



**INVITATION TO BID
ITB # 2020-741**

Voltage Regulator for Aztec Substation

BID OPENING DATE/TIME/PLACE:

April 6, 2020, 3:00 PM
City Commission Room
201 W Chaco
Aztec, NM 87410

For further information contact:

Kathy Lamb
Finance Director
City of Aztec
Phone: 505-334-7653
Fax: 505-334-7649
email: klamb@aztecnm.gov

Table of Contents

INVITATION TO BID	3
BID NOTICE.....	3
I. GENERAL CONDITIONS	4
II. SPECIAL CONDITIONS	5
III. INSTRUCTIONS TO BIDDERS.....	6
IV. AWARD	8
V. SPECIFICATIONS	8
VI. DEFINITIONS	9
BID FORMS.....	10
ACKNOWLEDGMENT OF RECEIPT FORM	10
BID SUBMITTAL.....	11
BIDDER’S CERTIFICATION	12
BID SCHEDULE	13
DEBARMENT/SUSPENSION CERTIFICATION FORM	14
REQUIREMENTS	15
GENERAL REQUIREMENTS – EQUIPMENT.....	16
VOLTAGE REGULATOR.....	22

INVITATION TO BID

BID NOTICE

ADVERTISEMENT FOR BIDS

Bid ITB 2020-741 Substation Voltage Regulators City of Aztec, New Mexico

The City of Aztec is accepting bids for the furnishing and delivery of voltage regulators for the project known as Aztec Substation Replacement. Bid documents and specifications may be obtained online by accessing the City's purchasing webpage through www.aztecnm.gov, Vendor Registry or by contacting Kathy Lamb at (505) 334-7653, klamb@aztecnm.gov. Sealed bids will be received by the City of Aztec at 201 W. Chaco, Aztec, New Mexico, 87410 until Thursday, ~~March 26, 2020~~, **April 6, 2020**, 3:00 PM. Bids will be opened on ~~March 26, 2020~~ April 6, 2020 after 3:00 p.m. in the City Commission Room.

CITY OF AZTEC
Aztec, New Mexico 87410
/s/ Kathy Lamb

Publication: Daily Times, March 8, 2020

I. GENERAL CONDITIONS

1. **CONTRACT DOCUMENTS:** The contract documents shall consist of the Bid Documents, any Addenda issued prior to Bid Opening, the Bid Offer, the Notice of Award, the Purchase Order and any separate written agreement agreed to by the parties.

2. **EXAMINATION:** Bidders shall carefully examine the Contract documents and the maintenance sites to obtain first-hand knowledge of existing conditions. Bidders will not be given extra payment for conditions, which can be determined by examining the site and contract documents. It is mutually agreed that the Bidder has made the examinations, investigations and test required herein and has made provisions as to the cost in his bid.

3. **MATERIALS:** Unless otherwise stated, all materials shall be new and both workmanship and materials shall be of good quality.

4. **CORRECTION OF WORK AFTER FINAL PAYMENT:** Final payment shall not relieve the vendor of responsibility for faulty materials or workmanship and the vendor shall promptly remedy any defects due thereto.

5. **PERFORMANCE OF CONTRACT:** The vendor shall comply with all laws, ordinances, rules regulations and specifications that have a bearing on this contract.

6. **OPERATIONAL INSTRUCTION:** The bidder shall supply with their bid the latest printed specifications and advertising literature on the unit (s) they propose to furnish.

7. **STATE OF DELIVERY:** All goods shall be delivered completely serviced and ready for use.

8. **DELIVERY/COMPLETION DATE:** Time of proposed delivery of completion of work must be stated in definite terms. Time is of the essence in the placing of this order and the City of Aztec reserves the right to cancel all items not shipped or work not completed within the period agreed to by the vendor. In case of default of the successful bidder, City of Aztec may procure the items from other sources and hold the bidder responsible for any excess cost occasioned thereby.

The City of Aztec considers delivery time to be that period elapsing from the time the individual order is placed until that order or work there under is received by the City at the specified delivery location. The City reserves the right to demand bond to guarantee delivery the date indicated. If order is given and the

bidder fails to furnish the materials by the guaranteed date, the City reserves the right to cancel the order without liability on its part.

The bidder shall provide immediate notice to the City of Aztec Purchasing Office whenever the Bidder encounters any difficulty which may delay timely performance. This notice does not guarantee an extension of delivery or performance schedule. Failure to provide notice, however, may be grounds for denial of any request for an extension of delivery or performance schedule.

9. **DELIVERY:** All materials will be delivered F.O.B. 402 S Lightplant Road, Aztec, New Mexico 87410, unless otherwise stated in specifications, Monday through Thursday, 7 AM to 5 PM.

10. **WARRANTIES:** The Bidder shall warrant and guarantee all workmanship performed by the Bidder and materials supplied by the Bidder for a minimum period of one (1) year from purchase date, unless otherwise identified in the specifications.

11. **DEFAULT:** In event of default by the bidder, the City reserves the right to procure the commodities and/or services from other sources, and hold the bidder liable for any excess cost occasioned thereby.

12. **FIRM PRICING:** Bid price shall remain firm for the entire contract period.

Guaranteed pricing is requested; please submit pricing guaranteed for sixty (60) days from the date of notice of award. Notice of award shall occur within 60 days of bid opening date. The City of Aztec reserves the right to accept any bid, in whole or in part, and to reject any or all bids if it is deemed in the best interest of the City to do so. The City of Aztec reserves the right to waive any formality or informality in the process of awarding this bid.

13. **CANCELLATION:** The City may cancel the contract with the vendor at any time for vendor poor performance or vendor breach of contract.

Cancellation shall not release the vendor from legal remedies available to the City.

14. **PAYMENT:** Original invoices must be presented for payment in accordance with instructions contained on the Purchase Order including reference to Purchase Order number and submitted to the correct address for processing.

All manufacturers' guarantees of Equipment, if any, shall be transferred and assigned to the City upon delivery of any Equipment and before final payment is

made for such Equipment. Such guarantees shall be in addition to those required of the Bidder.

Prior to final payment, two hard copies and one electronic copy of equipment instruction books are to be furnished to the City.

After full delivery and acceptance, it is the City's intent to make payment on completed orders within thirty (30) days of receipt of invoicing.

15. **PROTEST:** Any protest concerning the award of a contract shall be decided by the Procurement Specialist. Protests shall be made in writing to the Purchasing Office and shall be filed within three (3) business days of final approval and acceptance of the bid by the City Commission. A protest is considered filed when received by the Purchasing Office. The written protest shall include the name and address of the protestor, the ITB number, a statement of the specific reasons for the protest and supporting exhibits. The Purchasing Specialist will respond to the written protest within seven (7) days. The Purchasing Specialist's decision relative to the protest shall be final.

Upon receipt of a protest the City may, but is not required to, delay its order under the awarded contract.

