

**CITY OF ROCKY MOUNT
ROCKY MOUNT, NORTH CAROLINA**

**SPECIFICATIONS AND BID DOCUMENTS FOR
230KV CIRCUIT SWITCHER FOR THE
SOUTH POD SUBSTATION
OLD MILL ROAD, ROCKY MOUNT, NC**

ISSUED FOR BIDS

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ISSUED FOR BIDS



**Booth & Associates, LLC
Consulting Engineers
5811 Glenwood Avenue, Suite 10
Raleigh, North Carolina 27612
Firm License No. F-02**

© September 20

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ROCKY MOUNT, NORTH CAROLINA**

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REQUEST FOR PROPOSAL

NOTICE TO PROSPECTIVE BIDDERS

Sealed Proposals for the furnishing and delivery of all materials and equipment (except materials and equipment specified to be furnished by the Owner) complete and conforming to the bid documents for **one (1) 230kV Circuit Switcher** for the **South POD Substation**, located in Rocky Mount, North Carolina, as set forth in the Bid Schedules, will be received by **The City of Rocky Mount** of Rocky Mount, North Carolina (hereinafter referred to as the Owner) at the offices of at the offices of their Purchasing Manager, City of Rocky Mount, Purchasing Division, PO Box 1180, Rocky Mount, North Carolina 27802-1180, **2:00 PM, Local Time, Friday, October 15, 2021**, at which time the Proposals will be opened and read. Proposals can be hand delivered to the Purchasing Office at 331 South Franklin Street, Rocky Mount, NC 27804. Any Proposal received subsequent to that time will be promptly returned to the Bidder unopened.

The Specifications, together with all necessary forms and other documents for the Bidder, may be obtained from the Owner's Engineer, Booth & Associates, LLC, 5811 Glenwood Avenue, Suite 109, Raleigh, North Carolina 27612, to the attention of the contact on the attached Data Sheet.

Proposals and all supporting instruments must be submitted on and in the format of the forms furnished in the *Form of Proposal* of these bid documents and must be delivered in a sealed envelope addressed to the Owner's Engineer, Booth & Associates, LLC Proposals must be filled in with indelible ink. No alterations or interlineations will be permitted unless made before submission and initialed and dated.

Prior to the submission of the Proposal, the Bidder shall make and shall be deemed to have made a careful examination of the bid documents on file with the Owner and with the Engineer and of all other matters that may affect the cost and the time of the work.

The name and address of the Bidder, its license number (if a license is required by the State), and the following description must appear on the envelope in with the Proposal is submitted:

**"BID FOR 230 kV CIRCUIT SWITCHER
FOR SOUTH POD SUBSTATION, NOT TO BE OPENED UNTIL
2:00 PM, LOCAL TIME, FRIDAY, OCTOBER 15, 2021"**

The Owner reserves the rights to (1) waive minor irregularities or minor errors in any Proposal if it appears to the Owner that such irregularities or errors were made through inadvertence. Any such irregularities or errors so waived must be corrected on the Proposal prior to its acceptance by the Owner; (2) reject any or all Proposals and to hold any or all Proposals for a period of sixty (60) days from the date of opening thereof; (3) accept the bid, in its opinion, that represents the best value for the Owner, regardless of whether such bid is the lowest price; and (4) award Purchase Order(s) to Bidder(s) for any Schedule(s) individually or collectively from the Bid Schedules.

CITY OF ROCKY MOUNT
ROCKY MOUNT, NORTH CAROLINA

By: Ramona Plemmer Date: September 29, 2021
Purchasing Agent

**CITY OF ROCKY MOUNT
ROCKY MOUNT, NORTH CAROLINA**

**SPECIFICATIONS AND BID DOCUMENTS FOR
230 kV CIRCUIT SWITCHER FOR THE
SOUTH POD SUBSTATION**

IMPORTANT DATES

Event	Responsibility	Date and Time	Location
Issued	City	Wednesday, September 29, 2021	
Submit Written Questions No Later Than	Vendor	4:00 PM Monday, October 4, 2021	Email or Mail
Provide Responses to Questions	City	5:00 PM Wednesday, October 6, 2021	City's Bid Website
Submit Bids	Vendor	2:00 PM Friday, October 15, 2021	Mail or Hand Delivered *Email Submissions are Unacceptable
Contract Award	City	<i>Dependent on City Council Agenda expected ,10/25/2021</i>	Email or Mail
Contract Start Date	Vendor		

Bid updates can be found at the City website at
https://rockymountnc.gov/departments_services/finance/purchasing/bids

Questions can be sent to:
 Ramona Plemmer Ramona.Plemmer@rockymountnc.gov

***Final Submissions cannot be submitted electronically and must be delivered to the purchasing office as described on page N-1.**

DEFINITIONS

Whenever the following terms or pronoun in place of them are used in these *Instructions to Bidders, Form of Proposal, Technical Specifications, "Purchase Order"*, bond, etc., the intent and meaning shall be interpreted as follows:

Owner	City of Rocky Mount Rocky Mount, North Carolina
Purchasing Manager	Candice S. Kirtz; or authorized assistant
Consulting Engineer	Booth & Associates, LLC
Observer	An authorized representative of the Owner assigned to make any or all necessary observations of work performed and equipment and/or apparatus furnished by the Bidder.
Bidder	Any individual, firm, or corporation submitting a Proposal for the work contemplated, acting directly or through a duly authorized representative; or party of the second part of the Purchase Order, acting directly or through a duly authorized representative.
Subcontractor	An individual, firm, or corporation who contracts with the Bidder to perform part of the latter's Purchase Order.
Surety	The body, corporate or individual, approved by the Owner, which is bound with and for the Bidder who is primarily liable and which engages to be responsible for his acceptable performance of the work for which he has contracted.
Form of Proposal, Proposal	The approved, prepared form on which the Bidder is to submit or has submitted his Proposal for the work contemplated.
Bid Security	To all bids there shall be attached cash, cashier's check, or certified check from the Bidder upon a bank or trust company insured by the Federal Deposit Insurance Corporation, or in lieu thereof, a Bid Bond
Plans, Drawings	All Drawings or reproductions of Drawings pertaining to the construction under the Purchase Order.
Technical Specifications	The directions, provisions, and requirements contained herein pertaining to the method and manner of performing the work or to the quantities and qualities of materials to be furnished under the Purchase Order.
Purchase Order	The agreement covering the furnishing of equipment and/or apparatus and the performance of the work. The Purchase Order shall include the <i>Instructions to Bidders, General Conditions, Form of Proposal, "Plans", Technical Specifications</i> , and Acknowledgments.
Performance Bond (Not Required)	The approved form of security to be approved by the Owner furnished by the Bidder and his Surety as a guarantee of good faith on the part of the Bidder to accept the work in accordance with the terms of the Specifications and Purchase Order.

**Payment Bond
(Not Required)**

The approved form of security to be approved by the Owner furnished by the Bidder and his Surety as a guarantee for payment of all Subcontractors on the part of the Bidder in acceptance of the work in accordance with the terms of the Specifications and Purchase Order.

Work

The performance of the project covered by the Specifications or the furnishing of labor, machinery, equipment, tools, or any other article or item being purchased by the Owner.

Emergency

A temporary unforeseen occurrence or combination of circumstances which endangers life and property and calls for immediate action or remedy.

Work at Site of Project

Work to be performed, including work normally done on the location of the project.

Bid Documents

Include all sections of the *Request for Bids, Form of Proposal, Technical Specifications and Appendices, Addendum/Clarifications/Bulletins*, and Drawings.

The subheadings in these Specifications are intended for convenience or reference only and shall not be considered as having any bearing on the interpretations thereof.

INSTRUCTIONS TO BIDDERS

1.0 Bidder Qualification

- 1.1 Bids will be accepted only from Bidders deemed by the Owner or the Engineer to be qualified to provide the materials, equipment, and services described by these Specifications. The experience of Bidders in providing the same or similar materials, equipment, and services will be a major factor in determining qualification. The Bidder shall include information to establish qualifications.
- 1.2 Prospective Bidders who wish to submit a bid, but are not presently qualified, may receive consideration by submitting a completed Bidder's Qualification Form, which requires product line and user list, to the Engineer at least ten (10) days prior to the specified bid opening date and time. The Bidder's Qualification Form may be obtained from the Engineer.

