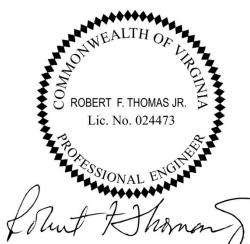
Progressive Engineering Consultants, Inc.

CONTRACT DOCUMENTS FOR SUBSTATION EQUIPMENT

CITY OF FRANKLIN, VIRGINIA REQUEST FOR PROPOSAL 2024-03b

FEBRUARY 2024

DOCUMENTS PREPARED BY



P.O. Box 690638 Charlotte, North Carolina 28227-7011

Telephone (704) 545 - 7327

Fax (704) 545 - 2315



SUBSTATION EQUIPMENT

Request for Proposal 2024-03b

Issued by:

Purchasing

Division
Rachel Trollinger, Purchasing
Agent 207 West 2nd Avenue
Franklin, Virginia 23851
(757) 562-8535

Email: rtrollinger@franklinva.com

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INTRODUCTION

I. INTRODUCTION

Sealed proposals for furnishing Substation Equipment, as specified, shall be received on behalf of the City of Franklin, Virginia by Progressive Engineering Consultants, Inc. Proposals will be received, opened, and read at the time and location as follows:

Location: Progressive Engineering Consultants, Inc.

4700 Lebanon Rd., Suite D-1

Charlotte, NC 28227

Time: 2:00 p.m., local time

Date: Tuesday, March 19, 2024

Proposals received after the date and time specified for the opening will be returned unopened.

II. <u>SPECIFICATIONS</u>

See Appendix G.

III. PROPOSAL FORMAT

- A. The proposal for this submittal shall contain all the information requested in Appendices A through G.
- B. Proposals and supporting documentation shall be submitted in a sealed envelope to:

Mailing Address (USPS)

Progressive Engineering Consultants PO Box 690638

Charlotte, NC 28227 Attn: Robert Thomas Physical Address (FedEX, UPS)

Progressive Engineering Consultants

4700 Lebanon Rd., Suite D-1

Charlotte, NC 28227 Attn: Robert Thomas

- C. The name and address of the Bidder as well as the date and hour of the opening of the Proposals must appear on the envelope in which the Proposal is submitted. Proposals shall also be marked "SEALED PROPOSAL FOR THE PURCHASE OF SUBSTATION EQUIPMENT."
- D. Proposals will be required to comply with all applicable statutes, regulations, etc., as set forth by the State of Virginia and those attached to and made a part of these documents.
- E. Each proposal must be accompanied by a certified check on a bank that is a member of the FDIC, payable to the order of the Purchaser, or a Bidder's Bond acceptable to the Purchaser and running in favor of the Purchaser, in an amount equal to (5%) of the maximum proposal price. If a proposal is accepted, the Bidder agrees that by filing its proposal together with such check or Bidder's Bond in consideration of the Purchaser's receiving and considering such proposal, said proposal shall be firm and binding upon each such Bidder and such check or Bidder's Bond shall be held by the Purchaser for a period not to exceed ninety (90) days from the date set for the opening of the proposals.

- F. Any conditions, requirements, or restrictions included as part of the Bidder's Proposal as set forth in these Notice and Instructions to Bidders may result in the proposal being deemed non-responsive.
- G. The Proposal shall include transportation charges for all equipment to the substation site located in Franklin, Virginia.
- H. Virginia sales tax is applicable to the purchase of this equipment. Each Bidder shall show, as a separate item, the amounts which will be payable by the successful Bidder as a result of taxes imposed by any taxing authority for the sale, purchase or use of these materials, supplies and equipment included in the taxable items furnished.
- I. The Purchaser reserves the right to make a contract for the lump sum price to one Bidder or to award contracts to multiple Bidders by section. The Purchaser also reserves the right to award contracts to multiple vendors based on pricing and experience.
- J. The Purchaser reserves the right to waive minor irregularities or minor errors in the proposal which appear to have been made through inadvertence, provided such irregularities or errors so waived are corrected on the proposal prior to its acceptance by the Purchaser. The Purchaser also reserves the right to reject any and all proposals or to accept a proposal other than the lowest submitted, if such action is deemed to be in the best interest of the Purchaser.
- K. It is the policy of the Purchaser to provide minorities and women equal opportunity for participating in all aspects of the City's contracting and procurement programs, including but not limited to employment, construction projects, and lease agreements consistent with the laws of the State of Virginia.
- L. It is further the policy of the Purchaser to prohibit discrimination against any person or business in pursuit of these opportunities on the basis of race, color, national origin, religion, sex, age, handicap, or veteran status. It is the policy of the Purchaser to conduct its contracting and procurement programs so as to prevent such discrimination and to resolve any and all claims of such discrimination.
- M. "The contractor certifies that the contractor will comply with the requirements of Chapter 14, Title 8 of the Virginia Code of Laws titled Unauthorized Aliens and Public Employment and agrees to provide to the Purchaser any documentation required to establish either; (a) the applicability of such law to the contractor, subcontractor, and sub-subcontractor; or (b) the compliance with this law by the contractor and any subcontractors or sub-subcontractors."
- N. It is the intent of the Purchaser to promote the use of local businesses and hiring citizens living within the local City of Franklin/Franklin County area when possible.
- O. Questions regarding the specifications and/or requirements of the Request for Proposal or requests for documentation shall be directed to Progressive Engineering Consultants, Inc. by calling (704) 545-7327, email (progress@pecinc.net) or US mail to the PO Box 690638, Charlotte, NC 28227.

P. Payment terms shall be Net 30 days following successful completion of all specified tasks by the Bidder.

IV. EVALUATION CRITERIA

The following evaluation criteria shall apply:

Eva	Evaluation Criteria	
1.	Proposal	25
2.	Purchase Price	20
3.	Evaluated Cost	20
4.	Delivery	16
5.	Payment Terms	10
6.	City Documents	7
7.	Bid Bond	2
Tota	ıl	100

V. <u>SELECTION PROCEDURE</u>

- A. The City of Franklin intends to make final award to a single Bidder. Selection of the successful Bidder shall be as follows:
 - 1. As previously stated, Bidder shall make written proposals.
 - 2. Following evaluation of the written proposals, the City may, at its discretion, engage in individual discussions with those Bidder deemed fully qualified, responsible, and suitable on the basis of the written proposals.
 - 3. Following these discussions, on the basis of the evaluation factors listed in this request and all information obtained in the selection process to this point, the City shall rank those Bidder and enter into negotiations with those Bidders. Should negotiations fail with any Bidder, negotiations will be terminated with that Bidder and negotiations will be opened with the next ranked Bidder, as required by the Virginia Public Procurement Act. Should the City determine, in its sole discretion, that the Bidder is clearly more highly qualified than other under consideration, a contract may be negotiated and awarded to that Bidder. The file will show the Evaluation Committee's strengths and weaknesses of each proposal received as basis for the selections.

VI. CONTRACT AWARD

- A. The contract will be awarded based on the evaluation criteria set forth in the bid documents and consistent with the Virginia Procurement Act, the City's Code, the City's Procurement Policies and Procedures and other applicable law. Nothing herein requires that the City complete this work and the City may determine not to award any Contract pursuant to this RFP in its sole discretion for any reason or no reason at all.
- B. The City reserves the right to make a contract for the lump sum price to one Bidder or to award contracts to multiple Bidders by section.
- C. The bid deposit shall be retained by the City if the successful bidder fails to execute the contract or fails to provide the required bonds as stated above within ten (10) days of the award of the contract.

ADVERTISEMENT FOR BIDS

ADVERTISEMENT FOR PROPOSALS

City of Franklin 1050 Pretlow Street Franklin, VA 23851

Sealed proposals for furnishing <u>Substation Equipment</u> as specified shall be received on behalf of the City of Franklin, Virginia by Progressive Engineering Consultants, Inc. at <u>2:00 p.m. local time</u> <u>Tuesday, March 19, 2024</u>, at which time they will be publicly opened and read.

Proposals should be addressed to Progressive Engineering Consultants, Inc., PO Box 690638, Charlotte, NC 28227 Attention: Mr. Robert Thomas (Physical address of 4700-D1 Lebanon Road, Charlotte, NC 28227).

The Contract Documents may be examined at the following locations:

City of Franklin
Progressive Engineering Consultants, Inc.
Franklin, Virginia
Charlotte, North Carolina

Copies of the documents may be obtained by contacting the office of Progressive Engineering Consultants, Inc., P.O. Box 690638, Charlotte, NC, 28227 (physical address 4700-D1 Lebanon Road, Charlotte, NC 28227) or by telephone (704) 545-7327.

A certified check or cashier's check payable to City of Franklin, Virginia or a satisfactory Bid Bond executed by a Corporate Surety licensed under the laws of Virginia to execute such bonds in the amount equal to five (5) percent of the total proposal shall be submitted with each proposal. Proposals may not be withdrawn for ninety (90) days after the date of receipt.

The bid deposit or bid bond shall be retained by the City of Franklin, Virginia if the successful bidder fails to execute the Contract or fails to provide the required performance bonds, as stated above, within ten (10) days after award of the Contract.

The City of Franklin reserves the right to reject any or all proposals and to accept any proposal which is deemed to be in the best interest of the City. The City of Franklin, Virginia invites and encourages participation in this bidding process by minority business enterprises.

CITY OF FRANKLIN FRANKLIN, VIRGINIA

	Ву
Issued:	Title

NOTICE AND INSTRUCTIONS TO BIDDERS

NOTICE AND INSTRUCTIONS TO BIDDERS

Progressive Engineering Consultants, Inc. will receive proposals on behalf of the City of Franklin, Virginia (hereinafter called the "Purchaser"), for furnishing Substation Equipment as specified. Proposals will be received, opened, and read at the following time and location:

Location: Progressive Engineering Consultants, Inc.

4700 Lebanon Rd., Suite D-1

Charlotte, NC 28227

Time: 2:00 p.m., local time

Date: Tuesday, March 19, 2024

Proposals will be publicly opened and read on the above date and time. All Proposals received after the time specified for the opening of the Proposals shall be returned unopened.

PROPOSAL FORMAT

1. Proposals and supporting documentation shall be submitted in a sealed envelope to:

Mailing Address (USPS)

Physical Address (FedEx, UPS)

Progressive Engineering Consultants, Inc. Progressive Engineering Consultants, Inc

PO Box 690638 4700 Lebanon Rd., Suite D-1

Charlotte, NC 28227 Attn: Robert Thomas Charlotte, NC 28227 Attn: Robert Thomas

- 2. The name and address of the Bidder as well as the date and hour of the opening of the Proposals must appear on the envelope in which the Proposal is submitted. Proposals shall also be marked "SEALED PROPOSAL FOR THE PURCHASE OF SUBSTATION EQUIPMENT."
- 3. Proposals will be required to comply with all applicable statutes, regulations, etc., as set forth by the State of Virginia and those attached to and made a part of these documents.
- 4. Each proposal must be accompanied by a certified check on a bank that is a member of the FDIC, payable to the order of the Purchaser, or a Bidder's Bond acceptable to the Purchaser and running in favor of the Purchaser, in an amount equal to (5%) of the maximum proposal price. If a proposal is accepted, the Bidder agrees that by filing its proposal together with such check or Bidder's Bond in consideration of the Purchaser's receiving and considering such proposal, said proposal shall be firm and binding upon each such Bidder and such check or Bidder's Bond shall be held by the Purchaser for a period not to exceed ninety (90) days from the date set for the opening of the proposals.
- 5. Any conditions, requirements, or restrictions included as part of the Bidder's Proposal as set forth in these Notice and Instructions to Bidders may result in the proposal being deemed non-responsive.
- 6. The Proposal shall include transportation charges for all equipment to the substation site located in Franklin, Virginia.
- 7. Virginia sales tax is applicable to the purchase of this equipment. Each Bidder shall show, as a separate item, the amounts which will be payable by the successful Bidder as a result of

taxes imposed by any taxing authority for the sale, purchase or use of these materials, supplies and equipment included in the taxable items furnished.

- 8. The Purchaser reserves the right to make a contract for the lump sum price to one Bidder or to award contracts to multiple Bidders by section. The Purchaser also reserves the right to award contracts to multiple vendors based on pricing and experience.
- 9. The Purchaser reserves the right to waive minor irregularities or minor errors in the proposal which appear to have been made through inadvertence, provided such irregularities or errors so waived are corrected on the proposal prior to its acceptance by the Purchaser. The Purchaser also reserves the right to reject any and all proposals or to accept a proposal other than the lowest submitted, if such action is deemed to be in the best interest of the Purchaser.
- 10. It is the policy of the Purchaser to provide minorities and women equal opportunity for participating in all aspects of the City's contracting and procurement programs, including but not limited to employment, construction projects, and lease agreements consistent with the laws of the State of Virginia.
- 11. It is further the policy of the Purchaser to prohibit discrimination against any person or business in pursuit of these opportunities on the basis of race, color, national origin, religion, sex, age, handicap, or veteran status. It is the policy of the Purchaser to conduct its contracting and procurement programs so as to prevent such discrimination and to resolve any and all claims of such discrimination.
- 12. "The contractor certifies that the contractor will comply with the requirements of Chapter 14, Title 8 of the Virginia Code of Laws titled Unauthorized Aliens and Public Employment and agrees to provide to the Purchaser any documentation required to establish either; (a) the applicability of such law to the contractor, subcontractor, and sub-subcontractor; or (b) the compliance with this law by the contractor and any subcontractors or sub-subcontractors."
- 13. It is the intent of the Purchaser to promote the use of local businesses and hiring citizens living within the local City of Franklin/Franklin County area when possible.
- 14. Questions regarding the specifications and/or requirements of the Request for Proposal or requests for documentation shall be directed to Progressive Engineering Consultants, Inc. by calling (704) 545-7327, email (progress@pecinc.net) or US mail to the PO Box 690638, Charlotte, NC 28227.
- 15. Payment terms shall be Net 30 days following successful completion of all specified tasks by the Bidder.