16. **RESERVATION OF RIGHTS:** The City of Aztec reserves the right to reject any or all bids failing to meet the City's specifications or requirements and to waive technicalities. If in the City of Aztec's opinion, the lowest bid is not the most responsible bid, considering value received for monies expended, the right is reserved to make awards as determined solely by the judgment of the City of Aztec. In determining the lowest responsible bidder, the City shall take into consideration the qualities of the articles supplied, their conformity with the specifications, and their suitability to the requirements of the City and the delivery terms. Intangible factors, such as the Bidder's reputation and past performance, will also be weighed.

The Bidder's failure to meet the mandatory requirements of the ITB will result in the disqualification of the bid from further consideration.

The City reserves the right to make single or multiple awards.

The City further reserves the right to reject all bids and obtain goods or services through intergovernmental or cooperative agreements, or to issue a new and revised ITB.

Submission of a bid confers no rights on the Bidder to

a selection or to a subsequent contract. All decisions on compliance, evaluation, terms and conditions shall be made solely at the City's discretion and shall be made in the best interest of the City.

17. **TERMINATION, CANCELLATION AND DAMAGES:** This contract may be terminated upon mutual agreement of both parties.

If the City terminates this Contract because of the Bidder's breach, the City shall have the right to purchase items or services elsewhere and to charge the Bidder with any additional cost incurred, including but not limited to the cost of cover, incidental and consequential damages and the cost of re-bidding. The City may offset these additional costs against any sums otherwise due to the Bidder under this bid or any unrelated contract.

If the City of Aztec fails to appropriate funds to enable continued payment of multi-year Contracts the City may cancel, without termination charges provided Bidder received at least thirty (30) days prior written notice of termination.

18. **TRANSFER OF OWNERSHIP OR ASSIGNMENT:** The terms and conditions of this contract shall be binding upon and shall ensure to the benefit of the parties hereto and their respective successors and assigns. Prior to any sales or assignments the City of Aztec must be notified and approve same in writing.

19. **VENUE:** By submitting a response, bidder agrees that venue for all disputes arising out of the solicitation process, including but not limited to judicial review of any protest decision, will be exclusively in the circuit court for the Eighteenth Judicial Circuit in City of Aztec, New Mexico and that New Mexico law will control.

END OF GENERAL CONDITIONS

II. SPECIAL CONDITIONS

DELIVERY REQUIREMENTS:

All deliveries shall be made Monday through Thursday between the hours of 7:00 a.m. and 5:00 p.m. local time. Notification of delivery must be made 24 hours prior to delivery to 505-334-7667.

Seller will notify Buyer before making any changes or substitutions of materials and quantities specified on the Purchase Order with cost of cover to be paid by Seller.

PREPARATION OF BIDS:

Bidders are not required to provide quotes for every product listed on the proposed sheet but shall clearly mark quotes in the correct spaces provided for the bid. The City of Aztec may award separate products to separate bidders or all products to one bidder, depending on prices quoted for each chemical.

DEMONSTRATION:

Pre demonstration of a substitute product may be required to determine suitability for our needs.

RENEWAL & EXTENSION:

The contract will not be subject to renewal or extension.

SUBCONTRACTORS:

No Subcontractors will be allowed.

VENDOR QUALIFICATIONS:

Upon request, the vendor shall provide a general history, description and status of their Company.

NON-TAXABLE TRANSACTION:

The products included in this bid are taxable to the City of Aztec.

LIQUIDATED DAMAGES:

The time of the delivery of the Equipment is of the essence to the City of Aztec. Should the Bidder neglect, refuse, or fail to deliver the Equipment within the time frame specified in their bid, the City shall have the right to deduct from and retain out of moneys which may be due and payable to the Bidder, the sum of two hundred (\$200) dollars per day.

END OF SPECIAL CONDITIONS

III. INSTRUCTIONS TO BIDDERS

ON-LINE NOTIFICATION OF SPECIFICATIONS:

This document is available over the Internet at www.aztecnm.gov, Vendor Registry, as well as from the contact listed in this document. Adobe Acrobat® Reader is required to view electronic documents on-line. If you do not have Adobe Acrobat® Reader, you may download it for free from Adobe at www.adobe.com/products/acrobat/readstep.html

The City is not responsible for errors and omissions occurring in the transmission or downloading of any specifications from this website. In the event of any discrepancy between information on this website and the hard copy specifications, the terms of the hard copy specification will control.

ALTERNATE/EQUAL BIDS:

The specifications cannot cover precisely, all minute details of the items required. Therefore, for purposes of establishing a standard of quality, the items listed in the specification may state brand names, manufacturer's models, numbers, et cetera. The City of Aztec, for cost effective measures, standardizes on specific items; those bids will contain the language "NO SUBSTITUTIONS," and any alternative will not be considered. A generic or alternate brand product of equal specifications may be proposed as an alternative for the item identified unless "NO SUBSTITUTIONS" is indicated. However, in bidding the alternate item, the bidder must also attach manufacturer's printed specifications and literature.

Bidders submitting alternate items, of equal specifications, may be requested to provide samples of the item they intend to supply for testing. The Purchasing Agent of City of Aztec shall be the sole judge to determine whether the alternate item is actually equal to the item identified in the specifications and the Purchasing Agent's decision will be final and binding.

The City recognizes the expertise provided by many bidders and encourages creativity in bidding. Alternates may be considered if the bid submitted clearly indicates what will be furnished and how it will benefit the City. Alternates will be compared to the lowest responsive, responsible bid as specified.

FACSIMILE/E-MAIL TRANSMITTALS:

Facsimile and/or e-mail transmitted bids will NOT be accepted by the City of Aztec.

INTERPRETATION OF CONTRACT DOCUMENTS:

If a potential Bidder is uncertain as to the meaning of any part of the specifications or this ITB, the bidder is expected to contact the Purchasing Agent no less than four (4) days prior to bid opening date.

PREPARATION OF BIDS:

The Bidder shall return bid on the attached bid forms. It must be returned with all pages intact. Please make

and retain a copy of the signed bid for your records. Unless otherwise stated, all blank spaces on the bid page or pages, applicable to the subject specification, shall be correctly filled in. Either a unit price or a lump sum price, or both as the case may be, shall be stated for each and every item, either typed in or printed in ink, in figures, and if required in words. Bidder shall acknowledge receipt of each addendum issued in the space provided on the bid form.

When a bid consists of a number of items, prices must be submitted for all items unless otherwise directed in the Special Conditions.

Where unit prices are to be bid, and/or where bids are to be made on more than one item, the Bidder shall extend the unit price(s) bid in the places provided on the pricing pages for the approximate quantities, shall compute the total amount of the bid and shall indicate same on the proposal pricing page. The Bidder must bid in accordance with the unit(s) of measure called for unless deviation procedure is followed. All extensions and total sums are subject to verification by the City and the correct extensions and sums will be used in the comparison of bids. If a discrepancy exists between the unit prices and totals, the unit prices shall prevail. If a discrepancy exists between the total base bid and the true sum of the individual bid items, the true sum shall prevail.