2.0 Proposals

- 2.1 To warrant consideration, Proposals must comply with these instructions.
- 2.2 Bids not received on Booth & Associates, LLC *Form of Proposal* contained herein will be considered unresponsive. The forms shall be filled out complete; any omissions may cause the entire Proposal to be rejected.
- 2.3 Proposals must be made on the *Form of Proposal* provided herein and must not be altered, erased, or interlined in any manner. The Bidder shall fill in the *Form of Proposal* as detailed in the *Terms and Conditions*. The Bidder may retain one (1) copy, but the original, fully executed, must be inserted in or attached to the bid documents. Also, one (1) additional copy of all executed forms and supporting information shall be supplied.
- 2.4 The Bidder shall furnish certain information, as required by the bid documents regarding the equipment on which he is bidding. Two (2) copies of the information, together with the Manufacturer's literature setting forth the guarantees and describing the equipment on which he is bidding shall be included as part of the Proposal. If one Manufacturer is bidding through two or more agents or representatives, descriptive literature, guarantees, etc., may be submitted in duplicate in one sealed envelope, which will be considered and treated as though it contained a sealed bid. This envelope shall contain a list of the names of Bidders to whom the information applies. Each sealed bid Proposal without this information shall state the name of the Manufacturer who is furnishing the information. Additional sets of the Specifications may be obtained upon a payment of Fifty Dollars (\$50) non-refundable deposit by approved Bidders.
- 2.5 Bids may be modified by the Bidder's removal of his original and the submittal of a completely revised bid package in full compliance with the bid documents if received prior to the time of opening bids and if included in the public reading of such bids. No oral or telephonic Proposals will be considered.
- 2.6 Proposals shall include a *Form of Exceptions* utilizing forms provided which shall itemize each and every exception from the bid documents. The *Form of Exceptions* shall state the section, subsection, and paragraph designations from the part of the Specifications to which exception is taken and explain in detail the nature of the exception. A copy of this *Form of Exceptions* is included in the *Form of Proposal*. Exceptions will not necessarily eliminate a Bidder from consideration, even if bids without exceptions are received from others. The treatment of exceptions will be based entirely on the overall best interests of the Owner. **Certain exceptions, e.g., failure to provide rigging and unloading at the site, or failure to properly provide field assembly supervision on testing may result in the entire bid Proposal being rejected.**
- 2.7 Should the Bidder find discrepancies in the documents or fail to understand their meaning, he shall immediately notify the Engineer, who will send written instructions to all Bidders. Neither the Owner nor the Engineer will be responsible for any oral instructions.

- 2.8 The Bidder shall be the Manufacturer of the equipment, or the Bidder shall submit with the *Form of Proposal* a notarized statement that the Bidder is authorized by the Manufacturer to tender the Proposal as submitted and that the Manufacturer will guarantee the suitability and adequacy of the equipment proposed, and will be bound by the Specifications, as though the Manufacturer had submitted the Proposal.
- 2.9 In the event that the Bidder proposes any change or deviation from the Engineer's Plans and Specifications, such Proposal changes or deviations must be submitted at the time bids are opened. The Owner reserves the right to reject any such proposed changes or deviations. All exceptions must be stated on the *Form of Exceptions*. Failure to submit a *Form of Exceptions* will imply strict adherence to the Plans and Specifications.
- 2.10 No bid Proposal may be withdrawn after the scheduled closing time for the receipt of bids for a period of ninety (90) days pending the Purchase Order by the successful Bidder. Should the successful Bidder default and not accept a Purchase Order, then the Purchase Order may be offered to the next lowest responsible Bidder whose Proposal is evaluated as acceptable
- 2.11 Prior to submission of the Proposal, the Bidder shall make and shall be deemed to have made a careful examination of the Plans and Specifications on file with the Owner and with the Engineer and all other matters that may affect the cost and the time of completion of the work.
- 2.12 The Purchase Order, when accepted, shall be deemed to include the Specifications for the equipment, and the Bidder shall not claim any modification thereof resulting from any representative or promise made at any time by an officer, agent, or employee of the Owner or by any other person.
- 2.13 The Owner reserves the right to accept any schedule, combination of schedules, or any portion of a schedule.

3.0 Bid Security

- 3.1 Each Proposal shall be accompanied by a cash deposit, cashier's check, or certified check drawn on a bank or trust company insured by the Federal Deposit Insurance Corporation or Savings Association Insurance Fund, or a Bid Bond in an amount not less than ten percent (10%) of the Proposal. The Owner will retain said deposit as Liquidated Damages in the event of failure of the successful Bidder to execute the Contract within ten (10) days after the award.
- 3.2 Bid Bond shall be conditioned that the Surety will, upon demand, forthwith make payment to the Obligee upon said Bond if the Bidder fails to accept a Purchase Order in accordance with the Bid Bond, and that upon failure to forthwith make payment, the Surety shall pay to the Obligee an amount equal to double the amount of said Bond.
- 3.3 Only one (1) Bid Bond is required, the amount of which shall be based on the total amount of the bid. The value for the Bid Bond shall be based on the Bid Schedule of maximum total amount.

4.0 Performance Bond/Payment Bond

A Performance Bond/Payment Bond is not required for this project.

5.0 Bulletins and Addenda

Any bulletins or addenda to the Specifications issued during the time of bidding are to be considered covered in the Proposal, and in accepting a Purchase Order, they will become a part thereof. Receipt of addenda shall be acknowledged by the Bidder on the *Form of Proposal*.

6.0 Shipment and Delivery

- 6.1 The Power Circuit Switcher shall be shipped to the site with unloading by the Owner, as defined by the attached vicinity map. Assembly of any component parts removed for shipment and field testing of the unit will be performed by the Owner. The Manufacturer's Field Service Engineer shall supervise the assembly and test unit in accordance to Manufacturer's recommendations under a separate line item in Proposal.

- 6.2 Units are to be shipped utilizing an open-top truck to facilitate unloading with a crane or fork truck. Units are to be shipped direct from the manufacturing site, with no intermediate transfers. Shipping with the Manufacturer's own trucks is preferred.
- 6.3 Before shipment, power circuit switcher shall be completely assembled to determine that all parts fit properly. Parts removed for shipment shall be marked so as to permit easy identification when reassembling.
- 6.4 Method of packing and loading shall be such as to protect all parts from dampness, corrosion, breakage, or vibration injury that might reasonably be encountered in transportation, storage and handling.
- 6.5 Release for shipment is to be granted by the Owner or the Engineer based upon the Manufacturer's compliance with the following:
 - 6.5.1 Fourteen (14) consecutive days prior notification of tests so the Owner may have a representative present for witness of the tests.
 - 6.5.2 Furnishing of the requisite number of copies of the Final Drawings as called for in the Specifications.
 - 6.5.3 Coordination of manufacturing and delivery with Owner's construction schedule as may be noted in these Specifications.
 - 6.5.4 Thirty (30) days notification of tentative shipping schedule and forty-eight (48) hours notification prior to all deliveries.
- 6.6 Delivery of all items of equipment shall be made at such time as to permit unloading between the hours of 9:00 a.m. and 3:00 p.m., Monday through Thursday, holidays excluded. The Owner will furnish escort to the substation site. Ultimate delivery shall be at the discretion of the Owner.

7.0 **Award of Purchase Order**

- 7.1 The issue of a Purchase Order will be made to the lowest acceptable Bidder as soon as practical, provided that in the selection of materials and equipment a Purchase Order may be awarded to a responsible Bidder other than the lowest in the interest of standardization, or ultimate economy if the advantage of such standardization or ultimate economy is clearly evident. The Owner reserves the right to reject any and all bids.
- 7.2 The Owner reserves the right to waive minor irregularities or minor errors in any Proposal if it appears to the Owner that such irregularities or errors were made through inadvertence. The Owner must correct any such irregularities or errors so waived on the Proposal prior to its acceptance.
- 7.3 In estimating the lowest cost to the Owner as one of the factors in deciding the award of the Purchase Order, the Owner will consider, in addition to the prices quoted in the Proposal, the following:
 - a. Equipment delivery (days)
 - b. Adherence to the Plans and *Technical Specifications*
 - c. Evaluation of equipment suitability to the system as noted and submitted by the Bidder
 - d. The Bidder's intended method of shipment of the materials and equipment

8.0 **Approval Drawings**

Receipt of "Approval Drawings" by the Bidder constitutes authorization for manufacture predicated upon the Drawings and corrections found thereon.

GENERAL CONDITIONS

1.0 Drawings and Specifications

The Drawings and Specifications are complementary, one to the other. That which is shown on the Drawings or called for in the Specifications shall be as binding as if it were both called for and shown. The intention of the Drawings and Specifications is to include all labor, materials, transportation, equipment, and any and all other things necessary to do a complete job, which may include manufactured items and field service assistance. In case of discrepancy or disagreement in the Purchase Order, the order of precedence shall be: Purchase Order, Specifications, Drawings.

2.0 Clarifications and Detail Drawings

In such cases where the nature of the work requires clarification by the Engineer, such clarification shall be furnished by the Engineer with reasonable promptness by means of written instructions or Detail Drawings or both. Clarifications and Drawings shall be consistent with the intent of bid documents, and shall become a part thereof.

3.0 Copies of Drawings and Specifications

The Engineer will furnish free of charge to the Bidder one (1) copy of the Drawings and Specifications. Additional sets of these Specifications may be obtained upon request and a non-refundable deposit of Fifty Dollars (\$50.00) by approved Bidders.

4.0 Ownership of Drawings and Specifications

All Drawings and Specifications are instruments of service and remain the property of the Engineer whose name appears thereon. The use of these instruments on work other than these bid documents without permission is prohibited. All copies of Drawings and Specifications other than final copies shall be returned to the Engineer upon request after completion of the work.

5.0 Royalties, Licenses, and Patents

It is the intention of the bid documents that the work covered herein will not constitute in any way an infringement on patents. The Bidder shall protect and save harmless the Owner against suit on account of alleged or actual infringement. The Bidder shall pay all royalties and/or license fees required on account of patented articles or processes, whether or not the patent rights are evidenced hereinafter.

6.0 Uncorrected Faulty Work

The Bidder shall be notified of faulty or damaged work and shall have the option to respond in a reasonable period of time. Should the correction of faulty or damaged work be considered inadvisable or inexpedient by the Owner or the Engineer, the Owner shall be reimbursed by the Bidder for the same by a deduction in the Purchase Order prices arrived at by a fair estimate of the probable cost of correction, approved by the Engineer.