CITY OF FRANKLIN FRANKLIN, VIRGINIA (Purchaser)

PROGRESSIVE ENGINEERING CONSULTANTS, INC. (Engineer)

Date: February 9, 2024

BIDDERS PROPOSAL

PROPOSAL

To: City of Franklin Franklin, Virginia

Gentlemen:

The undersigned has carefully examined the attached Notice and Instructions, Contract, Bond, and Specifications and hereby declares that he will furnish the material, equipment, and services as specified for the following price:

	<u>Price Each</u>	Extended Price
Section 1		
Four (4) - 115 kV SF-6 Circuit Breakers as specified	\$	\$
Total Cost for Service Engineer		\$
Section 2		
Three (3) - 15 kV Bus Breakers as specified	\$	\$
Total Cost for Service Engineer		\$
Section 3		
Nine (9) - 15 kV Feeder Breakers as specified	\$	\$
Total Cost for Service Engineer		\$
Section 4		
Twenty-seven (27) – 7.62 kV Voltage Regulators	\$	\$
Total Cost for Service Engineer		\$
	ГОТАL PROPOSAL	\$
MANUFACT	<u>TURER</u>	DELIVERY
115 kV SF-6 Circuit Breaker:		
15 kV Bus Breakers:		
15 kV Feeder Breaker:		
7.62 kV Voltage Regulators:		
Overcurrent Relay:		
Regulator Controller		

APPLICABLE PRICE TERMS:

Telephone

Date

EXCEPT	IONS:		
	Bidder		Ву
	Address		Print Name
City	State	Zip	Title

Email

CONTRACT

CONTRACT

THIS AGREEMENT made and contracted the	is day of,
2023, by and between the City of Franklin, Virginia	
the first part, and	
hereinafter calle	
part.	
WITNESSETH, That for and in consideration	of the payments and agreements to be made
and performed by the Purchaser, and under penalty ex	pressed in the bond bearing even date with
these presents, and hereunto annexed, the Materialma	in at its own proper cost and expense, and
with skill and diligence, will furnish	
for the total sum of	
and furnish same in accordance with the Notice as	nd Instructions to Bidders, Proposal and
Specifications attached in full compliance with the agr	eement.
And the said Materialman agrees to accept the	ne price stated under Item 1 above in full
compensation for the performance of this contract.	
This contract together with the aforementioned	documents constitutes the entire agreement
between the Purchaser and the Materialman.	
On completion of this contract by the Materia	alman and acceptance by the Purchaser as
being in accordance with all portions of this contract,	, the Purchaser shall pay the above-named
contract price as follows:	
The Materialman shall be responsible for all fee	es or claims for any patented invention used
by him and shall defend any suit or proceeding for infi	ingement of any patent or patents covering
materials purchased hereunder which may be brought	t against the Purchaser and shall hold said

Purchaser harmless for use or infringement of any patented thing or method used in connection

with any article, equipment, device, or thing furnished or constructed hereunder.

IN WITNESS, WHEREOF, the parties hereto have caused the Agreement to be signed and sealed, all as of the day and year first written:

xecuted in three (3) counterparts.	
TTEST:	(Materialman)
Signature	Signature
Print Name	Print Name
Title	Title
	AFFIX SEAL
ΓΤΕST:	CITY OF FRANKLIN FRANKLIN, VIRGINIA (Party of the First Part)
Signature	Signature
Print Name	Print Name
Title	Title
	AFFIX SEAL

BOND

BOND

KNOW ALL M	EN that we,		of	
County of		, State of		
hereinafter called the Pr	incipal, and			,
			hereinafter called the	Surety
or Sureties, are held, an	d firmly bound to the	he <u>City of Fra</u>	nklin, Virginia, hereinafter cal	led the
Purchaser, in the sum of	,			
			Dollars (\$)
	-	·	Sureties bind themselves, their and severally, firmly by these pre-	
WHEREAS, the	e Principal has, by	means of a wri	tten Agreement, dated the	
day of	, 2024 6	entered into a co	ontract or agreement with the Pu	rchaser
to furnish				

a copy of which Agreement is hereto attached and made a part hereof:

NOW THEREFORE, the condition of this obligation is such, that if the Principal shall faithfully perform the said Contract on his, its, or their part and satisfy all claims and demands incurred for the same, shall fully indemnify and save harmless the Purchaser from all cost and damage which the Purchaser may suffer by reason of failure to do so, and shall fully reimburse and repay the Purchaser all outlay and expense which the Purchaser may incur in making good any such default, and shall pay all persons who have contracts with the Principal, or any subcontractor of the said Principal for labor or material, or both, then this obligation shall be null and void, otherwise, it shall remain in full force and effect.

And said **SURETY**, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract of to the work or to the specifications.

IN TESTIMONY WHEREOF witness th	ne hands and seals of the parties hereto on this
, 2024.	
Executed in three counterparts.	
ATTEST:	(Materialman)
Signature	Signature
Print Name	Print Name
Title	Title
	AFFIX
	SEAL
	(Surety Company)
By	
(Witness as to Surety)	Signature
Countersigned:	
	Print Name
(Licensed Resident Agent)	Title
	AFFIX
	SEAL

INSTRUCTIONS

Bonds must be executed by a Surety Company authorized to conduct business in the State of incorporation of the Owner, acknowledged before a Notary Public, and accompanied by Power of Attorney or other authority satisfactory to the Owner.

APPENDIX A thru G

APPENDIX A: GENERAL TERMS, CONDITIONS AND INSTRUCTIONS TO BIDDERS AND CONTRACTORS

These General Terms, Conditions and Instructions to Bidders and Contractor (hereinafter referred to as the "General Conditions") shall apply to all purchases and be incorporated into and be a part of each Solicitation (as defined below) and every Contract (as defined below) awarded by the City of Franklin, a political subdivision of the Commonwealth of Virginia (hereinafter referred to as the "the City") unless otherwise specified by the City in writing. Bidders, Offerors and Contractors or their authorized representatives are expected to inform themselves fully as to these General Conditions before submitting Bids or Proposals to and/or entering into any Contract with the City: failure to do so will be at the Bidder's/Contractor's own risk and except as provided by law, relief cannot be secured on the plea of error.

Subject to all Federal, State and local laws, policies, resolutions, regulations, rules, limitations and legislation, including the City's Procurement Policies and Procedures, Bids or Proposals on all Solicitations issued by City will bind Bidders or Offerors, as applicable, and Contracts will bind Contractors, to all applicable terms, conditions, instructions, rules and requirements herein set forth unless otherwise SPECIFICALLY set forth by the City in writing in the Solicitation or Contract. All provisions of these General Conditions are material to any contract between the City and a Contractor.

INTRODUCTION

- 1. VIRGINIA PUBLIC PROCUREMENT ACT AND ETHICS IN PUBLIC CONTRACTING: The Virginia Public Procurement Act of Virginia Code §§ 2.2-4300 et seq. (hereinafter the "VPPA") is incorporated herein by reference. Nothing in these General Conditions is intended to conflict with the VPPA and in case of any conflict, the VPPA controls. Specifically, the provisions of Article 6 of the VPPA (Virginia Code §§ 2.2-4367 through 2.2-4377) relating to ethics in contracting, shall be applicable to all Solicitations and Contracts solicited or entered into by the City. By submitting their Bids or signing any Contract, all Bidders and Contractors certify that they have not violated any of the provisions of Article 6 of the VPPA, including, but not limited to, that their Bids are made without collusion or fraud and that they have not offered or received any kickbacks or inducements.
- 2. **DEFINITIONS**: The definitions of Virginia Code §§ 2.2-4301, 2.2-4302.1 and 2.2-4302.2 are specifically incorporated herein by reference and as used in these General Conditions, whether capitalized or not, any of such defined terms have the same meaning as such terms have under the VPPA: such defined terms include: "Affiliate", "Best Value", "Business", "Competitive Negotiation", "Competitive Sealed Bidding", "Construction", "Construction Management Contract", "Design-Build Contract", "Employment Services Organization", "Goods", "Informality", "Job Order Contracting", "Multiphase Professional Services Contract", "Nonprofessional Services", "Potential Bidder or Offeror", "Professional Services", "Public Body", "Public Contract", "Responsible Bidder or Offeror", "Responsive Bidder", "Reverse Auctioning" and "Services". Additionally, as used in these General Conditions, the following terms, whether capitalized or not, have the following meanings:
 - a. Bid/Proposal: The offer of a Bidder or Offeror to provide specific Goods or Services at specified prices and/or other conditions specified in the Solicitation. The term "Bid" is used throughout these General Conditions and where appropriate includes the term "Proposal" or any modifications or amendments to any Bid or Proposal.

- b. Bidder/Offeror/Vendor: Any individual(s), company, firm, corporation, partnership, or other organization bidding or offering on any Solicitation issued by the City and/or offering to enter into Contracts with the City. The term "Bidder" is used throughout these General Conditions and where appropriate includes the term "Offeror" and/or "Vendor."
- c. Contract: Any contract to which the City will be a party.
- d. Contractor: Any individual(s), company, firm, corporation, partnership, or other organization to whom an award is made by the City or who enters into any contract to which the City is a party.
- e. City: The City of Franklin, a political subdivision of the Commonwealth of Virginia, including where applicable all agencies and departments of the City.
- f. City Administrator: The City Manager of the City of Franklin and has signatory authority to bind the City to all contracts.
- g. City Attorney: The City Attorney of the City of Franklin.
- h. Purchasing Agent: The Director of Finance is the City's Purchasing Agent and is responsible for the purchasing activity of the City of Finance.
- i. General Terms, Conditions and Instructions to Bidders and Contractors (also referred to herein as the "General Conditions"): These General Terms, Conditions and Instructions to Bidders and Contractors shall be attached to and made a part of all Solicitations by the City and all Contracts to which the City is party.
- j. His: Any references to "his" shall include his, her, their, or its as appropriate.
- k. Invitation to Bid (also referred to herein as an "IFB"): A request which is made to prospective Bidders for their quotation on Goods or Services desired by the City. The issuance of an IFB will contain or incorporate by reference the General Conditions and the other specifications and contractual terms and conditions applicable to the procurement.
- 1. Purchasing Agent: The Purchasing Agent employed by the City and to whom Bidders/Contractors can submit questions relating to any Bid or Contract.
- m. Request for Proposal (also referred to herein as a "RFQ"): A request for an offer from prospective Offerors which shall indicate the general terms which are sought to be procured from Offerors. The RFQ will specify the evaluation factors to be used and will contain or incorporate by reference the General Conditions and other applicable contractual terms and conditions, including any unique capabilities or qualifications that will be required of the Contractor.
- n. Solicitation: The process of notifying prospective Bidders or Offerors that the City wishes to receive Bids or Proposals on a set of requirements to provide Goods or Services. "Solicitation" includes any notification of the City requirements may consist of public advertising (newspaper, City's website, or other electronic notification), the

mailing of notices of Solicitation, any Invitation for Quotes ("IFQ"), Initiations to Bid ("IFB"), or Requests for Proposal ("RFQ"), the public posting of notices, issuance of an Open Market Procurement ("OMP"), or telephone calls to prospective Bidders or Offerors.

- o. State: The Commonwealth of Virginia.
- 3. **AUTHORITY**: The Purchasing Agent shall serve as the principal public purchasing official for the City, and shall be responsible for the procurement of goods, services, insurance, and construction in accordance with the City's Procurement Policies and Procedures. The Purchasing Agent has responsibility and authority for negotiating, placing and when necessary, modifying every Solicitation and purchase order issued by the City. The City Administrator has signatory authority to bind the City to all contracts made lawfully.

No other City officer or employee is authorized to order supplies or Services, enter into purchase negotiations or Contracts, or in any way obligate the City for any indebtedness. Any purchase or contract made which is contrary to such authority shall be of no effect and void and the City shall not be bound thereby.

CONDITIONS OF BIDDING

- 4. **COMPETITION INTENDED**: It is the City's intent to encourage and permit open and competitive bidding in all Solicitations. It shall be the Bidder's responsibility to advise the City in writing if any language, requirement, specification, etc., or any combination thereof, stifles competition or inadvertently restricts or limits the requirements stated in a Solicitation to a single source. The City must receive such notification not later than seven (7) business days prior to the deadline set for acceptance of the Bids. In submitting a Bid, the Bidder guarantees that he or she has not been a party with other Bidders to an agreement to bid a fixed or uniform price. Violation of this implied guarantee shall render the Bid of any Bidder involved void.
- 5. **DISCRIMINATION PROHIBITED**: Pursuant to Virginia Code § 2.2-4310, the City does not discriminate against Bidders, Offerors or Contractors because of race, religion, color, sex, national origin, age, disability, status as a service-disabled veteran, or any other basis prohibited by state law relating to discrimination in employment. Whenever solicitations are made, the City shall include businesses selected from a list made available by the Department of Small Business and Supplier Diversity. Pursuant to Virginia Code § 2.2-4343.1, the City does not discriminate against "faith- based organizations", being a religious organization that is or applies to be a contractor to provide goods or services for programs funded by the block grant provided pursuant to the Personal Responsibility and Work Reconciliation Act of 1996, P.L. 104-193.
- 6. **CLARIFICATION OF TERMS**: Pursuant to Virginia Code § 2.2-4316, if any Bidder has questions or comments about the specifications or other Solicitation documents, the prospective Bidder should contact the City no later than seven (7) business days prior to the date set for the opening of Bids or receipt of Proposals. Any revisions to the Solicitation will be made only by written addendum issued by the City. Notifications regarding specifications may not be considered if received in less than seven (7) business days of the date set for opening of Bids/receipt of Proposals.