Where unit prices are requested, the quantities stated are approximate only but will be used to determine bid award. The quantities for all items on which bids are to be received on a unit price basis, will not be used in establishing final payment due the Bidder. Bids will be compared on the basis of number of units stated in the Bid Pricing Section. Contract payment for unit price items will be based on the actual number of units delivered.

In certain cases, amounts are to be shown in both words and figures. When discrepancies occur between the "Written in Words" and the "In Figures" amounts for the total lump sum bid amount, the "Written in Words" shall govern.

Bidders are warned against making any erasures or alterations of any kind, and bids that contain omissions, erasures, conditions, or alterations may be rejected. The bidder must fill in all blanks. Use "N/A" or "None" where applicable.

Pursuant to Section 13-1-108 NMSA 1978, the total amount of the bid shall exclude the applicable state gross receipts tax or applicable local option tax. The City will pay for any taxes due on the Contract and will pay any increase in applicable which become effective after the date the Contract is entered into in addition to

the Bid total.

Taxes shall be shown as a separate amount in each billing or request for payment made under contract and shall separately identify each tax being billed.

If the Bidder is a corporation, the President shall execute the bid. In the event that the bid is executed by other than the President, a certified copy of that section of the corporate bylaws or other authorization by the corporation, which permits the person to execute the offer for the corporation, shall be submitted.

If the Bidder is a partnership, all partners shall execute the bid, unless one partner has been authorized to sign for the partnership, in which case, evidence of such authority satisfactory to the Procurement Manager shall be submitted.

If the Bidder is a sole proprietor, the owner shall execute the bid.

A "Partnership" or "Sole Proprietor" operating under an Assumed Name shall be registered with the State of New Mexico.

RESIDENT CONTRACTOR PREFERENCE

Per Senate Bill 1, signed by Governor Martinez on October 5, 2011, all resident contractors, wishing to obtain in-state preference, are required to obtain a preference number with the New Mexico Department of Taxation and Revenue. All preference numbers issued prior to January 1, 2012 are invalid. It will be the sole responsibility of the Bidders requesting consideration for Resident Preference to obtain approval and a certification from the New Mexico Department of Taxation and Revenue prior to the bid opening date.

In accordance with Sections 13-1-21 and 13-1-22 NMSA 1978 and effective July 1, 2012, a resident veteran's business preference has been implemented. The Taxation and Revenue Department (TRD) will be issuing a three (3) year certificate to each qualified business. Businesses are required to reapply to TRD every three (3) years with the proper documentation to renew their certificate.

This preference is separate from the in-state preference and is not cumulative with that preference.

SUBMISSION OF BIDS:

Bids shall be submitted at the time and place indicated in the invitation to Bid.

Bids submit directly to the City of Aztec and shall be in an opaque sealed envelope, addressed to the CITY OF AZTEC, marked with the Bid number, Project title, and opening date. If forwarded by mail, the sealed envelope containing the Bid may enclosed in another envelope addressed to the CITY OF AZTEC at the address stated in the Advertisement for Bids.

The City of Aztec reserves the right to accept or reject any or all Bids. Bids may be rejected, among other reasons, for any of the following specific reasons:

1. Bid received after the time limit for receiving Bids.
2. Bids containing any irregularities.
3. Unbalanced value of any items.

Bidders may be disqualified and their Bids not considered, among other reasons, for any of the following specific items:

1. Reason for believing collusion exists among the Bidders.
2. Reasonable grounds for believing that any Bidder is interested in more than one Bid for the work contemplated.
3. The Bidder being interested in any litigation against the City.
4. The Bidder being in arrears on any existing contract or having defaulted on a previous contract.
5. Lack of competency as revealed by a financial statement, experience and equipment, questionnaires, etc.
6. Uncompleted work which in the judgment of the City will prevent or hinder the prompt completion of additional work if awarded.

Bids received after the date and time in the Invitation to Bid will be returned to sender unopened.

You must allow sufficient time for processing through the City's internal mailroom system. Be advised the City of Aztec is not included in a guaranteed morning delivery area.

WITHDRAWAL OF BIDS

Any Bid may be withdrawn prior to the scheduled time for the opening of Bids or authorized postponement thereof. Any Bid received after the time and date specified shall not be considered. No Bidder may withdraw a bid after the Bid opening until the time for award stipulated below has expired. Should there be reasons why the Contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the OWNER and the bidder.

CONTRACT AWARD INFORMATION:

Award notification will be sent to the vendor receiving the award via mail and/or email. Award status can be viewed at the City's Purchasing webpage at <http://www.aztecnm.gov/purchasing/office.htm> or Vendor Registry.

The above bid status information can also be obtained by contacting the Finance Director at (505) 334-7653 or email klamb@aztecnm.gov.

IV. AWARD

Award will be made to the most responsive, responsible and qualified vendor with the bid most closely conforming to the solicitation, whose selection will be most advantageous to the City.

In determining responsiveness, responsibility and qualifications, the following items, will be considered by the City.

A. The bid which offers all specifications requested and has the least overall cost to the City of Aztec.

B. Bidder's experience and references.

Upon request, the bidder shall supply the City of Aztec with references and/or information to justify qualifications.

V. SPECIFICATIONS

The City of Aztec seeks to purchase three (3) new Cooper voltage regulators, 10% voltage regulation with CL-7 controllers on each regular. NO SUBSTITUTIONS permitted.

Delivery truck shall be self-unloading.

Bid must be F.O.B. City of Aztec – Electric Department Yard, located at 402 S. Light Plant Road, Aztec, New Mexico, 87410. Equipment must be delivered between the hours of 7:00 a.m. and 5:00 p.m., Monday through Thursday (City is closed on Friday). Call (505) 334-7667 24 hours prior to delivery or if you have any further questions regarding these specifications.

Bidder shall attach, hereto, as part of this Bid, regularly printed literature published by the factory, which sets

forth and describes the equipment proposed to be furnished.

Manufacturer's standard warranty for parts and labor must be included with bid.

Equipment other than current year models will not be considered responsive. The units shall include all equipment set out in the manufacturer's literature as standard equipment. They shall include all exterior moldings, name plates, medallions, series identifications, and chrome of every description that is usual for standard stock models of this series.

VI. DEFINITIONS

Bid – The offer or proposal of the Bidder submitted on the prescribed form(s) setting forth the prices for the material/items to be procured or the Work to be performed.

Bidder – Any person, firm or corporation submitting a Bid for the material/items or Work.

Calendar Day – A calendar day of twenty-four (24) hours measured from midnight to the next midnight.

City – The City of Aztec, New Mexico.

Contract Price – The total monies payable to Bidder for the price established for each of the payment items listed in the Bid Schedule as the context indicates.

Contractor – Successful or selected bidder.

Dispute – Lack of agreement between any parties that have any obligations, duties, or responsibilities under the terms of the Bid.