7.0 Liquidated Damages

The Bidder shall commence manufacture upon issuance of a Purchase Order from the Owner and shall fully complete delivery as per the Delivery Schedule in the *Form of Proposal*. For each day in excess of the proposed dates, the Bidder shall be made payable to the Owner the sum of five hundred dollars (\$500.00) as Liquidated Damages (and not as a penalty), reasonably estimated in advance to cover the losses to be incurred by the Owner by reason of failure of said Bidder to complete delivery within the time specified, such time being in the essence of this Purchase Order and material consideration thereof.

8.0 Delays and Extension of Time

- 8.1 The time to be allowed for delivery is stated in the *Form of Proposal*. The Bidder, upon notice of award of the Purchase Order, shall prepare a Delivery Schedule based on the allowed time and submit such schedule to the Engineer for approval.
- 8.2 If Bidder is delayed at any time in the progress of the work by any act of negligence by the Owner or the Engineer, by any separate Bidder employed by the Owner, or by changes ordered

in the work, then the time of completion shall be extended for such reasonable time as the Engineer may decide.

- 8.3 No extension of time for completion will be made for ordinary delays and accidents. Extensions may be granted for delays ordered by the Engineer if the request has been made in writing within forty-eight (48) hours after the order to cease work has been given.

9.0 Guarantee

The Bidder shall guarantee his materials and workmanship against defect due to faulty materials, faulty workmanship, or negligence for a period of one (1) full year from date of energization and/or eighteen (18) months from date of delivery, whichever applies. He shall make good such defective materials or workmanship and any damages resulting therefrom without cost to the Owner. Each class of equipment shall carry a full one (1) year warranty against defects from the date of energization.

10.0 Change In Drawings and/or Specifications

The Owner, or the Engineer on behalf of the Owner, may make changes to Drawings and/or Specifications after award of the Purchase Order or while fabrication is in progress. The compensation for such changes shall be agreed upon in writing between the Bidder and the Owner prior to commencement of work involving the change. No payment shall be made to the Bidder for correcting work not in compliance with Specifications.

GENERAL TERMS & CONDITIONS

- 1. 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. AVAILABILITY OF FUNDS:** 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. SITUS AND GOVERNING LAWS:** 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. CONDITION AND PACKAGING:** 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. TERMINATION FOR CONVENIENCE:** 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. ADVERTISING:** 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. ASSIGNMENT:** 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. INSURANCE:** Contractor agrees to maintain **Commercial General Liability** in amount of \$1,000,000 each occurrence, \$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. SUBCONTRACTING:** 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. CARE OF PROPERTY: 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. OUTSOURCING: 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. COMPLIANCE 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. ELECTRONIC RECORDS: 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. **SOVEREIGN IMMUNITY:** 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.

FORM OF PROPOSAL

Terms and Conditions

Bid Schedule

Affidavit of Bidder

Form of Exceptions

Bid Bond

Addenda / Clarifications / Bulletins

**CITY OF ROCKY MOUNT
ROCKY MOUNT, NORTH CAROLINA**

**SPECIFICATIONS AND BID DOCUMENTS FOR
230kV CIRCUIT SWITCHER FOR THE
SOUTH POD SUBSTATION
ROCKY MOUNT, NORTH CAROLINA**

FORM OF PROPOSAL

(Provide one original and one copy)

Respectfully submitted this ____ day of _____, 2021

OWNER:	BIDDER:	
City of Rocky Mount 331 South Franklin Street Rocky Mount, NC 27804 PO Box 1180 Rocky Mount, NC 27802-1180 Ms. Ramona Plemmer Purchasing Agent Phone: (252) 972-1228 Fax: (252) 972-1662 ramona.plemmer@rockymountnc.gov		
	NAME	TITLE
	STREET ADDRESS	
	CITY/STATE/ZIP	
	PHONE:	
	FAX:	
	E-MAIL:	
	SIGNATURE	
SUPPLIER OF PROPOSED EQUIPMENT		
MANUFACTURER		
STREET ADDRESS		
CITY / STATE / ZIP		

TERMS AND CONDITIONS

1. The undersigned (hereinafter called the "Bidder") hereby proposes to sell and deliver to the Owner upon the terms and conditions herein stated, the materials, equipment, and services (hereinafter called the "Material") specified in the Bid Schedule(s) attached hereto, and by this reference made a part hereof, for the Materials for the Owner, and:
 - a. These bid documents that include *Notice to Prospective Bidders*, *Instructions to Bidders*, *General Conditions*, and *Technical Specifications* for the circuit switcher(s).
 - b. Manufacturer's Specifications, both as set forth herein and in Manufacturer's literature (two (2) sets) attached hereto or furnished separately as provided for in the *Instructions to Bidders*.
 - c. Legal negotiations, with low Bidder only, after bids are opened, for budgetary compliance.
2. The prices as quoted herein:
 - a. Are firm unless otherwise stated,
 - b. Are FOB to the location(s), as outlined in the *Instructions to Bidders*,
 - c. Do include the cost of delivery to the site at the Bidder's Risk, assuming unloading by Others, and
 - d. Have state sales tax shown as a separate item, if applicable.
3. The Material prices set forth herein do not include any sums which are or may be payable by the Bidder on account of State Sales Tax upon the sale, purchase or use of the Material. If any such tax is applicable to the sale, purchase or use of the Material hereunder, the amount thereof shall be added to the purchase price and paid by the Owner after the Bidder has ascertained the actual sales tax to be included in the Purchase Order price.
4. Invoice shall list the appropriate state sales tax as a separate item.
5. The Bidder further declares that he has examined the site of the work and informed himself fully regarding all conditions pertaining to the location where the Material is to be delivered; that he has examined the *Technical Specifications* for the work and bid documents relative thereto; has read all special provisions furnished prior to the opening of the bids; and that he has satisfied himself relative to the work to be performed.
6. The Bidder proposes and agrees if the following Bid Schedule(s) in this Proposal is accepted, to contract with the Owner, in the form of a Purchase Order specified, to furnish all necessary equipment and Materials, except Materials and equipment specified to be furnished by the Owner, complete in accordance with the bid documents, to the full and entire satisfaction of the Owner, with a definite understanding that no money will be allowed for extra work except as set forth in the *General Conditions*, and as filed on Change Order Forms.
7. The Owner may accept any schedule or portion thereof.
8. A *Form of Exceptions* to the *Technical Specifications*, prepared in accordance with the *Instructions to Bidders*, is attached hereto. The Bidder shall document any exceptions with deviation from the bid documents and Specifications in the *Form of Proposal*. Otherwise, the complete compliance is assumed.
9. Proposals shall include a complete Bill of Materials, identifying each item by catalog number, Manufacturer, ratings, characteristics, types, sizes, etc., of all Materials and equipment required for a complete and coordinated substation. A simple statement that all necessary Materials and equipment will be provided is not acceptable.
10. The Bidder warrants the accuracy of all statements contained in the Bidders Qualifications, if any shall be submitted, and agrees that the Owner shall rely upon such accuracy as a condition of the Purchase Order in the event that this Proposal is accepted.
11. Title to the Materials shall pass to the Owner upon delivery.
12. The Bidder warrants that the Materials will conform to the performance data and guarantees which are attached hereto and by this reference made a part thereof.

13. The Bidder warrants the accuracy of all statements contained in the Bidder's Qualifications and agrees that the Owner will rely upon such accuracy as a condition of the award of Purchase Order in the event that this Proposal is accepted.
14. By the submission of this bid, the Bidder certifies that:
 - a. The bid has been arrived at by the Bidder independently and has been submitted without collusion with any other Bidder of Materials, supplies, or equipment of the type described in the *Notice to Prospective Bidders* or the *Technical Specifications*, and
 - b. The contents of the bid have not been communicated by the Bidder, nor, to its best knowledge and belief, by any of its employees or agents, to any person not an employee or agent of the Bidder or its Surety on any Bond furnished herewith and will not be communicated to any person prior to the official opening of the bid.
15. The Bidder further agrees that in case of failure on his part to accept said Purchase Order within ten (10) consecutive calendar days after written notice has been given of the award of the Purchase Order, the Bid Security accompanying this bid, and the monies payable thereon, shall be paid into the funds of the Owner account set aside for this project, as Liquidated Damages for such failure; otherwise the check or cash accompanying the *Form of Proposal* shall be returned to the Bidder.
16. If, in submitting this Proposal, the Bidder has made any change in the *Form of Proposal*, the Bidder understands that the Owner may evaluate the effect of such change as they see fit or they may exclude the Proposal from consideration in determining the issue of Purchase Order.

BID SCHEDULES

**230kV CIRCUIT SWITCHER FOR
SOUTH POD SUBSTATION**

BID SCHEDULE NO. 1 – Base Bid

<u>Description</u>	<u>Quantity</u>	<u>Total Cost</u>
Power Circuit Switcher rated 230kV nominal, 1,200 amperes continuous current carrying capacity at 60 Hertz with a minimum of 20,000 amperes symmetrical interrupting rating, furnished with current transformers, all as per Specification and attached Data Sheet, delivered to site by March 1, 2022.	1	\$
Delivery Charge	1	\$
Sales Tax (if applicable)	1	\$
	BASE BID:	\$

Manufacturer _____ Type _____

BID SCHEDULE NO. 1 – Delivery Schedule

Instructions to Bidders, 6. Shipment and Delivery

The prices of the Materials and equipment set forth herein shall include the cost of delivery to the site at the Bidder's risk. The time of delivery shall be as follows:

	<u>Delivery (Days)*</u>
Approval Drawings**	_____
Final Drawings	_____
Delivery of Material	_____

- * Number of consecutive calendar days after receipt of written order from the Owner.
- ** Allow two (2) weeks for receipt and return of Approval Drawings.