- 7. MANDATORY USE OF CITY FORM AND TERMS AND CONDITIONS: Unless otherwise specified in the Solicitation, all Bids must be submitted on the forms provided by the City, including but not limited to, a Cover Sheet or Pricing Schedule, if applicable, properly signed in ink in the proper spaces and submitted in a sealed envelope or package. Unauthorized modification of or additions to any portion of the Solicitation may be cause for rejection of the Bid. However, the City reserves the right to decide, on a case-by-case basis, in its sole discretion, whether to reject any Bid or Proposal which has been modified. These General Conditions are mandatory provisions of all Solicitations and all Contracts of the City.
- 8. **LATE BIDS & MODIFICATION OF BIDS**: Any Bid or modification thereto received at the office designated in the Solicitation after the exact time specified for receipt of the Bid is considered a late Bid or modification thereof. The City is not responsible for delays in the delivery of the mail by the U.S. Postal Service, private carriers, or the inter-office mail system. It is the sole responsibility of the Bidder to ensure their Bid reaches City by the designated date and hour. The following rules apply to all Bids submitted to the City:
 - a. The official time used in the receipt of Bids/Proposals is that time on the automatic time stamp machine in the Finance Department;
 - b. Late Bids or modifications thereof will be returned to the Bidder UNOPENED, if Solicitation number, due date and Bidder's return address is shown on the container;
 - c. If a Bid is submitted on time, however a modification thereto is submitted after the due date and time, then the City in its sole discretion may choose to consider the original Bid except that the City may not consider such original Bid if the Bid is withdrawn by the Bidder pursuant to Section 9 below; and
 - d. If an emergency or unanticipated event or closing interrupts or suspends the City's normal business operations so that Bids cannot be received by the exact time specified in the Solicitation, then the due date/time specified for receipt of Bids will be deemed to be extended to the same time of day specified in the Solicitation on the first workday on which normal City business operations resume.

9. WITHDRAWAL OF BIDS

a. Pursuant to Virginia Code § 2.2-4330, a Bidder for a public construction contract, other than a contract for construction or maintenance of public highways, may withdraw his Bid from consideration if the price bid was substantially lower than the other Bids due solely to a mistake in the Bid, provided the Bid was submitted in good faith, and the mistake was a clerical mistake as opposed to a judgment mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a Bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the Bid sought to be withdrawn.

If a Bid contains both clerical and judgment mistakes, a Bidder may withdraw his Bid from consideration if the price bid would have been substantially lower than the other Bids due solely to the clerical mistake, that was an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the

compilation of a Bid that shall be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the Bid sought to be withdrawn. The Bidder shall give notice in writing to the City of his or her claim of right to withdraw his or her Bid within two business days after the conclusion of the Bid opening procedure and shall submit original work papers with such notice.

- b. A Bidder for a Contract other than for public construction may request withdrawal of his or her Bid under the following circumstances:
 - i. Bids may be withdrawn on written request from the Bidder received at the address shown in the Solicitation prior to the time of opening.
 - ii. Requests for withdrawal of Bids after opening of such Bids but prior to award shall be transmitted to the City, in writing, accompanied by full documentation supporting the request. If the request is based on a claim of error, documentation must show the basis of the error. Such documentation may take the form of supplier quotations, Bidder work sheets, etc. If Bid bonds were tendered with the Bid, the City may exercise its right of collection.
- c. No Bid may be withdrawn under this Section 9 when the result would be the awarding of the Contract on another Bid of the same Bidder or of another Bidder in which the ownership of the withdrawing Bidder is more than five percent (5%).
- d. If a Bid is withdrawn under the authority of Section 9 the lowest remaining Bid shall be deemed to be the low Bid.
- e. No Bidder who, is permitted to withdraw a Bid shall, for compensation, supply any material or labor to or perform any subcontract or other work agreement for the person or firm to whom the Contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn Bid was submitted.
- f. The City shall notify the Bidder in writing within five (5) business days of its decision regarding the Bidder's request to withdraw its Bid. If the City denies the withdrawal of a Bid under the provisions of this Section 9, it shall State in such notice the reasons for its decision and award the Contract to such Bidder at the Bid price, provided such Bidder is a responsible and responsive Bidder. At the same time that the notice is provided, the City shall return all work papers and copies thereof that have been submitted by the Bidder.
- g. Under these procedures, a mistake shall be proved only from the original work papers, documents and materials delivered as required herein. The work papers, documents and materials submitted by the bidder shall, at the bidder's request, be considered trade secrets or proprietary information subject to the conditions of subsection F of Virginia Code § 2.2-4342.
- 10. **ERRORS IN BIDS**: When an error is made in extending total prices, the unit Bid price will govern. Erasures in Bids must be initialed by the Bidder. Carelessness in quoting prices, or otherwise in preparation of the Bid, will not relieve the Bidder. Bidders/Offerors are cautioned to recheck their Bids for possible error. Errors discovered after public opening cannot be corrected and the Bidder will be required to perform if his or her Bid is accepted.

- 11. **IDENTIFICATION ON BID ENVELOPE**: All Bids, Proposals and requested copies thereof submitted to the City shall be in a separate envelope or package, sealed and identified with the following information clearly marked on the outside of the envelope or package:
 - a. Addressed as indicated on page 1 of the solicitation;
 - b. Solicitation number;
 - c. Title;
 - d. Bid due date and time;
 - e. Bidder's name and complete mailing address (return address); and
 - f. Pursuant to Virginia Code § 2.2-4311.2, the Bidder's identification number issued by the State Corporation Commission, or if the bidder is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or as otherwise required by law shall include in its bids or proposal a statement describing why the bidder or offeror is not required to be so authorized.

If a Bid is not addressed with the information as shown above, the Bidder takes the risk that the envelope may be inadvertently opened and the information compromised, which may cause the Bid to be disqualified. Bids may be hand delivered to the designated location in the City's offices. No other correspondence or other Proposals/Bids should be placed in the envelope. Any Bidder or Offeror that fails to provide the information required in (f) above shall not receive an award unless a waiver is specifically granted by the City Administrator.

- 12. **ACCEPTANCE OF BIDS**: Unless otherwise specified, all formal Bids or Proposals submitted shall be valid for a minimum period of one hundred twenty (120) calendar days following the date established for opening or receipt, respectively, unless extend by mutual agreement of the parties. At the end of the one hundred twenty (120) calendar days the Bid/Proposal may be withdrawn at the written request of the Bidder. Thereafter, unless and until the Proposal is withdrawn, it remains in effect until an award is made or the Solicitation is canceled by the City. The City may cancel any Solicitation at any time by notice of such cancelation to the Bidders.
- 13. **COMPLETENESS**: To be responsive, a Bid must include all information required by the Solicitation.
- 14. **CONDITIONAL BIDS**: Conditional Bids are subject to rejection in whole or in part.
- 15. **RESPONSE TO SOLICITATIONS**: In the event a Bidder cannot submit a Bid on a Solicitation, the Bidder is requested to return the Solicitation cover sheet with an explanation as to why the Bidder is unable to Bid on these requirements, or if there be no cover sheet for the Solicitation a letter to the City explaining the same.
- 16. **BIDDER INTERESTED IN MORE THAN ONE BID AND COLLUSION**: More than one bid from an individual, firm, partnership, corporation, or association under the same or different name will be rejected. Reasonable grounds for believing that a bidder is interested in more than one bid for the work contemplated will cause rejection of all bids in which the bidder is interested. Any or all bids may be rejected if there is any reason for believing that collusion exists among the bidders. Participants in such collusion may not be considered in future bids for the same work. Each bidder, as a condition of submitting a bid, shall certify that he is not a party to any collusive action as herein defined. However, a party who has

quoted prices on work, materials, or supplies to a Bidder is not thereby disqualified from quoting prices to other Bidders or firms submitting a Bid directly for the work, materials, or supplies.

- 17. **BID OPENING**: Pursuant to Virginia Code § 2.2-4301, all Bids received in response to an IFB will be opened at the date, time and place specified, and announced publicly, and made available for inspection as provided in Section 21 of these General Conditions. Proposals received in response to an RFQ will be made available for inspection as provided in Section 21 of these General Conditions.
- 18. **TAX EXEMPTION**: The City is exempt from the payment of any federal excise or any Virginia sales tax. The price bid must be net, exclusive of taxes. Tax exemption certificates will be furnished if requested by the Bidder.
- 19. **DEBARMENT STATUS**: By submitting their Bids, Bidders certify that they are not currently debarred from submitting Bids on Contracts by the City, nor are they an agent of any person or entity that is currently debarred from submitting Bids or Proposals on Contracts by the City or any agency, public entity/locality or authority of the State.
- 20. **NO CONTACT POLICY**: No Bidder shall initiate or otherwise have contact related to the Solicitation with any City representative or employee, other than the Purchasing Agent, after the date and time established for receipt of Bids. Any contact initiated by the Bidder with any City representative, other than the Purchasing Agent, concerning this Solicitation is prohibited and may cause the disqualification of the Bidder.
- 21. VIRGINIA FREEDOM OF INFORMATION ACT: As provided under Virginia Code § 2.2-4342, all proceedings, records, Contracts and other public records relating to procurement transactions shall be open to the inspection of any citizen, or any interested person, firm or corporation, in accordance with the Virginia Freedom of Information Act of Virginia Code §§ 2.2-3700 et seq., except:
 - a. Cost estimates relating to a proposed procurement transaction prepared by or for the City shall not be open to public inspection;
 - b. Any competitive sealed bidding Bidder, upon request, shall be afforded the opportunity to inspect Bid records within a reasonable time after the opening of Bids but prior to award, except in the event that the City decides not to accept any of the Bids and to reopen the Contract. Otherwise, Bid records shall be open to public inspection only after award of the Contract;
 - c. Any competitive negotiation Offeror, upon request, shall be afforded the opportunity to inspect Proposal records within a reasonable time after the evaluation and negotiations of Proposals are completed but prior to award except in the event that the City decides not to accept any of the Proposals and to reopen the Contract. Otherwise, Proposal records shall be open to the public inspection only after award of the Contract;
 - d. Any inspection of procurement transaction records under this Section 21 shall be subject to reasonable restrictions to ensure the security and integrity of the records;
 - e. Trade secrets or proprietary information submitted by a Bidder, Offeror or Contractor in connection with a procurement transaction shall not be subject to public disclosure

- under the Virginia Freedom of Information Act; however, the Bidder, Offeror or Contractor must invoke the protections of this Section 21 prior to or upon submission of the data or other materials, and must identify the data or other materials to be protected and State the reasons why protection is necessary; and
- f. Nothing contained in this Section 21 shall be construed to require the City, when procuring by "competitive negotiation" (RFQ), to furnish a Statement of reasons why a particular Proposal was not deemed to be the most advantageous to the City.
- 22. **CONFLICT OF INTEREST**: Bidder/Contractor certifies by signing any Bid/Contract to/with the City that no conflict of interest exists between Bidder/Contractor and City that interferes with fair competition and no conflict of interest exists between Bidder/Contractor and any other person or organization that constitutes a conflict of interest with respect to the Bid/Contract with the City.

SPECIFICATIONS

- **OMISSIONS OR DISCREPANCIES:** Any items or parts of any equipment listed in a Solicitation which are not fully described or are omitted from such specification, and which are clearly necessary for the completion of such equipment and its appurtenances, shall be considered a part of such equipment although not directly specified or called for in the specifications. Should a Bidder find a discrepancy or ambiguity in, or an omission from, the Solicitation, including the drawings and/or specifications, he or she shall so notify the City within twenty-four (24) hours of noting the discrepancy, ambiguity or omission and in any event no less than five (5) days prior to the date set for the opening of Bids. If necessary, the City will send a written addendum for clarification to all Bidders no later than three (3) days before the date set for opening of Bids. Any notification regarding specifications received less than five (5) days prior to the date set for the opening of Bids may or may not be considered by the City in its sole discretion. The Bidder shall abide by and comply with the true intent of the specifications and not take advantage of any unintentional error or omission but shall fully complete every part as the true intent and meaning of the specifications and drawings. Whenever the mention is made of any articles, material or workmanship to be in accordance with laws, ordinances, building codes, underwriter's codes, A.S.T.M. regulations or similar expressions, the requirements of these laws, ordinances, etc., shall be construed as to the minimum requirements of these specifications.
- 24. **BRAND NAME OR EQUAL ITEMS**: Pursuant to Virginia Code § 2.2-4315, unless otherwise provided in the Solicitation, the name of a certain brand, make or manufacturer does not restrict Bidders to the specific brand, make or manufacturer named; it conveys the general style, type, character, and quality of the article desired, and any article which the City in its sole discretion determines to be the equal of that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted. The Bidder is responsible to indicate the product clearly and specifically being offered and to provide sufficient descriptive literature, catalog cuts and technical detail to enable the City to determine if the product offered meets the requirements of the Solicitation. This is required even if offering the exact brand, make or manufacturer specified. Normally in competitive sealed bidding, only the information furnished with the Bid will be considered in the evaluation. Failure to furnish adequate data for evaluation purposes may result in declaring a Bid non-responsive. Unless the Bidder clearly indicates in its Bid that the product

- offered is "equal" product, such Bid will be considered to offer the brand name product referenced in the Solicitation.
- 25. **FORMAL SPECIFICATIONS**: When a Solicitation contains a specification which states no substitutes, no deviation therefrom will be permitted, and the Bidder will be required to furnish articles in conformity with that specification.
- 26. **CONDITION OF ITEMS:** Unless otherwise specified in the Solicitation, all items shall be new, in first class condition.