Proposal – The offer of a Bidder, on the prescribed form, to provide the material/items or perform the Work at the prices on the Bid Schedule.

State – The State of New Mexico.

ACKNOWLEDGMENT OF RECEIPT FORM

In acknowledgment of receipt of ITB 2020-741 VOLTAGE REGULATORS, the undersigned agrees that he/she has received the bid document copy from the City's website.

It is not required to return this form to submit a bid. To receive copies of communication relating to this procurement, the acknowledgment of receipt should be signed and returned as directed below no later than March 30, 2020, 10:00 AM.

FIRM: _____

REPRESENTED BY: _____

TITLE: _____ PHONE NO.: _____

EMAIL: _____ FAX NO.: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____

SIGNATURE: _____ DATE: _____

This name and address will be used for all correspondence related to document this Bid/RFP

Firm does/does not (circle one) intend to respond to ITB 2020-741 VOLTAGE REGULATORS.

If firm does not intend to reply, please give a brief reason for not responding. _____

Return to:
Kathy Lamb
Finance Director
City of Aztec
201 W Chaco
Aztec, New Mexico 87410
Telephone Number: 505-334-7653
Fax Number: (505) 334-7649
klamb@aztecm.gov

Faxed or emailed copies of this form will be accepted.
Faxed or emailed **BID** responses **will not** be accepted.

BID SUBMITTAL

ITB 2020-741 VOLTAGE REGULATORS

COMPANY NAME / MAILING ADDRESS / CITY / STATE / ZIP (please print)

CONTACT PERSON (please print)

EMAIL

TELEPHONE

IMPORTANT - BIDS MUST BE SUBMITTED IN A SEALED ENVELOPE WITH THE BID NUMBER AND OPENING DATE CLEARLY INDICATED ON THE FRONT OF THE ENVELOPE. EMAILED OR FAXED BIDS WILL NOT BE ACCEPTED. SUBMITTING A "NO BID" IS NOT REQUIRED TO BE KEPT ON THE CITY'S BIDDERS LIST.

Sealed bids will be received until Monday, April 6, 2020, 3:00 PM local time at City of Aztec, 201 W Chaco, Aztec NM 87410 at which time bids will be publicly opened and read aloud in the Commission Room. This bid is subject to the Purchase Order Terms and Conditions, Bidding Requirements and Specifications.

If a corporation, state of incorporation: _____

NEW MEXICO TAX ID NO: _____ **FEDERAL TAX ID NO.:** _____

In-State Preference will be applied only to those in-state certified businesses that have completed the following:

Bidder has received certification from the State of New Mexico for Resident Business Certification. Bidder has been issued Certification # _____ and is therefore eligible for the 5% preference. In-state certification approval is required at the time of the proposal opening to be eligible for in-state preference and include their State of New Mexico certificate with their bid.

Bidder has received certification from the State of New Mexico for Resident Veterans Preference. Offeror has been issued Certification # _____. Bidder must include their State of New Mexico certificate with their bid. Resident veterans preference certification approval is required at the time of the proposal opening to be eligible for resident veterans preference.

Guaranteed pricing is requested; please submit pricing guaranteed for 60 DAYS from the date of notice of award. Notice of award shall occur within 60 days of bid opening date. The City of Aztec reserves the right to accept any bid, in whole or in part, and to reject any or all bids if it is deemed in the best interest of the City to do so. The City of Aztec reserves the right to waive any formality or informality in the process of awarding this bid.

Proposal guaranteed: **Not Applicable to this Bid**

Subcontractor's listing threshold **Not Applicable to this Bid**

The time of the delivery of the Equipment is of the essence to the City of Aztec. Should the Bidder neglect, refuse, or fail to deliver the Equipment within the time frame specified in their bid, the City shall have the right to deduct from and retain out of moneys which may be due and payable to the Bidder, the sum of **two hundred (\$200) dollars per day**.

Bidder must check the appropriate box below:

If applicable, BIDDER ACKNOWLEDGES RECEIPT OF THE FOLLOWING AMENDMENT(S):

Addendum No. _____ Dated _____	Addendum No. _____ Dated _____
Addendum No. _____ Dated _____	Addendum No. _____ Dated _____

BIDDER’S CERTIFICATION

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
 - 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

To be a valid proposal, Bidder must sign here:

Signature

Typed Name of Person Signing as Bidder

Title of Person Signing as Bidder

Date Signed

BID SCHEDULE

ITB 2020-741 VOLTAGE REGULATORS

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
1	Cooper voltage regulator, 10% voltage regulation with CL-7 controller (NO substitutions will be accepted)	EA	3		
2	Spare Parts, Labor and/or additional Materials (regulator stands, if required, bushing pads, etc.) sufficient for 3 units	LOT			
3	Freight – price for freight of shipping fully assembled equipment (3 units)	LS			
TOTAL BID					

Total Written Amount of Bid (excluding tax)

Guaranteed Shipping/Delivery Time: _____ calendar days after receipt of order.

F.O.B. City of Aztec Electric Department

The Bidder agrees to supply the items as described above and in the bid specifications under the conditions outlined in attached documents for the amount stated above.

The undersigned certifies that he has examined and carefully prepared this bid and has checked the same in detail before submitting this bid, and that the statements contained herein are true and correct.

(SEAL) If Bid is by a Corporation

SIGNATURE OF BIDDER

Printed Name of Bidder

Title

Attest for Corporation (if required by corporation)

Telephone Number

Title of Attestor

Fax Number

Email

DEBARMENT/SUSPENSION CERTIFICATION FORM

THE FOLLOWING MUST BE CERTIFIED IF THIS PROCUREMENT IS \$60,000 OR GREATER

CONFLICT OF INTEREST

No elected official or employee of the City of Aztec (COA) has a direct or indirect financial interest in the Vendor or in the proposed transaction. Vendor neither employs, nor is negotiating to employ, any COA elected official or employee, with the exception of the person(s) identified below. Vendor did not participate, directly or indirectly, in the preparation of specifications upon which the quote or offer is made.

DEBARMENT/SUSPENSION STATUS

The Vendor certifies that it is not suspended, debarred or ineligible from entering into contracts with any federal entity, state agency or local public body. The Vendor agrees to provide immediate notice to the COA Purchasing Office in the event of being suspended, debarred or declared ineligible by any entity (federal , state or local), or upon receipt of a notice of proposed debarment that is received after the submission of the quote or offer but prior to the award of the purchase order or contract.

CERTIFICATION

The undersigned hereby certifies that he/she has read the above CONFLICT OF INTEREST AND DEBARMENT/SUSPENSION STATUS requirements RFP SEC II Conditions Governing The Procurement: C General Requirements: Disclosure Regarding Responsibility and that he/she understands and will comply with these requirements. The undersigned further certifies that they have the authority to certify compliance for the vendor named and that the information contained in this document is true and accurate to the best of their knowledge.