BID SCHEDULE NO. 1 – Field Service Engineering (Per Day Rate)

Per Day Rate (including expenses) for field service engineering, including all necessary Testing Supplies \$ _____/Day

Rate per one round trip (including expenses) to the site: \$ _____/Day

AFFIDAVIT OF BIDDER

The final payment of retained amount due the Bidder on account of the Purchase Order shall not become due until the Bidder has furnished to the Owner through the Engineer an affidavit signed, sworn, and notarized to the effect that all payments for Material, services, or any other reason in connection with this Purchase Order have been satisfied and that no claims or liens exist against the Bidder in connection with this Purchase Order. In the event that the Bidder cannot obtain similar affidavits from Subcontractors to protect the Bidder and the Owner from possible liens or claims against the Subcontractor, the Bidder shall state in his affidavit that no claims or liens exist against any Subcontractor, and if any liens or claims appear afterward, the Bidder shall save the Owner harmless on account thereof.

Bidder: _____

By: _____

Date: _____

FORM OF EXCEPTIONS

Instructions to Bidders, Paragraph 2.6 and Section 7. Award of Contract

BIDDER: _____
CITY OF ROCKY MOUNT
OWNER: _____
ROCKY MOUNT, NORTH CAROLINA
PROJECT DESCRIPTION: _____
230kV CIRCUIT SWITCHER FOR THE
SOUTH POD SUBSTATION

INSTRUCTIONS: The following is a list of exceptions to the bid documents and/or *Technical Specifications* pertaining to the furnishing of the subject Materials. Bidders shall identify each exception by Specification page and paragraph number on this form. The omission of exception implies complete compliance with Plans and Specifications.

**BID DOCUMENT/
SPECIFICATION
PAGE NO. AND
PARAGRAPH**

EXCEPTION/VARIATION

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
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_____	_____

BID BOND

KNOW ALL MEN BY THESE PRESENT, THAT WE _____
_____ as
Principal, and _____
as Surety, who is duly licensed to act as Surety in North Carolina, are held and firmly bound unto the City of
Rocky Mount of Rocky Mount, North Carolina, as Obligee, in the penal sum of _____
_____ DOLLARS (\$_____) (10% Bid Bond), lawful
money of the United States of America, for the payment of which, well and truly to be made, we bind ourselves,
our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these present.

SIGNED, Sealed and dated this _____ day of _____, 2021.

WHEREAS, the said Principal is herewith submitting a Proposal for
230kV CIRCUIT SWITCHER FOR THE SOUTH POD SUBSTATION

and the Principal desires to file this Bid Bond in lieu of making the cash deposit as required by the bidding documents contained herein;

NOW, THEREFORE, THE CONDITION OF THE ABOVE OBLIGATION is such that if the principal shall be awarded the Purchase Order for which the bid is submitted and shall accept the Purchase Order within ten (10) days after the award of same to the principal, then this obligation shall be null and void; but if the principal fails to so accept such Purchase Order as required by the bidding documents contained herein, the Surety shall, upon demand, forthwith pay to the Obligee the amount set forth in the first paragraph hereof, and upon failure to forthwith make such payment, the Surety shall pay the Obligee an amount equal to double the amount of this Bid Bond as set forth in the first paragraph hereof. Power of Attorney from the Surety to its Attorney-in-Fact is attached hereto.

Principal

By _____(SEAL)

Corporate Surety

By _____(SEAL)

INSERT

ADDENDA / CLARIFICATIONS / BULLETINS

Instructions to Bidders, 5. Bulletins and Addenda

TECHNICAL SPECIFICATIONS

**CITY OF ROCKY MOUNT
ROCKY MOUNT, NORTH CAROLINA**

**SPECIFICATIONS AND BID DOCUMENTS FOR
230kV CIRCUIT SWITCHER FOR THE
SOUTH POD SUBSTATION
ROCKY MOUNT, NORTH CAROLINA**

TECHNICAL SPECIFICATIONS

1.0 Scope

- 1.1 The Owner is procuring one (1) circuit switcher for installation into the 230kV South POD Substation. Bids will be received on one (1) schedule for the purchase of one (1) 230kV, 1200-amp power circuit switcher to be operated at 230kV.
- 1.2 The Bidder's work shall include furnishing the circuit switcher so represented in these *Technical Specifications*, and as set forth in the Bid Schedule(s) and attached Data Sheet. The Owner reserves the right to select any combination of alternate schedules as may be allowed. The Owner also reserves the right to reject any or all bids.

2.0 General Conditions

- 2.1 All materials and equipment shall be new, manufactured in the United States or Mexico.
- 2.2 These Specifications and Data Sheet describe the type, size, and characteristics of the various materials and equipment required to be furnished.
- 2.3 Strict adherence to these general Specifications is requested to facilitate checking and consideration of the Proposal.
- 2.4 It is the intent of these Specifications that the circuit switcher shall be complete and fully operable. Any details not mentioned in the Specifications but required for satisfactory operation shall be furnished and installed by the Bidder.
- 2.5 Station power and control DC voltage at the substation will be located on the attached Data Sheet. The equipment on the circuit switcher shall coordinate with these voltages as appropriate.
- 2.6 Where a Manufacturer's name and type of equipment is indicated in these Specifications, it is for clarity and the establishment of a standard and is not restrictive.
- 2.7 The power circuit switcher shall be suitable for outdoor operation and shall be live tank, three-pole, single throw. The circuit switcher shall consist of an outdoor tank, frame-mounted power circuit interrupter and integrated Motor Operated Air Break Switch having a weatherproof mechanism and relay cabinet with hinged panel containing the control wiring.

3.0 Special Conditions

3.1 Defective Materials, Equipment, and Workmanship

- 3.1.1 All materials and equipment furnished hereunder shall be subject to the inspection, tests, and approval of the Owner; and the Bidder shall furnish all information required concerning the nature or source of any materials and equipment and provide adequate facilities for testing and inspecting the materials and equipment at the plant of the Bidder.
- 3.1.2 The materials and equipment furnished hereunder shall become the property of the Owner when delivered at the point to which shipment is to be made; provided, however, that the Owner may reject any such materials and equipment as does not comply with the Specifications for materials and equipment and warranties of the Bidder 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

(1) year of date of delivery of the materials and equipment. Upon any such rejection, the Bidder shall replace the rejected materials and equipment with materials and equipment complying with the Specifications for materials and equipment and warranties FOB open-top truck or open trailer at suitable destination as determined by the Owner. The Owner shall return the rejected materials FOB open-top truck or open trailer at the same destination. In the event of the failure of the Bidder to so replace rejected materials and equipment, the Owner may make such replacement; and the cost and expense thereof shall be paid by and be recoverable from the Bidder.

3.1.3 The Circuit Switcher to be provided herein shall include a full warranty on the complete units together with all parts. The warranty shall extend for not less than twelve (12) months from the date of initial energization and up to eighteen (18) months from date of delivery, whichever is applicable.

4.0 Standards

4.1 All equipment and materials covered by these Specifications shall be in accordance with the applicable provisions of the latest editions of the Standards of the ASTM, ANSI, NEMA, IEEE, OSHA and latest revision of the NESC. Where a Manufacturer's name and type of equipment is indicated in the Specifications, it is for clarity and the establishment of a standard and is not restrictive unless use of an approved equal is specifically mentioned.

4.2 The Bidder may offer alternate pricing for equivalent items by other Manufacturers. However, **all** base bids must explicitly comply with the designated materials specified herein. The Owner may elect to purchase alternates, as proposed by the Bidder. The alternate materials are subject to review and approval by the Owner's Engineer.

5.0 Drawings and Documentation

5.1 Preliminary Drawings

Before proceeding with fabrication, the Manufacturer shall submit for approval to the Owner sufficient Drawings to demonstrate that all parts conform to the requirements and intent of these Specifications. The Drawings shall include Interrupter, Gang Switch Arrangement, Operator, Equipment Outlines, Elementary and Connection (Control Wiring) Diagrams. The Drawings shall be submitted electronically to the contact listed on the attached Data Sheet. The Drawings shall be compatible with AutoCAD® 2018. If the Bidder elects to submit paper copies in lieu of electronic copies, they shall submit four (4) copies of each drawing. All Drawings submitted shall be a minimum of a "D" (24" x 36") size print. Submittal of Drawings smaller than "D" size will be immediately returned stamped "not approved" and proper size Drawing will have to be submitted. All Drawings shall be dimensioned in feet and inches; metric measurements alone will not be acceptable. However, dual dimensioning in feet and inches and centimeters will be acceptable.

5.2 Approval Drawings

Receipt of "Approval Drawings" by the Bidder constitutes authorization for manufacture predicated upon the Drawings and corrections found thereon.

5.3 Design and Fabrication Drawings

The Outline Drawing shall show dimensions of equipment, including bushings, base anchor dimensions, conduit entrance panel location, and all other important external features. These Drawings shall show weights, vertical and horizontal dimensions, bushing catalog numbers and ampere ratings, description of top bushing terminals, and arrangement of all external accessory devices, as well as the complete interrupter rating. Cut sheets and catalog descriptive bulletins shall be submitted for any components of the circuit switcher, along with the Drawings for review.