AWARD

- 27. **RESPONSIBLE BIDDERS:** In determining whether a Bidder is a responsible Bidder as defined herein, at minimum, the following criteria will be considered:
 - a. The ability, capacity, and skill of the Bidder to perform the Contract or provide the service required under the Solicitation;
 - b. Whether the Bidder can perform the Contract or provide the service promptly, or within the time specified, without delay or interference;
 - c. The character, integrity, reputation, judgment, experience, and efficiency of the Bidder;
 - d. The quality of performance of previous Contracts or Services;
 - e. The previous and existing compliance by the Bidder with laws and ordinances relating to the Contract or Services;
 - f. The sufficiency of the financial resources and ability of the Bidder to perform the Contract or provide the service;
 - g. The quality, availability and adaptability of the Goods or Services to the particular use required;
 - h. The ability of the Bidder to provide future maintenance and service for the use of the subject of the Contract;
 - i. The number and scope of the conditions attached to the Bid;
 - j. Whether the Bidder is in arrears to the City on debt or Contract or is a defaulter on surety to the City or whether the Bidder's City taxes, or assessments are delinquent; and
 - k. Such other information as may be secured by the City, the Purchasing Agent having a bearing on the decision to award the Contract. If an apparent low Bidder is not awarded a Contract for reasons of non-responsibility, the City shall so notify that Bidder and shall have recorded the reasons in the Solicitation or Contract file.
- 28. **AWARD OR REJECTION OF BIDS; WAIVER OF INFORMALITIES**: The City shall award the Contract to the lowest responsive and responsible Bidder complying with all provisions of the IFB, provided the Bid price is reasonable and it is in the best interest of the City to accept it. Awards made in response to an RFQ will be made to the highest qualified Offeror whose Proposal is determined, in writing, to be the most advantageous to the City taking into consideration the evaluation factors set forth in the RFQ. The City reserves the right to award a Contract by individual items, in the aggregate, or in combination thereof, or to reject any or all Bids and to waive any informality in Bids received whenever such

rejection or waiver is in the best interest of the City. Award may be made to as many Bidders/Offerors as deemed necessary to fulfill the anticipated requirements of the City. The City also reserves the right to reject the Bid if a Bidder is deemed to be a non-responsible Bidder. Pursuant to Virginia Code § 2.2-4319, an IFB, an RFQ, any other solicitation, or any and all bids or proposals, may be canceled or rejected by the City at any time. The reasons for cancellation or rejection shall be made part of the contract file. The City shall not cancel or reject an IFB, a RFQ, any other solicitation, bid or proposal solely to avoid awarding a contract to a particular responsive and responsible bidder or offeror.

- 29. **EXCLUSION OF INSURANCE BIDS PROHIBITED**: Pursuant to Virginia Code § 2.2-4320, notwithstanding any other provision of law or these General Conditions, no insurer licensed to transact the business of insurance in the State or approved to issue surplus lines insurance in the State shall be excluded from presenting an insurance bid proposal to the City in response to an RFQ or an IFB; excepting that the City may debar a prospective insurer pursuant to its Debarment Policy, see Chapter 2 of the City's Procurement Policies and Procedures.
- 30. **ANNOUNCEMENT OF AWARD:** Upon the award or announcement of the decision to award a Contract as a result of this Solicitation, the City will publicly post such notice on eVa: https://eva.virginia.gov/index.html.
- 31. QUALIFICATIONS OF BIDDERS OR OFFERORS: The City may make such reasonable investigations as deemed proper and necessary to determine the ability of the Bidder to perform the work/furnish the item(s) and the Bidder shall furnish to the City all such information and data for this purpose as may be requested. The City reserves the right to inspect Bidder's physical facilities prior to award to satisfy questions regarding the Bidder's capabilities. The City further reserves the right to reject any Bid or Proposal if the evidence submitted by or investigations of such Bidder fails to satisfy the City that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work/furnish the item(s) contemplated therein.

32. TIE BIDS AND PREFERENCE FOR VIRGINIA PRODUCTS WITH RECYCLED CONTENT AND FOR VIRGINIA FIRMS:

- a. Pursuant to Virginia Code § 2.2-4328, in the case of a tie bid on an IFB only, the City may give preference to Goods, Services and construction produced in the City of Franklin or provided by persons, firms or corporations having principal places of business in the City of Franklin. If such choice is not available, preference shall then be given to Goods produced in Virginia, or for goods, services or construction provided by Virginia persons, firms, corporations, pursuant Virginia Code § 2.2-4324. If no City or State choice is available, the tie shall be decided publicly by lot. The decision by the City to make award to one or more such Bidders shall be final.
- b. Whenever the lowest responsive and responsible bidder is a resident of any other state and such state under its laws allows a resident contractor of that state a percentage preference, a like preference shall be allowed to the lowest responsive and responsible bidder who is a resident of Virginia and is the next lowest bidder. If the lowest responsive and responsible bidder is a resident of any other state and such state under its laws allows a resident contractor of that state a price-matching preference, a like

preference shall be allowed to responsive and responsible bidders who are residents of Virginia. If the lowest bidder is a resident contractor of a state with an absolute preference, the bid shall not be considered. The Department of General Services shall post and maintain an updated list on its website of all states with an absolute preference for their resident contractors and those states that allow their resident contractors a percentage preference, including the respective percentage amounts. For purposes of compliance with Section 32, the City may rely upon the accuracy of the information posted on this website.

- c. Notwithstanding the provisions of subsections, a and b, in the case of a tie bid in instances where goods are being offered, and existing price preferences have already been taken into account, preference shall be given to the bidder whose goods contain the greatest amount of recycled content.
- d. For the purposes of this Section 32, a Virginia person, firm or corporation shall be deemed to be a resident of Virginia if such person, firm or corporation has been organized pursuant to Virginia law or maintains a principal place of business within Virginia.
- 33. **NEGOTIATION WITH LOWEST RESPONSIBLE BIDDER:** Pursuant to Virginia Code § 2.2-4318, unless cancelled or rejected, a responsive Bid from the lowest responsible Bidder shall be accepted as submitted, except that if the Bid from the lowest responsible Bidder exceeds available funds, the City may negotiate with the apparent low Bidder to obtain a Contract price within available funds. However, the negotiation may be undertaken only under conditions and procedures described in writing and approved by the City prior to issuance of the IFB and summarized therein.

CONTRACT PROVISIONS

A. Anti-Discrimination:

By submitting bids or proposals, bidders, offerors or contractors certify to City of Franklin (the "City") that they will conform to the provisions of the federal Civil Rights Act of 1964, as amended, the Virginia Fair Employment Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act and Section 2.2-4311 of the Virginia Public Procurement Act, which provides:

- 1. During the performance of this contract, the contractor agrees as follows:
 - a. The contractor shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, political affiliation, veteran status, age, disability, or other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 - b. The contractor, in all solicitations or advertisements for employees placed by or on behalf of the contractor, shall state that such contractor is an equal opportunity employer.

- c. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
- 2. The contractor shall include the provisions of the foregoing paragraphs a, b and c in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.
- 3. Pursuant to Section 2.2-4343.1 of the Code of Virginia of 1950, as amended, in all invitations to bid, requests for proposals, contracts, and purchase orders, City of Franklin does not discriminate against faith-based organizations. "Faith-based Organization" means a religious organization that is or applies to be a contractor to provide goods or services for programs funded by the block grant provided pursuant to the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, P.L. 104-193.

B. Ethics in Public Contracting:

By submitting a bid or proposal, bidders, offerors or contractors certify that their bids or proposals are made in full compliance with the Virginia Conflicts of Interest Act and without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other bidder or offeror, supplier, manufacturer or subcontractor in connection with their bid or proposal and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.

C. Immigration Reform and Control Act of 1986:

By submitting a bid or proposal, bidders, offerors or contractors certify that they do not and will not, during the performance of this contract, employ illegal alien workers or otherwise violate the provisions of the federal Immigration Reform and Control Act of 1986.

D. Policy on Drug and Alcohol Abuse:

City of Franklin has adopted a Policy on Drug and Alcohol Abuse. By submitting a bid or proposal, bidders, offerors or contractors certify full compliance with this policy. A copy of the policy is available upon request. Further, in every contract over \$10,000 the following provisions apply:

During the performance of this contract, contractor agrees to (i) provide a drug-free workplace for the contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific contract awarded to a contractor in accordance with this chapter, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

E. Taxes

City of Franklin (federal I.D. #54-6001284) is exempt from federal, state and local taxes. Taxes included on invoices will be deducted from the payment amount. Tax-exempt forms will be completed for a vendor upon request.

F. **Delivery**

All costs and other charges associated with the delivery of a good or non-professional service shall be paid as indicated in the accepted bid or proposal. The City reserves the right to cancel all or any part of a contract without obligation if delivery is not made within the time period specified in the bid or proposal document or if the quantity or quality of products or non- professional services delivered is inadequate.

G. Required Signature

Prior to executing any contractor, the City may request documentation of the signer's authority.

H. Qualifications of Bidders, Offerors or Contractors:

The bidder, offeror, or contractor represents and warrants that it has the requisite experience, skills, capabilities, and manpower to perform the duties required by the contract in a good and workmanlike fashion and that it is authorized to do business in Virginia and has all necessary licenses required by law. The City of Franklin may make such reasonable investigations as deemed proper and necessary to determine the ability of a bidder, offeror or contractor to perform the work or supply the goods. The bidder, offeror or contractor shall furnish the City all such information and data for this purpose as may be requested. The City reserves the right to inspect the bidder's, offeror's, or contractor's physical facilities prior to award to satisfy questions regarding the bidder's or offeror's capabilities. Further, the City reserves the right to reject any bid or proposal if the evidence submitted by, or investigations of, such bidder or offeror fails to satisfy the City that such bidder or offeror is properly qualified to carry out the obligations of the contract and to complete the work or supply the goods.

I. Changes to the Contract:

No fixed price contract may be increased by more than twenty-five (25) percent of the amount of the contract or \$50,000, whichever is greater. Changes can be made to the contract only by mutual agreement of the parties evidenced by a signed writing;

J. Payment Terms:

All approved invoices will be paid within forty-five (45) days of receipt.

K. Default

In case of default by the contractor for failure to deliver or perform in accordance with the contract's specifications or terms and conditions, the City may procure the articles or services from other sources and hold the defaulting the contractor responsible for any

resulting additional purchase and administrative costs. The City will normally repurchase from the next low bidder or purchase competitively by re-solicitation. If the repurchase results in increased costs to the City, a letter will be sent to the defaulted contractor requiring payment for additional costs.

When repayment is requested, the contractor will be removed from future bidding until the repayment has occurred. The contractor shall not be liable for any excess cost if the failure to perform arises out of any act of war, order of legal authority, strikes, act of God, or other unavoidable causes not attributed to their fault or negligence. Failure of a contractor's source to deliver is generally not considered to be an unavoidable cause. The burden of proof rests with the contractor.

L. Assignment

The contract may not be assigned, sublet, or transferred without the written consent of the City of Franklin.

M. Hold Harmless:

The contractor and all its subcontractors shall bear all loss, expense (including reasonable attorney's fees) and damage in connection with, and shall indemnify the City of Franklin, its City Council members, officers, employees and agents against and save them harmless from all claims, demands, and judgments made or recovered against them because of bodily injuries, including death at any time resulting there from, and/or because of damage to property, from any cause whatsoever, arising out of, incidental to, or in connection with the contract. Compliance by the contractor with the insurance provisions hereof shall not relieve the contractor from liability under this provision.

N. Audit

The Contractor hereby agrees to retain all books, records, and other documents related to this Agreement for five (5) years after final payment or after all other pending matters are closed, whichever is longer. The City and its authorized agents, state auditors, the grantor of the funds to the City, the Comptroller of Virginia or of the United States, or any of their duly authorized representatives shall have access to any books, documents, papers and records of the Contractor which are directly pertinent to the Agreement for the purpose of making audits, examinations, excerpts or transcriptions.

O. Ownership of Documents

Any reports, studies, photographs, negatives, or other documents prepared by the contractor in the performance of its obligations under this contract shall be remitted to the City upon completion, termination or cancellation of the contract. The Contractor shall not use, willingly allow or cause to have such materials used for any purpose other than performance of the contractor' obligations under this Agreement without the prior written consent of the City. The City shall own the intellectual property rights to all materials produced under this Agreement.

P. Payment and Performance Bond

If required by law, the contractor shall furnish to the City performance and payment bonds in the amount of the Contract Sum, regardless of its amount, pursuant to Sections 2.2-4336 and 2.2-4337 of the Code of Virginia, 1950, as amended (the ("Code") and shall otherwise

fully comply with the requirements of such sections of the Code.