Signature: _____ Title: _____ Date: _____

Names Typed: _____ Company Name: _____

Address: _____ City/State/Zip: _____

REQUIREMENTS

DIVISION GQ
GENERAL REQUIREMENTS – EQUIPMENT

GQ.1. ENVIRONMENTAL CONDITIONS

The Contractor shall be responsible for designing, manufacturing, shop testing, delivering, and installing the equipment and associated accessories and appurtenances, all as specified in this Division, to meet or exceed all of the site and environmental conditions that are expected. The Contractor shall study the information provided and perform his own research, as deemed necessary, to meet or exceed these conditions.

A. Site

The substation is located near existing overhead power lines on a dirt road. The manufacturer will ensure delivery of the unit can navigate to the substation.

B. Weather and Atmospheric Conditions

1. There is a possibility for blizzards in this area.

C. Temperatures

1. Average annual temperature:
 - a. Maximum 85 °F.
 - b. Minimum 17 °F.
2. Highest recorded temperature 95 °F.
3. Lowest recorded temperature -21 °F.

D. Wind and Ice Loading – 2012 International Building Code (IBC) Design Parameters

1. Wind:
 - a. Basic 3-second gust wind speed 90 mph.
 - b. Importance factor 1.15.
2. Ice:
 - a. Thickness 0.5 in.
 - b. Importance factor 1.25.

E. Precipitation

1. Design rainfall:
 - a. Amount 2 in/hr.
 - b. Period 3 hrs.
2. Design snowfall:
 - a. Maximum drift depth 4 ft.
 - b. Seasonal total snow depth 3 ft.
3. Electrical storms:
 - a. Isokeraunic level 30 thunderstorm days per year.
4. Humidity:
 - a. Low humidity

F. Altitude Above Mean Sea Level 6,500 ft.

- G. The equipment and major components shall be suitable to meet all applicable seismic requirements in the 2012 IBC:
1. Site classification: D.
 2. Seismic risk category: IV.
 3. Seismic importance factor: 1.5.
 4. Spectral response accelerations, $S_s = \underline{0.2}g$.
 5. $S_1 = \underline{0.06}g$.
 6. Site coefficient, $F_a = 1.6$.
 7. $SDS = \underline{0.21}$ applied at the center of the mass of the equipment in the horizontal direction.
 8. Equipment and equipment supports shall be qualified, at a minimum, to the following levels of seismic performance in accordance with IEEE 693, unless specified otherwise:
 - a. $S_s < 0.1g$ – Low Seismic Level Qualification.
 - b. $0.1g < S_s < 0.5g$ – Moderate Seismic Level Qualification.
 - c. $S_s > 0.5g$ – High Seismic Level Qualification.

GQ.2 SPECIFICATIONS

- A. Any work shown or called for on the Engineer's Drawings and not particularly described in the Specifications or Bid Documents or specified and not shown on the Drawings shall be included by the Bidder. The omission from both Drawings and Specifications of express references to any detail of work necessary and obviously intended shall not relieve the Bidder from furnishing the same.
- B. The Specifications, Contract, and accompanying Drawings are intended to describe and provide for a finished piece of work.
1. The above referenced are intended to be complementary; what is called for by each of these shall be as binding as if called for by all.
 2. It is understood and agreed by the Bidder that the work described shall be complete in every detail, even though every item necessarily involved may not be particularly mentioned.
 3. The Bidder shall provide all labor, materials, and tools necessary for the entire completion of the work described and shall not avail himself of any manifestly unintentional error, omission, or inconsistency which may exist.
- C. Should any error or inconsistency appear in the Drawings, Specifications, or Contract or should the Bidder be uncertain as to the work, before proceeding with any such work, the Bidder shall Engineer of the same in writing, and then proceed with the work as directed in writing by the Engineer.

GQ.3 CONTRACTOR DRAWINGS AND SUBMITTALS

- A. General
1. The Contractor shall submit Shop Drawings, calculations, procedures, and reports, as required by the various sections of the Specifications and in accordance with these General
 2. Submittals shall be made in accordance with the Specifications.
 3. The Contractor shall prepare all necessary Detail Drawings, Designs, etc., giving full and complete information.
 - a. The Contractor shall commence the work immediately upon receipt of the necessary information.
 - b. Priority shall be given to the Drawings, etc., necessary for fabrication of the materials or equipment in the order of the required delivery.

4. Unless otherwise specified, one (1) copy of all Contractor and Subcontractor Drawings shall be submitted to the Engineer for review.
 - a. Similar submittals shall be made as often as necessary until conformance with the intent of the Specification is achieved.
 - b. The Contractor shall submit all Drawings to the Engineer at the proper time so as to prevent delays in the delivery of materials and equipment.
5. All Drawings submitted by a subcontractor to the Bidder for review by the Engineer shall first be sent by the subcontractor directly to the Contractor, who shall keep a record of the Drawing numbers and dates of receipt. The Contractor shall check thoroughly all Subcontractor Drawings in regards to measurements, sizes of members, materials, and details to ensure that they conform to the intent of the Engineer's Plans and Specifications.
6. Drawings found to be inaccurate or otherwise in error shall be returned to the subcontractor for correction before submitting them to the Engineer. After the Contractor has checked and approved the Drawings, he shall affix the date of approval and signature of the checker and submit them to the Engineer for review.
7. All Contractor and Subcontractor Drawings shall be submitted in the order in which materials and equipment are needed at the site without necessarily waiting for completion of all Drawings before submitting part of them for review.
 - a. The Engineer's review of the Contractor and Subcontractor Drawings shall not relieve the Contractor from responsibility for errors or omissions which may exist, even though work is performed in accordance with such reviewed Drawings.
 - b. If such errors or omissions are discovered at a later date, they shall be made good by the Contractor irrespective of any review by the Engineer.
8. No fabrication shall be started nor working Drawings used on the Contract work until applicable Drawings have been reviewed by the Engineer. The review shall be for general design only and shall not relieve the Contractor of his responsibility for the sufficiency of detail dimensions.
9. After final review, the Contractor shall furnish the Engineer's office with one (1) copy of each of the final Certified Drawings.
10. The Contractor shall furnish four (4) copies of instruction books for any equipment being furnished under the Specifications, Purchase Order, or Contract. The distribution of copies shall be as noted below:
 - a. Two (2) hard copies and one (1) electronic copy: The City of Aztec, New Mexico
 - b. One (1) electronic copy: ESC engineering, Inc., Fort Collins, Colorado
11. The Engineer will furnish the Contractor with necessary copies of the Drawings of the various subcontractors involved with the work that will affect the work to be performed by the Contractor.
12. After final review, no changes shall be made on any Drawings, unless authorized in writing by the Engineer.
13. The Contractor shall furnish to the Engineer, at no additional cost, one (1) copy of digital files in AutoCAD format and PDF format of all final Manufacturer and Shop Drawings required for maintenance.
14. In the opinion of the Engineer or the Owner, where revisions to Shop and/or Manufacturer Drawings have rendered copies from the Original Drawings indistinct or difficult to read, the Contractor shall, at no additional cost, trace the Drawings so that the final copies will be clear and legible.