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

- 5.5 The Owner or its Engineer may require a second submittal of Shop Drawings if, in the opinion of the Owner or its Engineer, such is required due to the extent of changes required on the first submittal. If an extension of time is required due to a protracted drawing approval process, the price will remain as quoted for the quoted delivery.
- 5.6 All Drawings shall have marked on each sheet or group of sheets which always remain together, a label that shall match the "Drawing Stamp" on the attached Data Sheet.
- 5.7 The Manufacturer shall submit with the preliminary Drawings all information needed to design an adequate foundation for the Pedestal, including the exact positioning and size of anchor bolts.
- 5.8 Final Drawings

Contingent upon Approval Drawing review and product manufacture, the Bidder shall issue final documentation as follows:

- 5.8.1 One (1) complete set of all Drawings revised to "as-built" status, released on paper.
- 5.8.2 Two (2) complete sets of all Drawings, revised to "as-built" status, released on two (2) separate USB's, compatible with AutoCAD® 2018. Product manuals, leaflets, CT curves, etc. shall be provided on the same USB in Adobe (.pdf) format. USB's shall contain .pdf copies of certified test reports as well.
- 5.8.3 Two (2) copies of applicable instruction books, including one (1) print each of all Drawings representing physical and electric details.
- 5.8.4 Two (2) copies of certified test reports corresponding to functional performance measurements after final assembly.
- 5.8.5 All Drawings are to be certified correct and supplied within a reasonable length of time prior to shipment of the equipment. Each set of Drawings and documentation shall include the following information:
- 1) Outline and Assembly Drawings showing size and location of major components and all principal dimensions.
 - 2) Control and relay panel front view.
 - 3) Details of terminal connectors.
 - 4) Details of control cabinet.
 - 5) Panel connection diagram showing exact connection for all components furnished.
 - 6) AC and DC elementary circuit diagrams for all relay and control equipment furnished.
 - 7) Wiring control and schematic diagrams.
 - 8) Instruction books.
 - 9) Renewal parts catalog.
- 5.8.6 All Drawings and documentation are to be forwarded to Booth & Associates, LLC, 5811 Glenwood Avenue, Suite 109, Raleigh, North Carolina 27612, to the attention of the contact on the attached Data Sheet.

6.0 Manufacturer's Field Representative

- 6.1 The Manufacturer shall provide as an adder price, the services of a Field Service Engineer for a period of one (1) day. Additional time required shall be provided at the per-day rate quoted in the *Form of Proposal*.
- 6.2 Services provided by the Field Engineer shall include all pre-service inspection procedures outlined in the Manufacturer's literature, circuit switcher inspection before unloading at the site or as requested by the Owner, supervision of installation of component parts including

bushings, and testing of the circuit switcher operations and controls. The Field Service Engineer shall give approval for energizing the circuit switcher. The Field Service Engineer shall also provide training to the Owner's maintenance personnel during checkout of the circuit switcher.

- 6.3 The Field Service Engineer will also be required by the Owner to perform a series of tests including high potential testing of interrupters, circuit switcher mechanism travel, and synchronization of group operation. The Owner shall specify those tests desired in addition to standard pre-service inspection procedures not listed above.

7.0 Power Circuit Switcher

7.1 Ratings

- 7.1.1 The Power Circuit Switcher shall be rated as per the attached Data Sheet.
- 7.1.2 The Circuit Switcher shall be designed to withstand seismic events for the applicable seismic zone according to IEEE 693 "Recommended Practice for Seismic Design of Substations" to the extent that a force applied in the direction of least resistance to that loading will not cause the interrupter tank(s), cover, frame, bushings, control cabinet, contact assembly, or fastenings to be overstressed.
- 7.1.3 The Circuit Switcher shall be suitable for operation at an ambient temperature of -30°C (22°F). Maximum ambient temperature rating shall be 50°C (122°F). Humidity rating shall be up to 100 percent.
- 7.1.4 The Circuit Switcher will be installed at an altitude as shown on attached Data Sheet.
- 7.1.5 The Circuit Switcher shall be designed to withstand wind loading of 90 mph with 120 mph gusts and ice loading up to 0.75 inches.
- 7.1.6 The completely assembled Circuit Switcher and all other appurtenances shall be designed and tested to withstand voltages in accordance with ANSI/IEEE C37.06, Table 4, latest edition, and as shown in the attached Data Sheet. The interrupter shall be able to withstand tabulated values without puncture or flashover with contacts either closed or fully open:
- 7.1.7 The Circuit Switcher shall have standard interrupting capacities as listed in the attached Data Sheet for each schedule.
- 7.1.8 The Circuit Switcher shall interrupt the arc within six (6) cycles or less measured from the instant the trip coil is energized with normal voltage. Six (6) cycles or less interruption shall be achieved over a range of 25 percent to 100 percent of rated interrupting capacity.

7.2 Details

- 7.2.1 The structural features of the circuit switcher shall meet the requirements of Section 8 of ANSI C37.12, latest revision, including the rated short-circuit current and seismic events as described in these Specifications.
- 7.2.2 Original and renewal parts shall be so manufactured that they can be assembled in the field without undo fitting.
- 7.2.3 The main interrupter contacts shall be designed to have adequate thermal and current-carrying capacity for carrying full-rated current without exceeding the allowable temperature rise as specified in ANSI C37. They shall be designed to have long life so that frequent replacement or maintenance will be unnecessary. The surfaces of either or both moving and stationary arcing contacts which are exposed directly to the arc shall be faced with suitable arc-resisting material.
- 7.2.4 All surfaces of steel parts (framework, tank, etc.) shall be cleaned in accordance with the Bidder's standards to remove dirt, scale, and grease prior to painting or galvanizing. This shall be immediately followed by an application of priming of rust-

inhibitive paint and the necessary base coat or the galvanization process. All steel surfaces shall have a minimum of 3 mils of paint or hot dipped galvanized.

- 7.2.5 The exterior surfaces of all bolts, nuts, and washers shall be primed and painted as above, or such parts shall be stainless steel or galvanized. No exposed cadmium-plated parts or zinc chromate-plated parts will be allowed.
- 7.2.6 Color specification shall be ANSI #70 light grey.
- 7.2.7 There shall be viewing windows for annunciator, open/close mechanism, and anything else determined by the Manufacturer. All viewing windows for viewing gauges, relays, and indicators shall be Lexan.
- 7.2.8 One (1) painted or galvanized, welded steel supporting framework with two (2) ground terminals for bonding. The connections are to be located on diagonally opposite corners at the bottom of the frame with NEMA 2-hole (one and three-fourths inch (1-3/4") spacing) and mounted with one-half inch (1/2") - 13 NC thread bolts.
- 7.2.9 The terminal connectors shall be rated for the bushing continuous current capacity.
- 7.2.10 Insulators and enclosures shall be light gray, constructed of high-strength wet-process porcelain, and rated at Full-Wave withstand BIL.
- 7.2.11 All metal cabinets attached to the pedestal shall be solidly grounded to the frame.
- 7.2.12 The circuit switcher shall be completely assembled, wired, adjusted, and tested at the factory before shipment.
- 7.2.13 The interrupter shall be designed so that no gas-handling service trailer or gas-recovery facilities are required, and so that no SF₆ seals will have to be made in the field. However, it shall be permissible for the interrupter to be brought up to final pressure in the field by use of a gas cylinder furnished by the Bidder.

7.3 Operating Mechanisms

- 7.3.1 7.3.1 The operating mechanism shall consist of a high-speed electrically trip-free and mechanically trip-free magnetic or charged spring-operated device. The mechanism shall operate to open the three phases of the interrupter simultaneously. The operating mechanism shall not permit tripping from any position except fully closed. In the event that any pole of the interrupter fails to close, the mechanism shall operate to trip all poles.
- 7.3.2 The stored energy mechanism shall be capable of at least one open operation. The time for the motor to recharge the mechanism shall not exceed ten (10) seconds.
- 7.3.3 The Circuit Switcher shall be equipped for DC tripping and closing. Two (2) separate and independent trip coils (or set of coils) shall be furnished so the circuit switcher can be tripped independently from two separate and independent relaying sources. The trip coils and all necessary circuits, including pressure switches and reset devices, shall be provided on the mechanism. Tripping current shall not exceed 20 amperes.
- 7.3.4 Each tripping circuit shall operate satisfactorily over a voltage range of 60% to 115% of nominal DC voltage. Where more than one trip coil is furnished on each trip for primary relaying and/or back-up relaying, the trip coils associated with the same tripping circuit shall be series connected. Parallel connection is not acceptable.
- 7.3.5 Operating mechanism auxiliary switches of the rotary type shall be mechanically coupled to the mechanism providing a positive indication of the position of the main contacts of the interrupter and a separate auxiliary switch for the integrated power switch. Each operating mechanism shall be equipped with an eight-stage auxiliary switch with contacts for customer use only in addition to those normally required for circuit switcher operation and light indication functions.
- 7.3.6 A Veeder-Root type operation counter, visible from outside of mechanism housing shall be provided.

- 7.3.7 Emergency trip control, mechanically linked to mechanism trip latch shall be provided. The manual trip lever shall be externally accessible to operating personnel and upon operation, shall set an interlock (69) to block electrical closing. The interlock shall be manual reset only.
- 7.3.8 Mounting facilities for application of a time travel device and instructions for timing of the circuit switcher shall be furnished with the circuit switcher.