Q. Required Payment to Subcontractors

Pursuant to Section 2.2-4354 of the Code, the contractor covenants and agrees to:

- 1. within seven (7) days after receipt of any amounts paid to the contractor under the Agreement, (i) pay any subcontractor for its proportionate share of the total payment received from the City attributable to the Services under the contract performed by such subcontractor, or (ii) notify the City and the subcontractor, in writing, of its intention to withhold all or a part of the subcontractor's payment and the reason therefor;
- 2. provide its federal employer identification number or social security number, as applicable, before any payment is made to the Contractor under the contract; and
- 3. pay interest at the legal rate or such other rate as may be agreed to in writing by the subcontractor and the contractor on all amounts owed by the contractor that remain unpaid after seven (7) days following receipt by the contractor of payment from the City for services performed by the subcontractor under the contract, except for amounts withheld pursuant to subparagraph 12, a above.
- 4. include in its contracts with any and all subcontractors the requirements of a, b, and c above.

R. Liability Coverage

The contractor shall take out and maintain during the life of the Agreement such bodily injury, liability and property damage liability insurance as shall protect it and the City from claims for damages for personal injury, including death, as well as from claims for property damage, which may arise from its activities under this contract.

S. Loss or Damage in Transit

Delivery by the contractor to a common carrier does not constitute delivery to the City. Any claim for loss or damage incurred during delivery shall be between the contractor and the carrier. The City accepts title only when goods are received regardless of the F.O.B. point. The City will note all apparent damages in transit on the freight bill and notify the contractor.

Discovery of concealed damages or loss will be reported by the City to the carrier and the contractor within seven days of receipt and prior to removal from the point of delivery if possible. the contractor shall make immediate replacement of the damaged or lost merchandise or be in default of this contract. It shall be the contractor's responsibility to file a claim against the carrier. If damage is to a small quantity, with the approval of the City, the contractor may deduct the amount of damage or loss from his or her invoice to the City in lieu of replacement.

T. No Waiver

Any failure of the City to demand rigid adherence to one or more of the terms and provisions of the contract, including these General Terms and Conditions, on one or more occasions, shall not be construed as a waiver nor deprive the City of the right to insist upon strict compliance with the terms of the contract. Any waiver of a term of the contract, in whole or in part, must be in writing and signed by the party granting the waiver to be effective.

U. Termination

The City may terminate the contract for its convenience and any or no cause at any time upon written notice to the contractor. the contractor shall not be paid for any service rendered or expense incurred after receipt of such notice except such fees and expenses incurred prior to the effective date of termination that are necessary for curtailment of the contractor's services under the contract.

V. Choice of Law

To ensure uniformity of the enforcement of the contract, and irrespective of the fact that either of the parties now is, or may become, a resident of a different state, this contract is made and is intended to be performed in the Commonwealth of Virginia and shall be governed by and construed in accordance with the laws of that state without regard to principles of conflicts of law.

W. Severability

If any provision of the contract is held to be illegal, invalid, or unenforceable, or is found to be against public policy for any reasons, such provision shall be fully severable and the contract shall be construed and enforced as if such illegal, invalid, or unenforceable provision had never been part of the contract, and the remaining provisions of the contract shall remain in full force and effect and shall not be affected by the illegal, invalid, or unenforceable provision, or by its severance from the contract.

X. Contractual Claims Procedure

- 1. Contractual claims or disputes by the contractor, whether for money or other relief, except for claims or disputes exempted by law from the procedure set forth herein, shall be submitted in writing no later than sixty (60) days after final payment; provided, however, that the contractor shall give the City written notice of its intention to file a claim or dispute within fifteen (15) days after the occurrence upon which the claim or dispute shall be based. Any written notice of the contractor' intention to file such a claim or dispute need not detail the amount of the claim but shall state the facts and/or issues relating to the claim in sufficient detail to identify the claim, together with its character and scope. Whether or not the contractor files such written notice, the contractor shall proceed with the services as directed. If the contractor fails to make its claim or dispute or fails to give notice of its intention to do so as provided herein, then such claim or dispute shall be deemed forfeited.
- 2. The City, upon receipt of a detailed claim, may at any time render its decision and shall render such decision within one hundred twenty (120) days of final payment. Each such decision rendered shall be forwarded to the contractor by written notice.
- 3. If the contractor disagrees with the decision of the City concerning any pending claim, the contractor shall promptly notify the City by written notice that the contractor is proceeding with the services under protest. Any claim not resolved whether by failure of the contractor to accept the decision of the City or under a written notice of the contractor' intention to file a claim or a detailed claim not acted upon by the governing body of the City, shall be specifically exempt by the contractor from payment request, whether progress or final. Pendency of claims shall not delay payment of amounts agreed due in the final payment.

4. The decision on contractual claims by the governing body of the City shall be final and conclusive unless the contractor appeals within six months of the date of the final decision on the claim by instituting legal action in the appropriate circuit court.

Y. Subject to Annual Appropriation

The contract is subject to annual appropriation by the City Council of the City of Franklin, Virginia. Neither the contract nor any amount due or to become due under the contract shall be deemed to constitute a debt or pledge of the faith and credit of the Commonwealth of Virginia or any political subdivision thereof, including the City. Neither the Commonwealth of Virginia nor any political subdivision thereof, including the City, shall be obligated to pay any amount due or to become due under this contract except from funds annually appropriated by the City Council of the City of Franklin for such purpose.

In the event of non-appropriation of funds for the items under this contract, the City may terminate this contract as to the services for which funds have not been appropriated. Written notice will be provided to the contractor as soon as possible after such action is taken.

Z. Forum Selection

The parties hereby submit to the personal jurisdiction and venue of the Circuit Court of County of Southampton, Virginia, and the General District Court of City of Franklin, Virginia, for resolution of any and all claims, causes of action or disputes arising out of or related to this Agreement. The parties further agree that any claims, causes of action or disputes arising out of, relating to or concerning this contract shall have jurisdiction and venue in the Circuit Court of County of Southampton, Virginia, and/or the General District Court of City of Franklin, Virginia, and shall be brought only in such courts.

Appendix A: General Conditions & Instructions

We understand the General Conditions & Instructions of these specifications and will comply in full if awarded this contract.

Name & Title	
Signature	
Date	

RETURN THIS PAGE

APPENDIX B: NON-COLLUSION STATEMENT

The party making the foregoing quote hereby certifies that such quote is genuine and not collusive or sham; that said Offeror has not colluded, conspired, connived or agreed, directly or indirectly, with any Bidder/Offeror or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference, with any person to fix the bid price or affiant or of any Offeror, or to fix any overhead, profit or cost element of said bid price, or of that of any other Offeror, or to secure any advantage against the Owner or any person interested in the proposed contract; and that all statements in said proposal or bid are true.

By signing this quote, the undersigned certifies that this person/firm/corporation is not currently barred from bidding on contracts by any agent of City of the Commonwealth of Virginia. Offeror also certifies by signing this quote that no conflict of interest exists between Contractor and the Owner that interferes with fair competition and no conflict of interest exists between Contractor and another person or organization that constitutes a conflict of interest with respect to the contract with the Owner. Undersigned Offeror hereby certifies that he/she has carefully examined all conditions and specifications of this Request for Proposal and hereby submits this proposal pursuant to such instructions and specifications, without exception.

Name & Title		
	Signature	
	Date	

APPENDIX C: BIDDER DATA SHEET

The following information is required as part of your response to this solicitation. Failure to complete and provide this sheet may result in determining your proposal to be not acceptable.

Qualification: The Bidder must have the capability and capacity to satisfy all the contractual

	requiremen	nts.			
2.	Bidder's Primary Contact: Name				
	Address:				
	Telephone	<u> </u>	Email:		
3.		Business: Indicate the nd service:	e length of time you have been in busing	ess providing this type	
4.	SCC#				
5.	Have you or any representative within your organization ever been debarred from submitting bids/proposals on contracts by City?				
6.	Have you or any representative within your organization ever been debarred from submitting bids/proposals on contracts by an agency, public entity/locality or authority of the Commonwealth of Virginia?				
7.		· /	cent accounts, either commercial or go ced, or has provided similar services.	overnmental, that your	
	A. Comp	oany			
	Conta	ıct	Phone		
	Proje	ct			
	Dates	of Service	\$Value		
	B. Comp	oany			
	Conta	nct	Phone		
	Proje	ct			
	Dates	of Service	\$Value		
	C. Comp	oany			
	Conta	ict	Phone		
	Proje	ct			

APPENDIX D: BIDDER STATEMENT

Undersigned Bidder hereby certifies that he/she has carefully examined all conditions and specifications of this solicitation and hereby submits this proposal pursuant to such instructions and instructions.

	rame & Title of Muthoriz	ed Person Submitting Proposal
	Signature of Authorized	Person Submitting Proposal
	Date	
SUBSCRIBE	D AND SWORN to before me	by the above named
On the	day of	
Notary Public	in and for the State of	
My Commissi	on Evnires	

APPENDIX E: SCC FORM

The Bidder/Offeror/Contractor:
is a corporation or other business entity with the following SCC identification number:
OR
is not a corporation, limited liability company, limited partnership, registered limited liability, partnership, or business trust
OR
is an out of state business entity that does not regularly and continuously maintain as part of its ordinary and customary business any employees, agents, offices, facilities, or inventories in Virginia (not counting ay employees or agents who merely solicit orders that require acceptance outside Virginia before they become contracts, and not counting any incidental presence of the Bidder in Virginia that is needed in order to assemble, maintain, and repair goods in accordance with the contract by which such goods were sold and shipped into Virginia from Bidder's out of state location)
OR
is an out of state business entity that is including with this proposal an opinion of legal counsel which accurately and completely discloses the undersigned Bidder's contracts with Virginia and describes why those contacts do not constitute the transaction of business in Virginia within the meaning of §13.1-757 or other similar provisions in Titles 13.1 or 50 of the Code of Virginia.
OR
Please check the following if you have not completed any of the foregoing options but currently have pending before the SCC an application for authority to transact businesses in the Commonwealth of Virginia and wish to be considered for a waiver to allow you to submit the SCC identification number once issued (City reserves the right to determine in its sole discretion whether to allow such waiver)
Name & Title
Signature
Date

Appendix F: Proprietary Information

Ownership of all data, materials, and documentation originated and prepared for the Owner pursuant to the Request for Proposal shall belong exclusively to the Owner and be subject to public inspection in accordance with the Virginia Freedom of Information Act. Trade secrets or proprietary information submitted by a Bidder shall not be subject to public disclosure under the Virginia Freedom of Information Act, however, the Bidder must invoke the protections of Section 2.2-4342F of the Code of Virginia, in writing, either before or at the time the data or other material is submitted. The written notice must specifically identify the data or materials to be protected and state the reasons why protection is necessary. The proprietary or trade secret material submitted must be identified by some distinct method such as highlighting or underlining and must indicate only the specific words, figures, paragraphs that constitute trade secret or proprietary information.

NOTICE OF PROPRIETARY INFORMATION Confidential References Protection in Accordance with the Code of Virginia, Section 2.2-4342F

Section Title	Page No.	Reason(s) for Withholding from Disclosure

INSTRUCTIONS: Identify the data or other materials to be protected and state the reasons by using the codes listed below. Indicate specific words, figures, or paragraphs that constitute trade secrets or proprietary materials.

- A. This page contains information relating to "trade secrets" and "proprietary information" including processes. Operations, style or work, or apparatus, identify confidential statistical data, amount or source of any income of any person (or) partnership. "See Virginia Public Procurement Act. Section 2.2-4342F. Unauthorized disclosure of such information would violate the Trade Secrets Act 18 U.S.C. 1905.
- B. This page contains proprietary information including confidential, commercial or financial information which was provided to the Government on a voluntary basis and is of the type that would not customarily be released to the public. See Virginia Public Procurement Act, Section 2.2-4342F; U.S.C. 552 (b) (4); 12 C.F.R. 309.5 (c)(4).

Appendix F: Proprietary Information (continued)

C. This page contains proprietary information including confidential, commercial or financial information. This disclosure of such information would cause substantial harm to competitive position and impair the Government's ability to obtain necessary information from contractors in the future. 5 U.S.C. See Virginia Public Procurement Act. Section 2.2-4342F: 522 (b) (4); 12 C.F.R 309.5 (c) (4).

Name & Title	
Signature	
 Date	

SPECIFICATIONS APPENDIX G

APPENDIX J 115 kV SF-6 CIRCUIT BREAKER

1.1 Rating

Four (4) transmission type, Sulfur Hexafluoride (SF-6) circuit breaker, dead tank type, rated 115 kV nominal, 123 kV maximum, 550 kV BIL, 60 cycle, three pole, single throw, shall be furnished and shall be suitable for operation on a 115,000-volt, three phase, three-wire system.

The SF-6 circuit breaker shall have a continuous current carrying capacity of 1200 amperes, a minimum interrupting capacity of 20,000 amperes RMS symmetrical, and shall be rated for interruption of the asymmetrical current associated with a symmetrical 100% rated fault current at an X/R ratio of 15.

The SF-6 circuit breaker shall be designed and tested in accordance with the latest applicable ANSI, NEMA, and ASME standards.

1.2 Trip and Close Circuits

The SF-6 circuit breaker tripping and closing operations shall be designed for 48-volts DC trip and close respectively and shall be mechanically and electrically trip free. Tripping for the breaker will require two independent trip circuits. This shall be accomplished through two independently protected DC circuits, connected to two independent trip coils. The closing power for the breaker shall be obtained from a 48-volt DC spring charge type energy storage mechanism with 48-volt DC charging motor. Tripping and closing power for the breaker shall be supplied from the 48-volt DC station batteries. The closing circuit shall include a block close contact.

The internal breaker trip and close circuits shall each be wired in series with auxiliary "a" and "b" contacts in order to de-energize the respective operating coil following breaker operation.