B. Submittal Procedures and Requirements

1. Each submittal must be accompanied by a letter of transmittal. The Contractor shall supplement the transmittal, if necessary, with a letter supplying other needed data and clarifications.
2. All Drawings prepared or furnished by the Contractor shall be marked with the title of the work and the name of both the Contractor and the Owner. The letter of transmittal for each shipment of Drawings shall be accompanied by a list of the numbers and titles of the Drawings.
3. Should Shop Drawings indicate the various items, etc., by symbols or numbers other than those shown on the Engineer's Drawings, the Engineer's symbols or numbers shall also be provided in parentheses to facilitate checking, etc.
4. Initial submittal of Drawings shall consist of one (1) copy of each item. Electronic copies of drawings or reproductions of publications shall be acceptable.
5. The copies, the original, and digital files shall be addressed and sent as follows:
 - ESC engineering, Inc.
 - 3540 John F Kennedy Pkwy
 - Fort Collins, Colorado 80525
 - Attention: Eli ImMasche
 - RE: Aztec Substation Replacement – Voltage Regulator Phone: 970-212-1489
 - Email: eimmasche@thinkesc.com
6. All Drawings or publications must be completely identified as to the item being furnished; each must indicate the project title in the title block or in the body of the document.
7. All Drawings and/or publications covering equipment must be identified with the terminology used in the Specification for the equipment name.
8. Shop Drawings and any lists of materials and equipment, where applicable, for all work related to a system shall be submitted completely and concurrently.
 - a. No review shall be made of partial submittals unless required to maintain the project schedules.
 - b. Submittals which, in the Engineer's opinion, cover features that are contingent upon the review of other features not yet submitted shall not be reviewed until receipt of these contingent items.
9. Attention shall be called, in writing, to deviations from the Engineer's Drawings and Specifications. The Bidder shall state explicit reasons, justifications, and benefits to the Owner as to whether or not such deviations involve a cost adjustment.
10. The Contractor shall indicate on all Drawings or publications submitted, by signed stamps or other obvious means, that the Contractor has checked said Drawings and that the work shown shall be submitted in accordance with the requirements of this procedure and all other requirements of the Contract Documents. Submittals that are not in accord with these requirements will not be reviewed by the Engineer, but will be returned to the Contractor for proper submittal, as outlined above.
11. All review of Drawings or other materials to be submitted shall be in writing.
 - a. Agreement or clarification obtained through consultation by telephone with either the Engineer or the Owner shall not be binding unless confirmed by the Engineer in writing.
 - b. If necessary, coordination meetings will be arranged to discuss any problems which arise from the Engineer's review of the Contractor's submittals. Any such meetings shall be at the location and convenience of the Owner or the Engineer.

C. Review of Submittals

1. After review by the Engineer, one (1) set of prints will be returned to the Contractor. The copy will be stamped and marked to show the status after review. Any follow-up action required of the Contractor shall be based on the review status as follows:
 - a. NO EXCEPTION TAKEN
Note: On notice of such review, digital files in AutoCAD and PDF format shall be submitted by the Contractor to the Engineer for distribution.
 - b. MAKE CORRECTIONS NOTED
Note: On notice of such review with comments, the Contractor may proceed with Manufacturing/Fabrication incorporating the Engineer's comments without additional by the Engineer. One (1) corrected electronic copy shall be returned to the Engineer.
 - c. REVISE AND RESUBMIT
Note: On notice of such design review, the Contractor shall make revisions required by the Engineer and resubmit one (1) corrected copy in accordance with the initial submittal procedures.
 - d. REJECTED
Note: On notice of such design review, the Contractor shall resubmit one (1) corrected copy for additional review.
2. No fabrication shall be started on any materials supplied until the applicable Drawings and Specifications have been returned either as "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED" and the Bidder shall accept such notation without additional cost to the Owner.
3. The item shall be stamped as follows for any items submitted for information:
"PRELIMINARY"
4. If it is not possible to review any Drawings submitted because all information required has not been included, the Contractor will be notified of the information required. The Drawings will not be returned until all information has been received and action taken as stated above.
5. The Engineer will generally process all submittals within 14 calendar days of receipt. The Contractor shall advise the Owner and the Engineer if shorter processing is required to maintain the work schedule.

D. Resubmitted documents shall be made in accordance with the initial submittal procedure and requirements, except that they must refer to the prior submittal number and must be accompanied by their own transmittal form. Documents resubmitted from more than one (1) initial transmittal shall not be grouped in a common re-submittal nor included with new transmittals.

GQ.4 CORRESPONDENCE

All correspondence of a technical nature, including the forwarding of Drawings and instruction books, shall be sent in accordance with submittal procedures and requirements herein to ESC Engineering, Inc. to the contact and location referenced in GQ.3.B.5.

GQ.5. SHIPMENTS, DELIVERIES, AND STORAGE

- A. The Bidder shall arrange for the proper delivery of all materials required and in accordance with the Contract Performance Schedule. Acknowledgment shall be sent to the Owner for any shipping and delivery dates.

- B. The Contractor shall furnish the Owner with copies of Bills of Lading, Shipping Manifests, and all other papers showing the shipment of materials.
- C. Equipment shall be crated and packed so that it can be unloaded, transported, and handled by such methods and in such a manner that no excessive stresses will be applied to any part thereof that will result in permanent strains or in misalignment of parts of such equipment. For larger equipment including, but not limited to, Breakers, Reclosers, Circuit Switchers, Switches, Insulators, Steel, etc., the Bidder shall provide for delivery on flatbed trucks. Delivery in van style trucks for larger equipment shall not be acceptable.
- D. All shipments shall be clearly marked with the Purchase Order number or Contract number. If no Purchase Order is issued, the item number(s) should be on the Bill of Materials and shipping papers to identify the packages with the corresponding numbers.
- E. The equipment and miscellaneous materials shall be delivered as shown in the Specifications. To allow unloading by the Contractor, the Engineer may request a delay of no more than 30 days in the shipping without extra cost to the Owner. Delays, however, are not anticipated.

GQ.6 SPARE PARTS

The Contractor shall submit with his Bid Proposal a separate, complete list of spare parts necessary for all equipment furnished in accordance with the Specifications. The list shall include the quantity, part number, description, and unit price for each item.

GQ.7 NOTICE TO PROCEED

The Purchase Order or Contract issued by the Owner shall be the Notice to Proceed.

GQ.8 CONFORMANCE WITH TRADE PRACTICES

It is the Contractor's responsibility to ensure that the equipment and materials are manufactured or fabricated by skilled and trained labor and that the equipment (such as control panels, fabricated pipe, and similar items) fabricated in the Contractor's or subcontractor's shop and which requires Instruction crafts conforms with the requirements of local trade practices, codes, and agreements applicable to the construction site.