7.4 Gas Insulation and Interruption Systems

- 7.4.1 The interrupter, if closed, shall remain closed and locked and provide an alarm if the air or gas pressure should decrease to the point where the interrupter is not capable of a successful operation at rated interrupting capabilities. If open, the interrupter shall lock open and provide an alarm. The detection schemes for these air and/or gas pressure conditions shall be failsafe. Each trip coil shall have independent pressure sensing and relaying to provide the stated features.
- 7.4.2 The interrupter shall be provided with a means of maintaining the appropriate dryness and pressure of the dielectric gas.
- 7.4.3 A gas pressure manifold valve assembly shall be provided and shall be easily accessible for routine maintenance checks.
- 7.4.4 Air and gas valves and connections shall be furnished to permit unit servicing as far as practical. Bidder shall verify with the customer before construction.
- 7.4.5 All tubing used for SF₆ gas-pressure monitoring and for air pressure from the air compressor discharge outlet to the rest of the air system shall be stainless steel. Copper tubing is not acceptable.

7.5 Mechanism Housing and Cabinet

- 7.5.1 The mechanism housing and cabinet shall be furnished and mounted on a central pedestal. The centerline of the mechanism housing shall not exceed sixty inches (60") above grade level.
- 7.5.2 The mechanism housing, cabinet, and cabinet door(s) shall be weatherproof and fabricated of sheet metal of sufficient thickness to prevent warping or buckling. The cabinet door(s) shall be vertically hinged and arranged to permit ready access to the inside of the cabinet housing. A continuous stainless-steel hinge shall be used on cabinet door(s) or sufficient reinforcement of cabinet door(s) must be provided to prevent warping and buckling of door hinge side. The door shall have a cabinet-type 3-point latching device with a locking device in the closed position and shall include provisions for attaching a padlock with a 3/8-inch shackle diameter to the locking device. All doors shall open wide (135°), giving full access to interiors. The mechanism housing may be in a separate compartment with bolted covers, which can be removed and replaced without undue difficulty.
- 7.5.3 The cabinet shall be provided with a removable plate in the bottom for conduit entrances (to be drilled by others).
- 7.5.4 One (1) or more AC heaters for continuous operation shall be furnished to prevent moisture condensation in the cabinet and housing. Additional heaters with thermostatic control shall be provided to maintain normal operation of the cabinet and housing at air temperature to -30°C (-22°F). All heaters shall be equipped with guards, and the AC electric terminals of the heaters shall also be covered.
- 7.5.5 A holder shall be furnished and mounted on the inside of the cabinet to store the Final Drawings and instruction book.
- 7.5.6 Convenience 120-volt GFCI receptacles and lamps shall be provided in the main cabinets, complete with fuses or equivalent. Light shall have door switch and shall be protected by a guard.
- 7.5.7 The control panel shall be dead front with all switches, breakers, etc., enclosed.

7.6 Wiring

All power wiring shall be made with #10 AWG tinned copper wire or larger sized wire. The primary insulation jacket of all wiring shall be 600-volt; 90°C; and water, oil, and flame resistant. Control wiring shall be 41 or 65 stranded cable, Type SIS, and not smaller in size than #14 AWG tinned copper wire, with the exception that wiring to alarm auxiliary relays and indicating lights may be smaller in size. All current transformer leads are to be #10 AWG tinned copper or larger in size.

- 7.6.1 Power wiring shall be sized as required in accordance with the National Electrical Code.
- 7.6.2 All wires shall be identified at each end with legible permanent labels depicting termination location at opposite end.
- 7.6.3 Wiring connections between fixed and hinged sections shall be minimum 41-strand, flexible wire.
- 7.6.4 Seven-stranded control wire is not acceptable.
- 7.6.5 All terminal connections for conductor sizes #10 AWG and smaller shall be made with pre-insulated, full ring tongue, crimp-type lugs. Lugs shall be AMP, Inc. "Pre-Insulated Diamond-Grip" (PIDG) with nylon sleeves. Spade-type terminals or slip-on connectors are not acceptable.
- 7.6.6 For Phoenix type terminals: All wiring shall be connected using pre-insulated, closed barrel, blade-type terminals: bare, stranded wire shall not be inserted into Phoenix terminals.
- 7.6.7 All terminal connections for conductors sizes #2 AWG through #9 AWG shall be made with Burndy Insulug Type YAEV.
- 7.6.8 All terminal connections for conductor sizes larger than #2 AWG shall be made with two-hole, long-barrel, double-indent crimp-type lugs; Burndy Hylug Type YA. (Single-hole lugs may be used only where necessary.)
- 7.6.9 High-temperature insulated wire shall be used for connections to heaters.
- 7.6.10 Grommets shall be provided for all openings in metal barriers used for wiring.
- 7.6.11 Uninsulated exposed conductor or terminal lug shall not extend beyond the sides of the terminal block or its insulating barriers.
- 7.6.12 All leads for multi-ratio current transformers shall be wired to shorting-type terminal blocks in the control cabinet. If junction boxes are required in wiring between current transformer and control cabinet, terminal blocks or splicing sleeves shall be used for wiring connections. In-line type disconnecting terminals such as American Petroleum Institute (API) No. 32448 or Burndy No. YZ10 will not be acceptable.
- 7.6.13 All current transformer shorting blocks shall have the sixth position grounded and bonded to the shorting rail.
- 7.6.14 If accidental short circuiting of certain wires can result in malfunction of equipment such as closing or tripping of the circuit switcher, these wires shall not be terminated on adjacent terminal block points.
- 7.6.15 All wiring shall be neat and orderly.
- 7.6.16 The close circuit shall be wired out to two (2) terminal block points to provide external blocking of any close function with contact from the substation lockout relay. These two points shall have a field removable jumper.
- 7.6.17 The close circuit shall be wired out to two (2) terminal block points to provide external closing from the customer's controls.
- 7.6.18 Each trip circuit shall be wired out to two (2) terminal block points to provide external tripping from the customer's protective relays and controls.

- 7.6.19 No more than two (2) wires per terminal point are permissible.
- 7.6.20 The control cabinet shall be equipped with a ground bar. All components including but not limited to CT shorting blocks, case, door, back panel, AC receptacles shall be bonded to ground bus bar.

7.7 Terminal Blocks and Fuseholders

- 7.7.1 Molded-type terminal blocks, rated 600 volt, 30 amperes, for all control connections shall be provided. Terminal blocks with self-contained pressure-type connectors are not acceptable.
- 7.7.2 General Electric Type EB-25 or Marathon Type 1500 STD terminal blocks shall be provided furnished with white marking strips for identification of terminal wires for all connections except current transformer. Modular assembly style terminal blocks are not acceptable.
- 7.7.3 General Electric Type EB-1 or Marathon Catalog No. 1422123 power terminal blocks shall be provided for landing of Owner's single-phase, 3-wire, 240/120-volt AC control power leads and DC control power leads.
- 7.7.4 A minimum of 15 percent spare (but not less than 12 points) terminal points shall be provided in the mechanism housing and cabinet. These terminal points shall be furnished with all connection hardware.
- 7.7.5 A single-throw disconnect switch shall be installed on all fuseholders or incorporated into the fuseholder itself. If separate fuseholders are to be utilized then fuseholders shall be Marathon RF30AXS (X = 2 for 2 poles, 3 for 3 poles, etc.) series fuseblocks with hard-gripping fuse clips (reinforcing member) and straight slotted silicon bronze screws on each terminal, or approved equivalent.

7.8 Nameplates

- 7.8.1 Nameplates and their mounting screws shall be of noncorrosive metal and mounted in positions where they can be safely and easily read with the equipment in service.
- 7.8.2 All relays, switches, contactors, starters, and other devices shall be identified by nameplates.

7.9 Interrupter Position Indicators

- 7.9.1 Mechanical-type interrupter position indicators, positive as far as practical, shall indicate open and closed positions of the circuit switcher; shall be clearly visible from the ground at reasonable distances; and shall not require opening of doors or special lighting. These shall be independent of control voltage.
- 7.9.2 Indicator position indicators shall be supplemented with LED indicating lamps operating on DC control voltage. Lamps shall be applied as follows:
 - a. One green lamp to indicate that all three poles are open. This lamp shall be connected in the DC close circuit. The lamp(s) shall be located in the control cabinet.
 - b. One red lamp to monitor each trip circuit coil and to indicate that any interrupter pole is in the closed position. This lamp shall be connected in the DC trip circuit. The lamp(s) shall be located in the control cabinet.

7.10 Terminal Connectors

Tin-plated terminal connectors, NEMA 4-hole spade type, shall be furnished with the Circuit Switcher. They shall be adequately shielded and corona free.

7.11 Pressure Switches

- 7.11.1 Devices for all uses, air and gases, for automatic control of pressure, for alarms, and for safeguard cutoffs, shall be of highest quality and proven reliability.

- 7.11.2 Contacts, ungrounded, shall be fully insulated and compatible with their associated equipment; those used in DC control circuits shall be suitable for the specified control voltage and shall withstand the full standard AC hi-pot test voltage required of switchboard control wiring.
- 7.11.3 All pressure switches shall have multiple electrically independent contacts and shall be furnished as needed:
 - a. To alarm when pressure drops too low to permit full duty cycle operation.
 - b. To cut off closing if pressure is insufficient for safe and satisfactory closing.
 - c. A gas pressure manifold valve assembly shall be provided and shall be easily accessible for routine maintenance checks of pressure switches.
 - d. All pressure switches shall have dust covers.
 - e. All switch gauges shall have indicating dials.

7.12 Main Pole Interconnection and Adjustment

- 7.12.1 The main poles of the Circuit Switcher shall be mechanically interlocked. The design and arrangement shall be such that the interrupting contacts may be readily adjusted to touch and to part essentially simultaneously; and other adjustments may be made as are necessary for the proper operation of the circuit switcher.
- 7.12.2 The above requirement for adjustability will not be necessary if proper settings are fixed as part of the manufacturing process and not subject to drifting from the proper points.