1.3 Bushings and Connections

The breaker shall have six cover-mounted <u>porcelain</u> bushings equipped with NEMA four-hole spade type terminals suitable for aluminum connection, and two clamp type grounding terminals suitable for a No. 1/0 to 4/0 copper ground connection. Extra creep bushings shall be furnished if required for the installation of the bushing current transformers specified in Paragraph 2.4.

1.4 Metering and Overcurrent Protection

The breaker shall be furnished with six (6) 1200:5 ampere, multi-ratio, bushing type current transformers. These current transformers shall meet or exceed the requirements of ANSI relay accuracy class C400. All current transformer secondary leads shall be wired through raceway to shorting type terminal blocks located in the mechanism housing. Terminal blocks shall be appropriately marked to illustrate bushing location and tap number.

1.5 Detailed Features

As a minimum, the SF-6 breaker shall include the following detailed features:

1. Three (3) SF-6 interrupter assemblies and supports.

- 2. SF-6 gas pressure/density gauge.
- 3. Compressed air pressure gauge (if applicable).
- 4. One (1) breaker contact position status 'Open Close' semaphore.
- 5. One (1) Spring Status 'Charged Discharged' semaphore.
- 6. One (1) manual spring charging ratchet and removable handle.
- 7. One (1) external manual trip device which blocks closing of the breaker. (Device 69)
- 8. One (1) mechanical close device.
- 9. One (1) trip operations counter, non-resetting type.
- 10. Hinged access door, gasketed and pad lockable.
- 11. Viewing access for status indicators and counter.
- 12. Nameplate.
- 13. Necessary control power circuit breakers for closing and tripping circuits.
- 14. 240 VAC cabinet heaters with thermostat and heater control breaker.
- 15. Necessary terminal boards.
- 16. One (1) 120 VAC convenience light and one (1) 120 VAC GFCI convenience outlet complete with control circuit breaker.
- 17. Drawings and Instruction Book holder.
- 18. Red and Green breaker position indicating lamps for closed or open status, respectively.
- 19. One (1) trip/close control switch, electrically trip free, with separate green/red position indicator. This switch shall trip the breaker directly. Closing shall be connected to a terminal board wired in series with a block close contact for customer lock out relay.
- 20. One (1) 43 R/L remote local switch which shall disable remote close.

The mechanism compartment shall be wired and tested for proper operation. All components shall be permanently labeled to match designations on schematics and drawings.

A minimum of six (6) spare N/O and six (6) spare N/C auxiliary switch contacts shall also be furnished and wired to the terminal board for customer interconnection.

Position indicating lamps shall be solid state LED type. Incandescent, filament type lamps shall not be accepted.

1.6 Dimensions

Minimum height of the exposed bushing terminals shall be 156 inches above ground line. Maximum height to the exposed bushing terminals shall not exceed 160 inches. Frame extensions shall be provided as required to obtain minimum and maximum heights.

1.7 Remote Control

The following functions shall be wired to a terminal board that is independent of any terminal board which might be used for breaker control wiring. The separate terminal board shall be mounted in the control compartment of the breaker for customer interconnection.

<u>Loss of AC</u> (LAC) Connected to provide two (2) dry "<u>b</u>" contact outputs for loss of breaker control AC supply, one for customer's SCADA, and one spare.

<u>Loss of DC 1</u> (LDC1) Connected to provide two (2) dry "<u>b</u>" contact outputs for loss of breaker control DC supply for first DC circuit, one for customer's SCADA and one spare.

<u>Loss of DC 2</u> (LDC2) Connected to provide two (2) dry "<u>b</u>" contact outputs for loss of breaker control DC supply for second DC circuit, one for customer's SCADA and one spare.

<u>Remote Lockout</u> (RLO) Wired for momentary customer contact input which shall open and lockout the breaker.

<u>Remote Close</u> (RCL) Wired for momentary customer contact input which shall close the breaker.

<u>Breaker Position</u> (BKR POS) Connected to provide a standard form "a" dry contact output to indicate breaker position. This function <u>shall</u> be provided by a spare breaker auxiliary switch contact.

<u>Low Gas Pressure/Density Alarm</u> (LGPA) Connected to provide two (2) dry "<u>b</u>" contact outputs to indicate a low SF-6 gas pressure and/or density alarm, one for customer's SCADA and one spare.

<u>Trip 1</u> (TRIP1) Wired for momentary customer contact input which shall open and lockout the breaker for the first trip circuit.

<u>Trip 2</u> (TRIP2) Wired for momentary customer contact input which shall open and lockout the breaker for the second trip circuit.

Manufacturer's drawings shall be marked with the preceding acronyms for actual customer connection points. Any and all accessories required for the functions specified herein shall be included as a part of the proposal. Proper operation of the breaker shall not require customer connection to any of the remote features.

1.8 Accessories

One set of special tools required for maintenance.

1.9 Spares

Five (5) spare LED lamps of each type utilized shall be included with each breaker. Lamps shall be manufactured by G.E., Data Display Products, or other approved vendors.

1.10 Drawings

Upon acceptance and execution of a contract, the successful Bidder shall, within four weeks, furnish for approval two (2) sets of drawings and instructions covering the physical size, weight, arrangement, dimensions, electrical characteristics, wiring diagrams and other pertinent data for the transformers. The Bidder shall also supply four (4) prints of the finally approved issue of each drawing for use in the field and for the Purchaser's records. The Bidder shall also furnish all drawings in printed format and in digital format for use in AutoCAD(R) and for use in Adobe Acrobat (.pdf) on CD and thumb drive. The Bidder shall also supply four (4) sets of printed, written instructions and renewal parts lists, suitably illustrated, covering the operation and maintenance of the equipment furnished. All drawings, documentation, information, test reports, operating and maintenance instructions

and other correspondence and like items shall be in the English language printed and on CD and thumb drive.

1.11 Service Engineer

The proposal shall show as a separate item the <u>total cost</u> (not per-diem charges) for a qualified service engineer to inspect, adjust, and charge the SF-6 interrupters of the circuit breaker in accordance with the manufacturer's recommendations after installation. The service engineer shall place the breaker in service and check for correct functional operation of all components of the breaker and initiate the manufacturer's warranty. The cost of any special tools or equipment required for this inspection shall be included in the Proposal.

1.12 Exceptions

Exceptions to any of the equipment or functions specified herein shall be clearly stated in the Proposal. If no exceptions are stated, it shall be understood that the equipment to be furnished meets or exceeds all of the requirements of the Specifications.

SECTION 2 15 kV VACUUM BREAKERS (BUS BREAKERS)

2.1 General

These specifications cover three (3) outdoor vacuum bus breakers, distribution type, frame-mounted, three pole, single throw, for 60 cycles, 13,200 volts grounded wye operation. The vacuum circuit breakers shall be rated 15 kV, 2000 amperes continuous, 25,000 amperes symmetrical interrupting capacity, 110 kV BIL.

Each breaker shall be mechanically and electrically trip free and shall be designed for 240-volt AC closing. The closing power for all breakers shall be obtained from the 240-volt AC spring charge type energy storage mechanism. Tripping power for the breakers shall be supplied from the Purchaser's 48-volt DC station batteries. Manufacturer shall provide two complete sets of drawings for approval, and four complete sets for records. Record copies shall include operating instructions and renewal parts lists for all equipment supplied as a part of these specifications.

2.2 **Bushings and Connections**

Each breaker shall have six cover-mounted porcelain bushings equipped with NEMA four-hole spade type terminals suitable for aluminum or copper conductor, and two clamp type grounding terminals suitable for a No. 1/0 to 4/0 copper ground connection.

2.3 Metering and Overcurrent Protection

Each bus breaker shall be furnished with six (6) 2000:5 ampere, multi-ratio, bushing type current transformers. Current transformers shall meet or exceed the requirements of ANSI relay accuracy class C400. Current transformer secondary leads shall be wired to shorting type terminal blocks located in the mechanism housing. Terminal blocks shall be appropriately marked to illustrate bushing location and tap number.

Breakers shall be equipped with the following local features:

- 1. Red and green breaker position indicating lamps for closed or open status, respectively.
- 2. Manual trip/close control switch with red and green semaphore.

The internal breaker trip and close circuits shall each be wired in series with auxiliary "a" and "b" contacts in order to de-energize the respective operating coil following breaker operation. Additionally, the internal breaker close circuit shall include a block close contact.

The breaker control, including all inputs and outputs shall meet or exceed the latest requirements of ANSI surge withstand capability test C37.90a SWC.

2.4 Detailed Features

Each breaker shall be equipped with a manual tripping device, manual closing device, control power circuit breakers for closing and tripping circuits, space heaters and heater control breaker, necessary terminal boards, mechanical position indicator and mechanical operation counter. Each mechanism housing shall be complete and shall be wired and tested for proper operation. Each breaker shall also be equipped with one, 120 VAC single-phase GFCI convenience outlet, incandescent lamp, switch, and control circuit breaker. Minimum height of the exposed bushing terminals shall be 120 inches above ground line. Adjustable

frame shall be provided as required to obtain minimum and maximum heights. Maximum height to the exposed bushing terminals shall not exceed 124 inches.

Each breaker shall be equipped with a weatherproof housing and hinged panel for the control equipment.

Breaker interrupting capacity shall be 25,000 amperes RMS symmetrical minimum and shall be rated for interruption of the asymmetrical current associated with a symmetrical 100% rated fault current and an X/R ratio of 15.

All control components, circuit breakers, terminal strips, relays, switches, and lights, shall be permanently labeled to match drawings and schematic.

2.5 Remote Control

The following functions shall be wired to a terminal board that is independent of any terminal board which might be used for breaker control wiring. The separate terminal board shall be mounted in the control compartment of the breaker for customer interconnection.

<u>Loss of AC</u> (LAC) Connected to provide a dry contact closure on loss of breaker control AC power.

<u>Loss of DC</u> (LDC) Connected to provide a dry contact closure on loss of breaker control DC power.

<u>Remote Lockout</u> (RLO) Wired for momentary or latched customer contact input which shall open the breaker.

<u>Remote Close</u> (RCL) Wired for momentary customer contact input which shall close the breaker.

<u>Breaker Position</u> (POS) Connected to provide a standard form "a" dry contact output to indicate breaker position. This function <u>shall</u> be provided by a spare breaker auxiliary switch contact.

A minimum of six (6) spare N/O and six (6) spare N/C auxiliary switch contacts shall also be furnished and wired to the terminal board for customer interconnection.

Manufacturer's drawings shall be marked with the preceding acronyms for actual customer connection points. Any and all accessories and interposing relays required for the functions specified herein shall be included as a part of the proposal. Proper operation of the breaker shall not require customer connection to any of the remote features.

2.6 Accessories (Per Breaker)

- 1. One Manual Closing Device.
- 2. One set of special tools required for maintenance.

2.7 Lamps

The red and green lamps utilized to display the open or closed position of the circuit breakers shall be LED solid state type of appropriate voltage capability. Lamps shall be manufactured by G.E., Data Display Products, or another approved equivalent.

2.8 Drawings

Upon acceptance and execution of a contract, the successful Bidder shall, within four weeks, furnish for approval two (2) sets of drawings and instructions covering the physical size, weight, arrangement, dimensions, electrical characteristics, wiring diagrams and other pertinent data for the transformers. The Bidder shall also supply four (4) prints of the finally approved issue of each drawing for use in the field and for the Purchaser's records. The Bidder shall also furnish all drawings in printed format and in digital format for use in AutoCAD^(R) and for use in Adobe Acrobat (.pdf) on CD and thumb drive. The Bidder shall also supply four (4) sets of printed, written instructions and renewal parts lists, suitably illustrated, covering the operation and maintenance of the equipment furnished. All drawings, documentation, information, test reports, operating and maintenance instructions and other correspondence and like items shall be in the English language printed and on CD and thumb drive.

2.9 Service Engineer

The proposal shall show as a separate item the <u>total cost</u> (not per diem charges) for a qualified service engineer to inspect and adjust each circuit breaker in accordance with the manufacturer's recommendations after installation. The service engineer shall place each circuit breaker in service and check for correct functional operation of all components of each breaker and initiate the manufacturer's warranty. Should field service not be required, the Bidder shall note in the Proposal.

2.10 Spare Parts

Five spare bulbs for the trip and close indicators for each circuit breaker shall be included in the proposal price. One spare interposing relay of each type installed in the circuit breaker shall be furnished as a part of the proposal.

2.11 Exceptions

Exceptions to any of the equipment or functions specified herein shall be clearly stated in the Proposal. If no exceptions are stated, it shall be understood that the equipment to be furnished meets or exceeds all of the requirements of the Specifications.

SECTION 3 15 kV VACUUM CIRCUIT BREAKERS (FEEDER BREAKERS)

3.1 General

These specifications cover nine (9) outdoor vacuum circuit breaker, distribution type, frame-mounted, three pole, single throw, for 60 cycle, 13,200 volts grounded wye operation. The vacuum circuit breaker shall be rated 15 kV, 1200 amperes continuous, 25,000 amperes symmetrical interrupting capacity, 110 kV BIL.

The breaker shall be mechanically and electrically trip free and shall be designed for 240-volt AC closing. The closing power for the breaker shall be obtained from the 240-volt AC spring charge type energy storage mechanism. Tripping power for the breaker shall be supplied from the Purchaser's 48-volt DC station batteries. Manufacturer shall provide two complete sets of drawings for approval, and four complete sets for records. Record copies shall include operating instructions and renewal parts lists for all equipment supplied as a part of these specifications.

3.2 Bushings and Connections

The breaker shall have six cover-mounted porcelain bushings equipped with NEMA clamp type terminals suitable for 4/0-500 MCM aluminum or copper conductor, and two clamp type grounding terminals suitable for a No. 1/0 to 4/0 copper ground connection.