VOLTAGE REGULATOR

DIVISION VR
VOLTAGE REGULATOR

VR.1 SCOPE

This DIVISION covers the design, manufacturing, shop testing, delivery, technical direction of installation, and field testing of voltage regulators and associated accessories and appurtenances (hereinafter called the equipment), all as specified herein. It is the intent of this Division to have the equipment designed, manufactured, assembled, tested, and delivered in accordance with the most advanced and modern technical and commercial practice(s). Equipment furnished shall be complete, ready for use, and suitable in all respects for the service indicated, despite the omission of specific reference to any minor component part.

VR.2 GENERAL

- A. Work to be provided by the Contractor under this Division shall include the following:
1. Equipment designed, rated, manufactured, and complete with accessories, as specified herein.
 2. All specified shop tests and inspections.
 3. Schedules, drawings, manufacturing and quality procedures, test reports, and other information and documents, as specified herein.
 4. Delivery of the equipment at the job site.
- B. The following work will be provided by others:
1. Foundations, including the anchoring system.
 2. All bus work, power, and control wiring external to the equipment.
 3. External conduit and control wiring.
 4. Control power sources.
 5. Unloading and placement on the foundations.
 6. Installation, assembly of accessories, oil handling and testing, and mechanical and electrical testing in the field.
- C. Work provided under this Division shall be in strict conformance with the latest edition and latest addenda thereto, as of the time work is performed, and of the applicable codes, standards, regulation procedures, and tests of the following organizations:

AEIC	Association of Edison Illuminating Companies
ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing Materials
AWS	American Welding Society
EPA	Environmental Protection Agency
IBC	International Building Code
ICEA	Insulated Cable Engineers Association
IEEE	Institute of Electrical and Electronics Engineers
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NESC	National Electrical Safety Code
OSHA	Occupational Safety and Health Administration

VR.3 DETAILED REQUIREMENTS

A. Description of Service

This Division is for an oil insulated, tank-type, single-phase, voltage regulator. The regulator shall be a complete operable unit including, but not limited to, all accessories defined herein. The terms of this Division shall take precedence over the ANSI and NEMA Specifications referenced herein. The voltage regulator shall be designed and tested to comply with ANSI Standards.

B. Electrical Specifications

1. All Electrical Specifications shall be met for regulators at the altitude and ambient temperature range as described in DIVISION GQ – GENERAL REQUIREMENTS.

2. Ratings and Performance:

Manufacturer	<u>Cooper</u>	
Type	<u>VR-32</u>	
Rated Voltage at 60 Hz	<u>7.2</u>	kV
Internal BIL (at 3,000 ft.)	<u>110</u>	kV
External BIL (already derated for installed altitude)	<u>150</u>	kV
kVA Rating	<u>667</u>	kVA
Load Current	<u>670</u>	amp
Range of Voltage Regulation	<u>10</u>	%
Number of Steps	<u>32</u>	steps
Control Voltage	<u>Internal</u>	VDC
Auxiliary Voltage	<u>120</u>	VAC

3. The voltage regulator shall be capable of withstanding RMS symmetrical short-circuit, full-load current for 2 seconds and be 40 times the regulator full-load current for 0.8 seconds without harming the regulator.

C. Properly sized shunt arresters shall be provided on each regulator and sized appropriately. All mounting hardware and brackets shall be provided for mounting arresters.

D. The tap changer shall be equipped with a manual crank and interlock.

E. The voltage regulator shall have some means of venting combustible gases.

F. All external hardware used on the voltage regulator shall be stainless steel.

G. The voltage regulator shall be provided with an external tap position indicator.

H. The voltage regulator shall have a base for skidding in any direction.

I. All voltage regulators furnished under this Division shall be furnished with an oil sampling valve.

J. All voltage regulators shall be provided with two (2) nameplates; one (1) mounted on the control enclosure and the other mounted on the voltage regulator tank.

K. The Contractor shall provide an equipment stand that will elevate the voltage regulator to give a minimum top of concrete to base bushing clearance of 8'-6" and a maximum of 10'-0". Hardware shall be provided for securing the regulators to the stands. The stands shall have provisions for anchoring them to the concrete foundation in all four (4) corners of each stand. Standard NEMA 2-hole grounding pads shall be provided on the opposite corner of each stand (quantity of two (2) pads per stand required).

VR.4 REGULATOR CONTROLS

A. The voltage regulator shall be supplied with a CL-7 single-phase controller with the following characteristics:

1. Voltage regulating relay.
2. Line drop compensator.
3. Reactance reversing switch.
4. Adjustable time delay, 0-90 seconds range.
5. Automatic/off/manual switch selector.
6. Manual raise/lower switch.
7. Voltage testing terminals.
8. Heater with thermostat mounted on 1-inch tall insulated stands.
9. Voltmeter indicating output voltage.
10. Position indicator.

11. Communications Interface: Ethernet 100 BASE-FX multi-mode (fiber optic) ST.
- B. An easy to read and operate menu-driver control panel shall be provided. At least two (2) levels of password shall be provided to restrict access to various levels of the control.
- C. User-programmable alarms shall be provided to alert the operator either locally or remotely that one (1) or more of the following system conditions have occurred:
 1. Block raise or lower limit exceeded.
 2. Reverse power flow condition detected.
 3. Voltage reduction invoked.
 4. Line current limit exceeded.
 5. Tap block raise or lower in effect.
 6. Self-test alarm for loss of power or malfunction of control.
- D. Control shall be easily programmed either through a SCADA System or through a RS-232 port on front of the control.

VR.5 SPARE PARTS

The Contractor shall submit with his Bid Proposal a separate complete list of spare parts necessary for all equipment furnished, in accordance with this Division. The list shall include the quantity, part number, description, and unit price for each item.

VR.6 BUSHING SPECIFICATIONS

- A. All porcelain bushings shall be wet process, homogeneous, and free from cavities or other flaws. The glazing shall be a uniform ANSI-70 Gray color and free of blisters, burns, and other defects. Where multiple section bushings are proposed, a detailed description of the bonding procedure for joining the sections shall be provided to the Owner for approval. Bushings can be shipped separately from the regulator.
- B. Regulator bushings shall be equipped with NEMA 4-hole pads.
- C. The bushing designation (S, L, and SL) shall be permanently marked on the regulator cover adjacent to bushings.
- D. The S, L, and SL bushings shall be interchangeable with each other.

VR.7 PAINTING

- A. The voltage regulator tank shall be painted ANSI-70 Gray. Touch up paint shall be provided to repair any damage that may occur during shipment.
- B. The minimum paint thickness shall be 5 mil. The Contractor shall demonstrate to the satisfaction of the Engineer and the Owner the suitability of the materials and procedures being offered for the paint system.