7.13 Auxiliary Equipment and Accessories

- 7.13.1 The Circuit Switcher shall be equipped with an operation counter.
- 7.13.2 Auxiliary relays shall be provided for loss of voltage on all AC and DC circuits; low SF₆ pressure; and for blocking of tripping or closing of the interrupter.
- 7.13.3 Auxiliary relays, which perform either a trip or close, start-or-stop function, shall not be mounted on a hinged panel or door. All auxiliary relays shall have dust covers.
- 7.13.4 All alarm contacts shall be suitable for stated control voltage, with separate wiring from each device to terminal blocks in control cabinet.
- 7.13.5 Motors shall have voltage as indicated on attached Data Sheet. They shall be drip-proof, with Class B insulation. They shall have sufficient capacity for all conditions of starting and continuous operation which their pump or compressor may impose, with temperature rise not to exceed 90°C above an ambient of 40°C and a service factor of 1.15. Each motor shall be equipped with its own thermal protection.
- 7.13.6 Twenty (20) stage convertible auxiliary switch, directly connected to the main operating linkage. This switch shall be made consistent with the requirements of these Specifications.
- 7.13.7 All necessary SF₆ gas service connection fittings shall be provided for each interrupter provided.
- 7.13.8 Gas vent, as required, shall be provided.
- 7.13.9 Provision for travel recorder shall be included.

7.14 Piping and Conduit

Furnish all necessary individual storage tanks, piping, valves, and conduit for the complete assembly of the circuit switcher. Storage tanks required shall be manufactured to the requirements of the ASME Code Section VIII Division 1 and so stamped and registered with the National Board of Registration. Any safety and/or safety relief valves approved for service on these tanks shall also be constructed in compliance with the latest requirements of the ASME Boiler and Pressure Vessel

Code. These valves shall also be stamped and registered with the National Board of Registration.

7.15 Special Tools and Lifting Devices

- 7.15.1 Furnish a set of all special tools and hardware required for removal and maintenance of the Circuit Switcher.
- 7.15.2 Furnish any special lifting devices required for installation and or maintenance of the Circuit Switcher and/or their accessories.
- 7.15.3 Furnish lifting eyes and lugs for vertically lifting the equipment assembly.

8.0 Spare Parts

- 8.1.1 The Bidder shall furnish with the Proposal a recommended spare parts list and spare parts price list, applicable to the circuit switcher described in the Proposal. This list shall include, but is not limited to, the following:
 - a. Complete interrupter for one pole.
 - b. All pressure-limit switches, gauges, and alarm relays.
 - c. One close coil and one trip coil.
 - d. One of each of each type of electric motor.
 - e. Three each of each type of gasket.
 - f. One each of each type of relay coil.
 - g. One heater element.
- 8.1.2 The above requirements are for spare parts and prices in the Proposal, but it is not the intention of this Specification that these parts be furnished as part of the Purchase Order.

9.0 Tests

- 9.1 The tests shall be performed on the Circuit Switcher as a three-phase unit.
- 9.2 Production tests shall be performed on the Circuit Switcher and associated relays as required by present-day standards.
- 9.3 Design tests shall be conducted on the Circuit Switcher unless design tests have been conducted on a duplicate Circuit Switcher of previous manufacture.
- 9.4 Additional tests shall be conducted if not included in the production and design tests, as follows:
 - 9.4.1 Take operations data on the interrupter by means of a Doble breaker analyzer or a Honeywell Visicorder or equivalent, under normal gas and air pressure and control voltage to demonstrate compliance with this Specification and guaranteed values.
 - 9.4.2 Furnish charts showing:
 - a. Opening at normal voltage and pressure.
 - b. Opening at minimum voltage and pressure.
 - c. Closing at normal voltage and pressure.
 - d. Closing at minimum voltage and pressure.
 - e. Close and trip free at normal voltage and pressure.

- 9.5 Above data shall show contact travel against cycle (60-Hertz basis) and shall have the following points marked thereon if applicable:
- 9.5.1 Opening Operation
 - a. Trip coil energized
 - b. Air or gas blast starts
 - c. Main contacts part
 - d. Main contacts fully open
 - e. Air or gas blast stops
 - 9.5.2 Closing Operating
 - a. Closing coil energized
 - b. Main contacts touch
 - c. Main contacts fully closed
 - 9.5.3 Tank test - air or hydrostatic (ASME and State).
 - 9.5.4 Dielectric test on all control wiring and accessories.
 - 9.5.5 If the circuit switcher or any of their auxiliaries or accessories fails to pass the tests specified, additional tests shall be made to locate the failure. After rework or repair of the failure, the specified tests shall be repeated to ensure that the repaired circuit switcher, auxiliary, or accessories will meet the Specification in all respects.
 - 9.5.6 Rework or repair and retesting shall be done at Bidder's expense.
 - 9.5.7 Bidder shall keep a record of all failures detected during tests, of rework or repair required, and of test data taken after rework or repairs have been completed.
 - 9.5.8 Rework or repairs shall be made in accordance with an approved procedure signed by that party responsible to give in-process disposition of such rework or repairs.

APPENDICES

1. Circuit Switcher Data Sheet
2. Vicinity Map
3. MWBE Affidavits

1

Circuit Switcher Data Sheet

**CITY OF ROCKY MOUNT
CIRCUIT SWITCHER DATA SHEET
FOR
230 KV SOUTH POD SUBSTATION**

GENERAL:

S & C model 2010 circuit switcher with horizontal interrupters and vertical-break power-operated disconnect, rated 230 kV nominal, 242kV maximum, 900 KV BIL; 1,200 Amps continuous, 20kA fault interrupting; with 120" phase spacing.

Quantity to Supply: One (1)

Catalog #: 197031-A-H1-E14-K-M-T-T2-V-Y

- A: 48 VDC control voltage
- H1: 120 VAC space heater voltage
- E14: 168" mounting pedestals
(E14: 168", E16: 192", E18: 216", E20: 240")
- K: With space heater thermostat
- M: With red & green position-indicating lamps
- T: With trip circuit monitoring relay
- T2: With loss of control voltage relay
- V: With duplex GFCI receptacle and convenience light lamp holder
- Y: With Local/Remote switch

Include one (1) set of twelve (12) anchor bolts S-81365-1 with each unit.

All of the above materials are subject to approval of the Owner and the Engineer.

The seller shall submit two (2) copies of the equipment shop drawings, to the Engineer for review, within forty-five (45) days of award. One copy of these shop drawings will be returned within fifteen (15) days after submission, with the comments of the Engineer. The Engineer's address is:

Mr. Michael Winkler, PE
Booth & Associates, LLC
5811 Glenwood Avenue, Suite 109
Raleigh, NC 27612
919-851-8770
M.Winkler@booth-assoc.com

WARRANTY:

The manufacturer shall furnish a warranty that the circuit switcher and its equipment will be in accordance with these specifications and with the latest IEEE, ANSI, and NEMA standards.

SHIPMENT:

Shipment shall be FOB to **230 kV South POD Substation, 540 Old Mill Road, Rocky Mount, NC 27804**. Owner will provide for unloading of equipment by **scheduled appointment** only between 8:00 a.m. and 3:00 p.m. Monday - Thursday only. The Seller's responsibility for the shipping of this equipment shall terminate when the circuit switcher has been delivered to the site, off-loaded by Others, set on the foundation and assembled by Others to the satisfaction of the Owner.

Both the Owner and the Engineer shall be notified of the estimated delivery date at least **forty-eight hours before unit is shipped**.

DELIVERY:

Equipment shall be delivered to site **by March 1, 2022**.

Prior to Delivery:

Furnish four (4) sets of final prints for the equipment supplied.

Furnish one (1) copy of all drawings on USB in AutoCAD® 2018 compatible format.

Send one (1) set of final drawings and the USB to:

