inside the breaker cabinet (only applicable for (spring) stored energy mechanism).
- 10.18 Loss of voltage alarm relay on each auxiliary power and control power feed to the breaker, one for auxiliary power, one for close control power, and one for trip coil control power.

## 11. FACTORY TESTS

- 11.1 Regardless of any statements in the standards to the contrary, each breaker shall be completely assembled at the factory. The assembled components, including bushings, shall be those which will be a permanent part of the breaker assembly. After each breaker is completely assembled, it shall be subjected to and shall be certified to meet all requirements of the production tests as listed and described in ANSI C37.04, C37.06, and C37.09 Standards.
- 11.2 Each breaker shall be fully tested and verified for proper operation. Upon completion of factory assembly and wiring of equipment, the successful bidder shall conduct functional tests to verify correct wiring operation of equipment. Factory Acceptance Testing (FAT) shall, as a minimum, include the following:
  - Pre-functional test checkout (general workmanship, wire continuity, isolation, etc.)
  - DC Control Circuit Functional Tests
  - AC Sensing Circuit Functional Tests

If wiring errors are discovered following delivery of the breaker(s), all costs to correct the errors shall be borne by the manufacturer. The manufacturer will be notified of the discovery of errors and given the opportunity to correct them first. If corrections are not made by the manufacturer in a timely manner, the owner shall arrange for others to make corrections and the manufacturer shall be responsible for all costs incurred.



#### 12. WARRANTY

The Materialman shall guarantee his materials and workmanship against defect due to faulty materials or faulty workmanship or negligence for a period as outlined below following final acceptance of the work. He shall make good such defective materials or workmanship and any damage resulting therefrom without cost to the Owner.

The breaker shall carry a full five-year warranty against defects in materials or workmanship. Any less period will be considered less responsive and not in compliance with these specifications.

# 13. BID SCHEDULE NO. 1 – BUS BREAKER

# **BREAKER RATINGS, Minimum:**

Rated interrupting time (60 Hertz basis): 3 cycles (50 ms)

Basic lightning impulse insulation level (BIL) 110 kV

Rated maximum voltage, rms: 15.5 kV
Rated continuous current, rms: 2,000 A
Rated short-circuit and short-time current, rms: 20 kA

Extrapolate ratings based on above values from latest revision of Table 2 of ANSI C37.06, "Preferred ratings for outdoor circuit breakers 72.5 kV and below".

Dielectric withstand ratings and external insulation shall be in accordance with latest revision of Table 4 of ANSI C37.06.

# **BUSHING RATINGS:**

Type of contaminated environment: Light

Minimum creepage distance shall be based on type of contaminated environment stated above and as described in latest revision of IEEE Std C57.19.100.

Bushings shall be rated to meet or exceed electrical insulation characteristics given in the latest revision of Table 1 of ANSI C57.19.01.

# **BUSHING CURRENT TRANSFORMERS:**

Current transformer data:



Bushing Location	Ampere Ratio	Quantity Each Bushing	Total	Accuracy Class	Continuous Thermal Rating (30°C)
1,3,5	2000:5	2	6	C400	2.0
2,4,6	2000:5	2	6	C400	2.0

# 14. BID SCHEDULE NO. 2 – FEEDER BREAKERS

# **BREAKER RATINGS, Minimum:**

Rated interrupting time (60 Hertz basis): 3 cycles (50 ms)

Basic lightning impulse insulation level (BIL) 110 kV

Rated maximum voltage, rms: 15.5 kV
Rated continuous current, rms: 1,200 A
Rated short-circuit and short-time current, rms: 20 kA

Extrapolate ratings based on above values from latest revision of Table 2 of ANSI C37.06, "Preferred ratings for outdoor circuit breakers 72.5 kV and below..."

Dielectric withstand ratings and external insulation shall be in accordance with latest revision of Table 4 of ANSI C37.06.

# **BUSHING RATINGS:**

Type of contaminated environment: Light

Minimum creepage distance shall be based on type of contaminated environment stated above and as described in latest revision of IEEE Std C57.19.100.

Bushings shall be rated to meet or exceed electrical insulation characteristics given in the latest revision of Table 1 of ANSI C57.19.01.

# **BUSHING CURRENT TRANSFORMERS:**

Current transformer data:

Bushing Location	Ampere Ratio	Quantity Each Bushing	Total	Accuracy Class	Continuous Thermal Rating (30°C)
1,3,5	1200:5	1	3	C400	2.0
2,4,6	1200:5	1	3	C400	2.0