VR.8 OIL SPECIFICATIONS

- A. Where practical, the regulator shall be shipped with oil installed. If the regulator is shipped without oil, the tanks shall be filled with inert gas or dry air under pressure. The Bidder shall coordinate the oil delivery and filling of the regulator. The oil shall conform to current ANSI Standards for the intended use.
- B. Oil containing in excess of 50 parts per million of polychlorinated biphenyls (PCBs) shall not be acceptable.
- C. Provisions shall be made for the oil drain and sampling device.
- D. A liquid level indicator shall be provided.
- E. An automatic pressure relief valve shall be provided.

VR.9 TESTING

The following testing shall be performed on each regulator in accordance with the latest ANSI and NETA Standards. During testing, each regulator must be fully assembled; partial disassembly before shipment will be allowed. Copies of the test reports shall be provided to the Engineer and the Owner.

- A. Ratio test on all tap locations.
- B. Polarity test.
- C. Test to check the position indicator alignment with the tap changer setting.
- D. Test the resistance and reactance reverse polarity switch.
- E. Test the neutral light to ensure operation.
- F. Test the overall mechanical function of the voltage regulator.
- G. No load loss at rated voltage and rated frequency.
- H. Excitation current at rated voltage and rated frequency.
- I. Impedance and load loss at rated current and rated frequency.
- J. Applied potential test.
- K. Induced potential test.
- L. Insulation power factor test.
- M. Impulse test.
- N. Test insulating liquid from main and common tank for dielectric breakdown voltage, acid neutralization number, specific gravity, interfacial tension, DGR, moisture, color, and power factor.

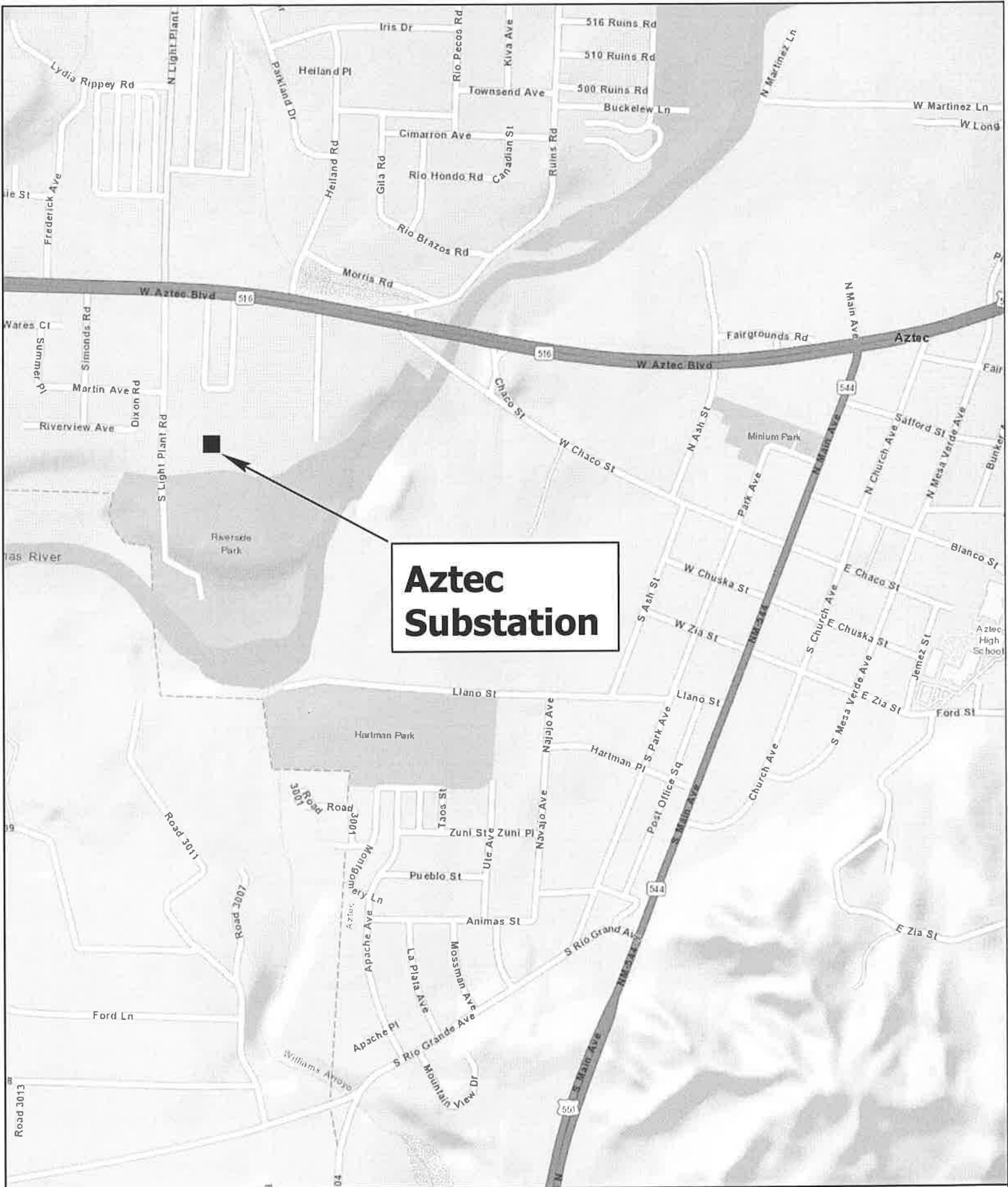
VR.10 DRAWINGS AND OTHER SUBMITTALS

- A. All submittals of Drawings, files, correspondence, etc. shall be made in accordance with the procedures outlined in DIVISION GQ – GENERAL REQUIREMENTS.
- B. The following data shall be supplied with the regulator proposal:
 - 1. Regulator outline.
 - 2. Regulator weight.
 - 3. Quantity of oil (gallons and weight).
 - 4. Anchor bolt arrangement and foundation recommendation.
 - 5. Typical control schematic.
 - 6. Typical instruction manual.
 - 7. Reliability data of similar equipment in service.
- C. The following Shop Drawings and data shall be submitted to the Engineer for review in the timeframe shown in the Performance Schedule after the regulator order:
 - 1. Regulator outline and details.
 - 2. Regulator control schematic.
 - 3. Regulator wiring diagram.
- D. Certified Shop Drawing submittals shall be provided prior to regulator delivery and in the timeframe shown in the Performance Schedule. The following submittals shall be provided:
 - 1. Drawings of the regulator outline.
 - 2. Drawings of the regulator control schematic and wiring diagram.
 - 3. Instruction manual.
 - 4. Copies of factory tests outlined herein.

VR.11 SHIPPING

Each voltage regulator shall be completely assembled at the factory prior to shipment to ensure the compatibility of components. The voltage regulator may be shipped disassembled, however, according to the Manufacturer's recommendation.

END OF DIVISION VR



**Aztec
Substation**



3540 JFK Parkway
Fort Collins, CO 80525
970-224-9100
www.thinkESC.com

**CITY OF AZTEC
AZTEC SUBSTATION
Vicinity Map**