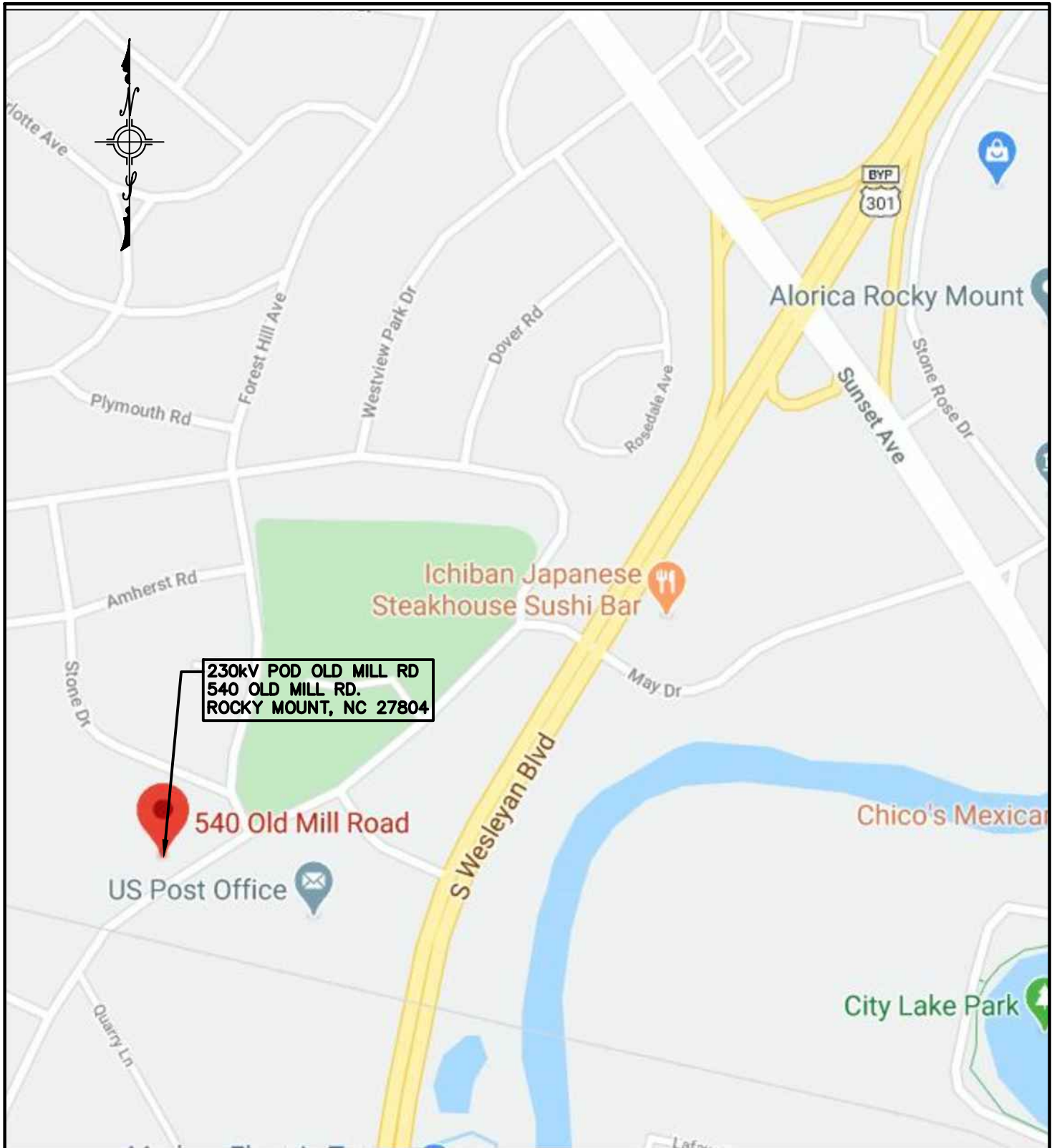
Mr. Michael Winkler, PE
Booth & Associates, LLC
5811 Glenwood Avenue, Suite 109
Raleigh, NC 27612
919-851-8770

Send three (3) sets of final drawings, instruction books, internal wiring diagrams, repair parts lists, etc. to:

Darryl Strother – Energy Resources
City of Rocky Mount
PO Box 1180 Rocky Mount, NC 27802, 252.467.4808

2

Vicinity Map



SITE LOCATION

ADDRESS:
540 Old Mill Rd.
Rocky Mount, NC 27804

LATITUDE: 35.951766°
LONGITUDE: -77.8342348°

CITY OF ROCKY MOUNT
ROCKY MOUNT, NORTH CAROLINA

230kV POD OLD MILL RD
VICINITY MAP

Booth & Associates, LLC

5811 Glenwood Avenue | Raleigh, NC 27612 CONSULTING ENGINEERS NC P-0221

DWN. BAA	DATE: 4/4/20	DWG. NO. VM-1
CKD. KPM	APPD. KPM	
SCALE: 1"=2,000'	FILE: 18899VM	
JOB NO. 18899	DATE REVISION	
© 07/20		

3

MWBE Affidavits

City of Rocky Mount AFFIDAVIT A – Listing of Good Faith Efforts

County of _____

(Name of Bidder)

Affidavit of _____

I have made a good faith effort to comply under the following areas checked:

Bidders must earn at least 50 points from the good faith efforts listed for their bid to be considered responsive. (1 NC Administrative Code 30 I.0101)

- 1 – (10 pts)** Contacted minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor, or available on State or local government maintained lists, at least 10 days before the bid date and notified them of the nature and scope of the work to be performed.
- 2 --(10 pts)** Made the construction plans, specifications and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bids are due.
- 3 – (15 pts)** Broken down or combined elements of work into economically feasible units to facilitate minority participation.
- 4 – (10 pts)** Worked with minority trade, community, or contractor organizations identified by the Office of Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses.
- 5 – (10 pts)** Attended prebid meetings scheduled by the public owner.
- 6 – (20 pts)** Provided assistance in getting required bonding or insurance or provided alternatives to bonding or insurance for subcontractors.
- 7 – (15 pts)** Negotiated in good faith with interested minority businesses and did not reject them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.
- 8 – (25 pts)** Provided assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisted minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit.
- 9 – (20 pts)** Negotiated joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.
- 10 - (20 pts)** Provided quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.

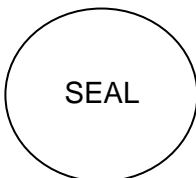
The undersigned, if apparent low bidder, will enter into a formal agreement with the firms listed in the Identification of Minority Business Participation schedule conditional upon scope of contract to be executed with the Owner. Substitution of contractors must be in accordance with GS143-128.2(d) Failure to abide by this statutory provision will constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of the minority business commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: _____ Name of Authorized Officer: _____

Signature: _____

Title: _____



State of _____, County of _____

Subscribed and sworn to before me this _____ day of _____ 20____

Notary Public _____

My commission expires _____

City of Rocky Mount --AFFIDAVIT B-- Intent to Perform Contract with Own Workforce.

County of _____

Affidavit of _____

(Name of Bidder)

I hereby certify that it is our intent to perform 100% of the work required for the _____ contract.

(Name of Project)

In making this certification, the Bidder states that the Bidder does not customarily subcontract elements of this type project, and normally performs and has the capability to perform and will perform all elements of the work on this project with his/her own current work forces; and

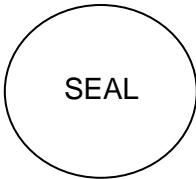
The Bidder agrees to provide any additional information or documentation requested by the owner in support of the above statement. The Bidder agrees to make a Good Faith Effort to utilize minority suppliers where possible.

The undersigned hereby certifies that he or she has read this certification and is authorized to bind the Bidder to the commitments herein contained.

Date: _____ Name of Authorized Officer: _____

Signature: _____

Title: _____



State of _____, County of _____

Subscribed and sworn to before me this _____ day of _____ 20____

Notary Public _____

My commission expires _____

DO NOT USE AFFIDAVIT 'B' UNLESS YOU ARE ONLY PROVIDING LABOR AND NOT PURCHASING ANY MATERIALS OR SUPPLIES

City of Rocky Mount - AFFIDAVIT C - Portion of the Work to be Performed by HUB Certified/Minority Businesses

County of _____

(Note this form is to be submitted only by the apparent lowest responsible, responsive bidder.)

If the portion of the work to be executed by HUB certified/minority businesses as defined in GS143-128.2(g) and 128.4(a),(b),(e) is equal to or greater than 10% of the bidders total contract price, then the bidder must complete this affidavit.
 This affidavit shall be provided by the apparent lowest responsible, responsive bidder within **72 hours** after notification of being low bidder.

Affidavit of _____ I do hereby certify that on the _____
 (Name of Bidder)

_____ (Project Name)
 Project ID# _____ Amount of Bid \$ _____

I will expend a minimum of _____% of the total dollar amount of the contract with minority business enterprises. Minority businesses will be employed as construction subcontractors, vendors, suppliers or providers of professional services. Such work will be subcontracted to the following firms listed below.

Attach additional sheets if required

Name and Phone Number	*Minority Category	**HUB Certified Y/N	Work Description	Dollar Value

*Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)

**** HUB Certification with the state HUB Office required to be counted toward state participation goals.**

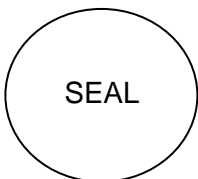
Pursuant to GS143-128.2(d), the undersigned will enter into a formal agreement with Minority Firms for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: _____ Name of Authorized Officer: _____

Signature: _____

Title: _____



State of _____, County of _____

Subscribed and sworn to before me this _____ day of _____ 20____

Notary Public _____

My commission expires _____

City of Rocky Mount

AFFIDAVIT D – Good Faith Efforts

County of _____

(Note this form is to be submitted only by the apparent lowest responsible, responsive bidder.)

If the goal of 10% participation by HUB Certified/ minority business **is not** achieved, the Bidder shall provide the following documentation to the Owner of his good faith efforts:

Affidavit of _____ I do hereby certify that on the _____
 (Name of Bidder)

Project ID# _____ (Project Name) Amount of Bid \$ _____

I will expend a minimum of _____% of the total dollar amount of the contract with HUB certified/ minority business enterprises. Minority businesses will be employed as construction subcontractors, vendors, suppliers or providers of professional services. Such work will be subcontracted to the following firms listed below. (Attach additional sheets if required)

Name and Phone Number	*Minority Category	**HUB Certified Y/N	Work Description	Dollar Value

*Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)

**** HUB Certification with the state HUB Office required to be counted toward state participation goals.**

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 firm 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 firm is not considered the lowest responsible sub-bidder, 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 due to lack of qualification.
- I. 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 rejection of the bid and award to the next lowest responsible and responsive bidder.

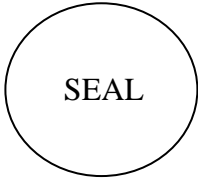
Pursuant to GS143-128.2(d), the undersigned will enter into a formal agreement with Minority Firms for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: _____ Name of Authorized Officer: _____

Signature: _____

Title: _____



State of _____, County of _____

Subscribed and sworn to before me this _____ day of _____ 20____

Notary Public _____

My commission expires _____