3.3 Metering and Overcurrent Protection

The feeder breaker shall be furnished with six (6) 1200:5 ampere, multi-ratio, bushing type current transformers. Current transformers shall meet or exceed the requirements of ANSI relay accuracy class C400. Current transformer secondary leads shall be wired to shorting type terminal blocks located in the mechanism housing. Terminal blocks shall be appropriately marked to illustrate bushing location and tap number.

The breaker shall be equipped with a Schweitzer Engineering Laboratories 751 overcurrent relay, complete part number 751102C1C1C0X85A820.

The relay inputs and outputs shall be configured as follows:

IN101 – 52b contact

IN102 – 52a contact

IN301 – Trip Coil Monitor

IN302 – Loss of AC

IN303 – Reclose Switch Input (MRSW)

IN304 – Ground Switch Input (MGSW)

IN401 – Spare (wired to terminal board for future use)

IN402 – Reclose Enable

IN403 – Spare (wired to terminal board for future use)

IN404 – Spare (wired to terminal board for future use)

OUT101 - Trip

OUT102 - 79 Close

OUT103 – Control Malfunction Alarm (CMA) (Wired to terminal board)

OUT301 – Remote Close (RCL)

OUT302 – Spare (wired to terminal board for future use)

OUT303 – Spare (wired to terminal board for future use)

OUT304 – Spare (wired to terminal board for future use)

OUT401 – Spare (wired to terminal board for future use)

OUT402 – Spare (wired to terminal board for future use)

OUT403 – Spare (wired to terminal board for future use)

OUT404 – Spare (wired to terminal board for future use)

Inputs and outputs may be reconfigured prior to fabrication of the breaker.

The breaker shall be equipped, as a minimum, with the following local features:

- 1. Phase and ground overcurrent protection.
- 2. Programmable minimum trip level settings.
- 3. Front panel target indication for all trip features. (Individual time and instantaneous for each phase and ground.)
- 4. Time and date stamped fault history for all phases and ground.
- 5. Resettable duty monitor for calculation of accumulated breaker interrupting duty.
- 6. Resettable RMS phase current indication for instantaneous, integrated, and maximum integrated RMS current values.
- 7. Phase and ground fault indication counters.
- 8. Red and Green breaker position indicating lamps for closed or open status, respectively.
- 9. Trip test switch for verification of trip, reclose and reset timing.
- 10. Front panel lockout indication.
- 11. Control system malfunction indication.
- 12. Loss of AC control power indication.
- 13. Loss of DC control power indication.
- 14. Manual trip/close control switch with red and green semaphore. (Manual trip shall cause lockout of the breaker.)
- 15. Non-reclose switch.
- 16. Ground trip/instantaneous trip block (operation shall disable all ground trip and instantaneous phase trip functions).
- 17. Extremely inverse, user programmable time-current characteristic curves.
- 18. User programmable instantaneous trip function (no intentional time delay).
- 19. Completely programmable operating sequence for each set of overcurrent functions.
- 20. Automatic reclosing function, programmable from 0 to 4 operations to lockout with each reclose interval programmable from 0 to 60 seconds in .1 second increments.
- 21. Programmable reset after successful reclose adjustable from 3 to 180 seconds.

*The relay shall have the ability to trip the breaker directly, without any additional auxiliary relays.

All data shall be available for review and modification from the keypad located on the front of the hinged instrument panel. All data shall also be available for review or modification from a personal computer over an RS-232C serial interface. Any custom software required for the programming or interrogation of the control shall be furnished as a part of the circuit

breaker package. This software shall be the full version of the software (i.e., not a "lite" version).

User programmable password security protection shall be provided and required for data entry or modification of settings.

The breaker control, including all inputs and outputs shall meet or exceed the latest requirements of ANSI surge withstand capability test C37.90a SWC.

The relay manufacturer shall be Siemens or approved equal.

3.4 <u>Detailed Features</u>

The breaker shall be equipped with a manual tripping device, manual closing device, control power circuit breakers for closing and tripping circuits, space heaters and heater control breaker, necessary terminal boards, mechanical position indicator and mechanical operation counter. The mechanism housing shall be complete and shall be wired and tested for proper operation.

The breaker shall also be equipped with one, 120 VAC single-phase GFCI convenience outlet, incandescent lamp, switch, and control circuit breaker. Minimum height of the exposed bushing terminals shall be 120 inches above ground line. Adjustable frame shall be provided as required to obtain minimum and maximum heights. Maximum height to the exposed bushing terminals shall not exceed 124 inches.

The breaker shall be equipped with weatherproof housing and hinged panel for the control equipment.

Breaker interrupting capacity shall be 25,000 amperes RMS symmetrical minimum and shall be rated for interruption of the asymmetrical current associated with a symmetrical 100% rated fault current and an X/R ratio of 15.

All control components, circuit breakers, terminal strips, relays, switches, and lights, shall be permanently labeled to match drawings and schematic.

3.5 Remote Control

The circuit breaker shall be furnished with one redundant pair of uniquely addressable fiber optic ports capable of communication with DNP 3.0 protocol to furnish the following specified functions. This communication shall be accomplished with two multimode fiber optic cable pairs with LC type connectors from the circuit breaker back to the customer's Remote Terminal Unit. This port shall be a direct output from the microprocessor-based relay. Fiber to serial converters shall not be allowed.

<u>Loss of AC (LAC)</u> Connected to provide dry contact closure on loss of breaker control AC supply and assigned to fiber optic output.

Remote Lockout (RLO) Programmed for pulsed customer input which shall open and lockout the breaker via the fiber optic connection. This shall be assigned to a relay output that is separate from the overcurrent trip output.

Remote Close (RCL) Programmed for pulsed customer input which shall close the breaker via the fiber optic connection. This shall be assigned to a relay output that is separate from the relay close output.

Breaker Position (POS) Connected to provide a standard form "a" dry contact output to indicate breaker position. This function <u>shall</u> be provided by a spare breaker auxiliary switch contact and wired to a terminal board for Purchaser connection.

Reclosing Control (RSW) Programmed for latched customer input via fiber optic which shall block or disable the reclose feature. Programmed output shall be furnished via fiber optic to monitor the separate status of this feature to determine the reclosing function availability for service.

<u>Ground Switch Control (GSW)</u> Programmed for latched customer input via fiber optic which shall block or disable the complete ground trip function and the instantaneous trip function of the phase overcurrent protective trip circuits. While activated, the breaker shall only trip as a result of phase time delay trip operation. Fiber optic output shall be programmed to monitor the separate status of this feature to determine the ground and instantaneous trip function availability for service.

<u>Loss of DC (LDC)</u> Connected to provide, a dry contact closure on loss of DC control power and wired to a terminal board for Purchaser connection.

<u>Manual Reclosing Switch (MRSW)</u> Programmed to provide fiber optic output to monitor the position of the panel mounted non-reclosing switch.

<u>Manual Ground Trip Switch (MGSW)</u> Programmed to provide fiber optic output to monitor the position of the panel mounted ground relay and phase instantaneous trip block switch.

<u>Control Malfunction Alarm (CMA)</u> Programmed to provide dry contact output to indicate a microprocessor control malfunction and wired to a terminal board for Purchaser connection.

A minimum of six (6) spare N/O and six (6) spare N/C auxiliary switch contacts shall also be furnished and wired to the terminal board for customer interconnection.

Manufacturer's drawings shall be marked with the preceding acronyms and addresses for actual customer programming. Any and all accessories and interposing relays required for the functions specified herein shall be included as a part of the proposal. Proper operation of the breaker shall not require customer input to any of the remote features.

Additionally, the following outputs shall be provided:

- 1. Individual phase and neutral amperes.
- 2. Three phase kW.
- 3. Three phase kVAR (lagging or leading).
- 4. Individual phase to ground voltages.

All specified DNP 3.0 binary and control, inputs and outputs shall be configured by the Vendor prior to shipment such that the equipment furnished shall meet the functional requirements of the specifications. Binary, analog, and control inputs and outputs shall be listed by address, function, and scale factor. DNP 3.0 protocol shall at a minimum support both Class 0 and Class 1 type interrogations. Data filtering shall be available to allow Purchaser selection of points which are to be returned.

3.6 Accessories (Per Breaker)

- 1. One Manual Closing Device.
- 2. One set of special tools required for maintenance.

3.7 Lamps

The red and green lamps utilized to display the open or closed position of the circuit breakers shall be LED solid state type of appropriate voltage capability. Lamps shall be manufactured by G.E., Data Display Products, or other approved vendors.

3.8 Drawings

Upon acceptance and execution of a contract, the successful Bidder shall, within four weeks, furnish for approval two (2) sets of drawings and instructions covering the physical size, weight, arrangement, dimensions, electrical characteristics, wiring diagrams and other pertinent data for the transformers. The Bidder shall also supply four (4) prints of the finally approved issue of each drawing for use in the field and for the Purchaser's records. The Bidder shall also furnish all drawings in printed format and in digital format for use in AutoCAD^(R) and for use in Adobe Acrobat (.pdf) on CD and thumb drive. The Bidder shall also supply four (4) sets of printed, written instructions and renewal parts lists, suitably illustrated, covering the operation and maintenance of the equipment furnished. All drawings, documentation, information, test reports, operating and maintenance instructions and other correspondence and like items shall be in the English language printed and on CD and thumb drive.

3.9 Service Engineer

The proposal shall show as a separate item the <u>total cost</u> (not per diem charges) for a qualified service engineer to inspect and adjust each circuit breaker in accordance with the manufacturer's recommendations after installation. The service engineer shall place each circuit breaker in service and check for correct functional operation of all components of each breaker and initiate the manufacturer's warranty. Should field service not be required, the Bidder shall note in the Proposal.

3.10 Spare Parts

Five spare bulbs for the trip and close indicators for the circuit breaker shall be included in the proposal price. One spare interposing relay of each type installed in the circuit breaker shall be furnished as a part of the proposal. The Bidder shall show, as a separate option, the cost of one spare microprocessor control unit for Breaker.

3.11 Exceptions

Exceptions to any of the equipment or functions specified herein shall be clearly stated in the Proposal. If no exceptions are stated, it shall be understood that the equipment to be furnished meets or exceeds all of the requirements of the Specifications.

SECTION 4 7.62 kV VOLTAGE REGULATORS

4.1 GENERAL

This specification covers twenty-seven (27), outdoor station class power voltage regulating equipment. The voltage regulators specified here within shall be furnished complete with all accessories, regulator controller, control cabinet and interconnected wiring factory installed and assembled, and upon receipt, ready for immediate service.

4.2 CODES AND STANDARDS

The regulators furnished under this specification shall be designed and manufactured in compliance with the latest IEEE, ANSI and NEMA standards covering the complete unit or parts thereof. Regulators shall conform to the latest revision of ANSI C57.15, with short time loading characteristics conforming with Appendix C57.95.

4.3 PERFORMANCE

The following guaranteed performance specifications shall be furnished by the regulator manufacturer and shall be included as a part of this proposal.

- 1. Temperature rise in degrees C at rated full load.
- 2. Total weight.
- 3. Withstand at 40 times rated current.
- 4. Overall dimensions.
- 5. No-load, full-load, and total losses for all steps of regulation at a constant load voltage equal to rated voltage.
- 6. Electricities A and B factors will be used to evaluate losses and to determine the lowest life cycle cost of each regulator group. The City reserves the right to purchase any regulator group as it deems appropriate for the City of Franklin, Virginia.

4.4 RATINGS

These specifications cover voltage regulators and voltage regulator controllers. Voltage regulators to be furnished shall be manufactured by Siemens or approved equal and shall be outdoor type, single-phase step type and rated 7620/13200 volts, 250/280 kVA, 328/367 amperes, 110 kV BIL, "Straight Configuration", ANSI Type A. "Inverted Configuration," ANSI Type B shall **not** be furnished. Taps shall be provided for operation at 7,960, 7,620 and 7,200 volts. Regulators shall be tapped at the 7,620 volt tap. Regulators shall provide voltage regulation of ten percent raise and lower in thirty-two 5/8 percent steps. Provisions shall be made to limit the regulation range by means external to the main tank to provide increased kVA capacity of 10 percent, 20 percent, 35 percent, and 60 percent at 8-3/4 percent, 7-1/2 percent, 6-1/4 percent, and 5 percent regulation, respectively.

General ratings shall be:

- 1. Single phase, oil immersed
- 2. 60 Hz
- 3. 55/65-degree C temperature rise by resistance
- 4. Self-cooled
- 5. Plus, or minus ten (10) percent regulation in thirty-two 5/8 percent steps

- 6. Short circuit rating of forty (40) times nameplate rating for a period of .8 seconds (48 cycles) and 25 times nameplate rating for a period of 2 seconds (120 cycles).
- 7. Non-PCB ASTM D-3487 Type II insulating oil
- 8. Non-PCB capacitors in motor circuits
- 9. Switch must be designed to make 2 million mechanical operations. Expected minimum contact life for Regulators rated 7.62 kV 250 kVA shall be 200,000 operations.

The voltage regulators shall be furnished with the following minimum features:

- 1. Position indicator and positive neutral indicator.
- 2. Line Drop compensator.
- 3. Operation counter.
- 4. Test terminals for regulated voltage.
- 5. Internal External power supply terminals and switch.
- 6. Voltage level adjustment.
- 7. Bandwidth adjustment.
- 8. Time delay adjustment for tap changer operation.
- 9. Control switch for automatic, lower, raise, and off.
- 10. MOV bypass arrester across series winding.
- 11. Upper and lower voltage limit set points.

4.5 VOLTAGE REGULATOR CONTROLLER

Twenty-seven (27), single phase, voltage regulator controllers to be furnished shall be manufactured by Schweitzer or approved equal. The control panel will be mounted on the regulator tank so that the height is adjustable from a minimum of 44" to a maximum of 60". The maximum and minimum measurements are at the bottom of the control panel above ground level. Ground level is defined as the bottom of any sub-base that is necessary to bring the regulator up to minimum height. Control cabinet height shall <u>not</u> exceed six (6) feet above ground level to the top of the cabinet.

Motor driver circuits in the control panel and the regulator itself must include relays and other devices of sufficient ratings to prevent failure of the device due to normal operating currents/conditions.

A thermostatically controlled heater will be provided within the control to prevent moisture formation. The heater will turn on at 75 degrees F and off at 100 degrees F.

Manufacturer shall state compatibility and retrofit to previous vintage control panels.

The current transformers shall have mechanical knife switch type shorting device mounted inside the control cabinet so that it can be visually verified that the current transformer secondary is shorted prior to disconnecting the leads to the control.

All leads to the control shall be either color coded or labeled for easy identification.

The regulator control panel shall contain the following basic items:

- 1. Position indicator drag hand reset button
- 2. Indicating light, which provides neutral position indication. The indicating light shall be actuated independent of the position indicator.

- 3. Independent motor and panel fuses replaceable on the control faceplate.
- 4. A six-digit operations counter 1 per tap change.
- 5. Bandwidth indicating lights, which provide a constant indication as to whether the output is within the programmed bandwidth.
- 6. Voltage test terminals, which connect to the 120 VAC regulated base output of the regulator.
- 7. Three position voltage selector switch to allow the regulator control to be operated from the internal potential transformer, an external 120 VAC source, or turned off.
- 8. A manual-off-automatic motor transfer switch and a manual raise/lower switch operable when the regulator is in the manual position only.
- 9. Line drop compensation consisting of resistance and reactance settings with selectable polarity for resistance and/or reactance.
- 10. Voltage level setting adjustable from 105 to 134 volts in one (1) volt increments.
- 11. Bandwidth adjustment that is adjustable from one (1) to six (6) volts in 1/2-volt increments. The bandwidth setting shall be independent of the voltage level setting.
- 12. Time delay adjustable from 10 to 120 seconds in 1-second increments.
- 13. Voltage limit control (first house protector) to allow selectable levels of maximum or minimum voltage not to be exceeded by the regulator. The control will prevent the regulator from operating if the next tap change would exceed the programmed limits. Lights will be provided that will indicate when the voltage limits have been exceeded.
 - The voltage limit control must be installed in such a manner that its operation is completely independent of the control panel circuitry thereby preventing a failure of the device to operate if the control panel were to fail.
- 14. The voltage regulator controller shall be furnished with the capability of three levels of local and remote voltage reduction control of 0 to 10 percent adjustable in 0.5 percent increments. Reduction shall be initiated either by operation of the local switch or customer supplied fiber optic ethernet DNP input. The fiber optic ethernet DNP input shall be accomplished via a control input and shall not require the writing of an analog value to the control. The control shall visually indicate the status of the voltage reduction control system.
- 15. Programming of the panel will be either through a keypad on the face of the panel or via a laptop computer using a RS-232 or USB interface on the front of the panel. The manufacturer will provide the software necessary to program the panel with a laptop computer. The manufacturer will provide software to allow monthly reading of the control panel using a laptop computer and a RS-232 or USB interface on the front of the panel.
- 16. The regulator control panel shall be housed in a weather resistant enclosure capable of being padlocked. The control panel shall be unit constructed to provide direct control interchangeability as well as allowing its removal from the regulator. The control panel shall not require the need for any device or tool to open the panel.

4.6 **COMMUNICATION**

Each voltage regulator controller shall have communications ports which have two uniquely addressable Ethernet fiber optic ports capable of communications with DNP 3.0 protocol. This communication shall be accomplished with two multimode fiber optic cable pairs with LC type connectors from the customer's Ethernet switch to each regulator. The microprocessor – based controls shall be compatible with a "fiber repeat" mode. Copper to Fiber converters shall not be allowed. Each voltage regulator controller shall also be furnished with one uniquely addressable serial multimode fiber optic port capable of communicating DNP 3.0 protocol. Fiber optic ports shall have ST type connectors.

Each voltage regulator controller shall be equipped with a Schweitzer Engineering Laboratories 2431 voltage regulator control, part number 24310111X1246XXX--XX ("--" is vendor specific wiring harness) or approved equal. Control cabinet height shall not exceed six (6) feet above ground level to the top of the cabinet.

The following minimum outputs shall be available from the controller via DNP 3.0:

- 1. Regulator output voltage
- 2. Regulator amperes
- 3. Regulator power factor
- 4. Regulator tap position
- 5. Regulator kW
- 6. Regulator kVAR
- 7. Regulator control malfunction

All software and cabling necessary for programming the controller from an RS 232C serial port or USB port connected to a lap-top computer shall be furnished. DNP 3.0 protocol and shall at a minimum support both Class 0 and Class 1 type interrogations. Data filtering shall be available to allow Purchaser selection of points which are to be returned.

4.7 CONSTRUCTION

The regulators shall be designed such that they can be partially or completely un-tanked for inspection and maintenance without disconnecting any internal electrical or mechanical connections.

Lifting eyes/hooks of sufficient strength will be provided on the tank lid that will allow lifting of the regulator internal mechanism without removal of the tank lid. Lifting hooks of sufficient strength will be provided on the side of the tank to allow balanced lifting of the regulator when filled with oil.

After the unit is un-tanked, it shall be possible to operate as a complete unit the regulator mechanism and test the control panel from an external 120 VAC source.

The regulator shall be completely sealed to prevent moisture from entering the regulator during normal operating conditions but shall have a venting mechanism available that will vent combustible gases that build up during normal or fault conditions.

A means of non-automatic pressure relief shall be provided in the tank lid to allow for the venting of pressure before the entire lid is removed.

A base plate will be welded to the bottom of the regulator to allow for a means of securing the regulator to the substation footings.

Minimum height of the exposed bushing terminals shall be 120 inches above the ground line. Maximum height shall be 124 inches. Frame extensions shall be supplied as required to obtain these minimum and maximum heights.

Sub-bases will be of galvanized steel of sufficient strength to hold the regulator when filled with oil. The sub-base shall not be designed any wider than the base plate welded onto the regulator. Sub-base construction will be welded. **Painted or bolted bases will not be acceptable**.

Two copper-clad or stainless-steel ground pads for grounding the regulator will be provided on front and back sides of the regulator tank base.

The tap changing mechanism shall operate based on a Geneva gear driven, "slow make fast break" motor driven design or approved equal and shall be completely oil immersed. A mechanism (bleeding resistors, reactors, equalizer windings, vacuum bottles, etc.) will be provided across the tap changing mechanism to eliminate internal arcs.

An internal potential transformer will be provided to power the tap changing motor and the control panel. External voltage source terminals will be provided in the control panel which will allow the tap changer motor to be energized through the front of the control panel by an external 120 VAC source. An interlocking scheme will be provided to prevent energizing of the high voltage bushings from an external 120 VAC source in the control panel.

An external motor capacitor will be used and will be installed in the regulator control panel.

All external nuts and bolts will be stainless steel.

4.8 FINISH

The voltage regulator, control panel, and all other external metal parts shall be painted ASA #70 gray.

The paint finish shall meet the latest requirements of ANSI C57.12.28 finishing guidelines for pad-mounted equipment. Certified test data will be required.

4.9 BUSHINGS

Regulator bushings shall have a minimum creep distance of 26.5 inches. The bushing designators (S, L or SL) shall be stamped on the regulator cover adjacent to the applicable bushing. The S, L or SL bushings must be interchangeable with each other.

4.10 CONNECTIONS

All units shall have bushings with threaded studs terminated with clamp type terminals and rated for the full loading of the regulator.

4.11 ARRESTORS

Internal or External bypass protection shall be provided across the series winding.

THE MANUFACTURER WILL STATE WHETHER THEY ARE PROVIDING INTERNAL OR EXTERNAL BYPASS PROTECTION.

4.12 GAUGES

An external oil sight level gauge shall be provided which indicates oil level and oil color.

An external position indicator, which is mounted above the oil level of the regulator, shall be included to provide information as to the regulator's step position. The position indicator shall be furnished with reflecting numbers and a weather and shatter resistant faceplate. The position indicator shall be slanted at a minimum of 15-degrees to allow for easy viewing from the ground.

4.13 LOAD BONUS FEATURE

The regulators shall include a feature, which will permit additional current carrying capabilities at reduced regulation per the following:

Regulation (Percent)	Current (Percent)
<u>+</u> 10.0	100
<u>+</u> 8.75	110
<u>+</u> 7.5	120
<u>+</u> 6.25	135
<u>+</u> 5.0	160

The maximum current carrying capability will be limited by the maximum current rating of the switch. The information shall be inscribed on the nameplate.

The adjustment allowing the various percentages of regulation shall be located in the position indicator. The position indicator will be located in a region below the cover thereby allowing the operator safe operation of the maximum regulation adjustment knobs.

4.14 DRAIN VALVE

The regulators will be furnished with a one (1) inch drain valve at the bottom of the tank. The valve shall be located under the regulator control. The drain hole in the regulator must be one inch (one-inch flow path shall be unrestricted by smaller openings). A sampling valve, which is removable, will be provided at the end of the drain valve. The drain valve will be brass.

4.15 MARKINGS

The regulators shall have the size in kVA painted directly above the oil drain hole in minimum 3" high black letters.

4.16 NAMEPLATES

Two (2) complete nameplates will be provided and securely fastened to the regulator. One will be on the front of the control panel, and one will be fastened to the regulator tank on the same side and near the control panel. All nameplates can be Anodized Aluminum or Stainless steel with laser etching.

4.17 INSULATING LIQUID

The regulator shall be filled with ANSI Type II mineral oil per ASTM D-3487.

The manufacturer shall certify the insulating liquid to be free of PCB contaminates. The term "free" shall mean less than two (2) parts per million by volume.

4.18 **SPARE EQUIPMENT**

One complete spare regulator control, without enclosure, identical in design to those being furnished as part of the voltage regulators, shall be furnished as part of this proposal.

4.19 **DRAWINGS**

Upon acceptance and execution of a contract, the successful Bidder shall, within four weeks, furnish for approval two (2) sets of drawings and instructions covering the physical size, weight, arrangement, dimensions, electrical characteristics, wiring diagrams and other pertinent data for the transformers. The Bidder shall also supply four (4) prints of the finally approved issue of each drawing for use in the field and for the Purchaser's records. The Bidder shall also furnish all drawings in printed format and in digital format for use in AutoCAD^(R) and for use in Adobe Acrobat (.pdf) on CD and thumb drive. The Bidder shall also supply four (4) sets of printed, written instructions and renewal parts lists, suitably illustrated, covering the operation and maintenance of the equipment furnished. All drawings, documentation, information, test reports, operating and maintenance instructions and other correspondence and like items shall be in the English language printed and on CD and thumb drive.

4.20 EXCEPTIONS

Exceptions to any of the equipment or functions specified herein shall be clearly stated in the Proposal. If no exceptions are stated, it shall be understood that the equipment to be furnished meets or exceeds all of the requirements of the Specifications.

4.21 SCHEMATICS – MANUALS

The manufacturer will provide three complete sets of schematics and manuals per regulator of sufficient detail to allow for component level repair of the regulator and the control. Each manual and schematic will contain the regulator serial number.

4.22 WARRANTY

The manufacturer will state the warranty period for the regulator and for the control. A minimum of 18-months parts and labor warranty is required for the regulator and control.

4.23 SERVICE ENGINEER

The proposal shall show as a separate item the <u>total cost</u> (not per diem charges) for a qualified service engineer to inspect and adjust each voltage regulator in accordance with the manufacturer's recommendations after installation. The service engineer shall place each voltage regulator in service and check for correct functional operation of all components of each voltage regulator and initiate the manufacturer's warranty. Should field service not be required, the Bidder shall note in the Proposal.

4.24 DELIVERY

The successful Bidder shall furnish Voltage Regulators F.O.B. to the City of Franklin, Virginia for unloading by others. Shipment shall be by truck and the cost of delivery shall be included in the cost of the units. All equipment shall be delivered in an **open-top** vehicle.

• Each shipment shall include a detailed packing list identifying all items by part number, including hardware. Deliveries will be accepted only between the hours of 8:30 a.m. to 2:30 p.m. Monday through Friday, excluding Holidays.

• All material shall be carefully loaded for protection during shipment. Small parts and fasteners shall be carefully boxed, crated, bagged, or otherwise containerized and protected for shipment. Larger parts and assemblies shall be handled, loaded, blocked, and secured in such a manner to prevent damage, including damage to the finish. Blocks and straps shall be rust proof and properly padded to minimize abrasion. The supplier shall be responsible for all remedies for damage caused to materials during shipment.

All material shall be arranged to allow safe unloading at the site.

- The manufacturer shall notify the City no less than seventy-two (72) hours prior to the delivery of any materials. Any claims for delays made as a result of the manufacturer or driver's failure to make such notification shall be the responsibility of the supplier.
- Freight that is obviously damaged on arrival will be refused. Any necessary action regarding replacement of materials or equipment delivered in unacceptable condition shall be the responsibility of the supplier, including concealed freight damage. The supplier shall be fully responsible for all action necessary for replacement or repair of such damage in a timely manner.