

**COLORADO RIVER COMMISSION OF NEVADA
AGENDA ITEM G
FOR MEETING OF MARCH 12, 2024**

SUBJECT: *For Possible Action:* Consideration of and possible action to approve contract CRCMH-01 between successful bidder, Ritz Instrument Transformers, Inc., and the Colorado River Commission of Nevada, based on bid solicitation 69CRC-S2585 for the Monthill Substation Project for three Combined Instrument Transformers for a total of \$89,400.

RELATED TO AGENDA ITEM:

None.

RECOMMENDATION OR RECOMMENDED MOTION: Staff recommends the Commission approve the contract CRCMH-01 with Ritz Instrument Transformers Inc. and authorize the Executive Director to sign the contract on behalf of the Commission.

FISCAL IMPACT:

None.

STAFF COMMENTS AND BACKGROUND:

A. Background on Operations

Pursuant to NRS 538.161, the Colorado River Commission of Nevada (Commission) may execute contracts, for the planning, and development of any facilities for the generation or transmission of electricity for the greatest possible benefit to the State. Additionally, the Commission has a Facilities Development Agreement with the Southern Nevada Water Authority (SNWA) for the purpose of “creating a cooperative relationship to jointly develop, operate, maintain, use and replace a Power System” for SNWA and its members. SNWA has requested the Commission assist in the design, procure, and construct a new substation at Monthill. The proposed purchase contract is put forward for approval as part of the work the Commission will perform for SNWA for the Monthill project.

B. Background of Bid/Procurement

On November 14, 2023, bid solicitation 69CRC-S2585 was posted in NVEPro. Bid solicitations were sent to vendors registered with NVEPro, and additional independent vendors directly via email. The deadline for bid proposals closed at 2:00 p.m. on December 18, 2023. Three quotes were received through NVEPro. The evaluation team had no technical exceptions and recommended approval of the bid of Ritz Instrument Transformers, Inc.

This Contract is to design, manufacture, assemble, test, ship, and provide all other ancillary services relating to the procurement of three Combined Instrument Transformers. The Equipment will be purchased by the Commission pursuant to NRS 538.161 (2) and the Commission established Procedures for Purchasing Electrical Materials for the Power Delivery Project and State Administrative Manual (SAM) 0326.

C. Staff’s Recommendation

Staff recommends the Commission approve the contract with Ritz Instrument Transformers, Inc. and authorize the Executive Director to sign it on behalf of the Commission.



**Colorado River Commission of Nevada
555 East Washington Avenue, Suite 3100
Las Vegas, Nevada 89101-1065**

Monthill Substation

**Contract No. CRCMH-01
Combined Instrument Transformer**

Bid Documents and Specifications

For Award;
March 12, 2024

MONTHILL SUBSTATION

Contract No. CRCMH-01 Combined Instrument Transformer

Bid Documents and Specifications

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SECTION 100 REQUEST FOR BIDS

1. Notice.

The Colorado River Commission of Nevada (CRCNV) hereby requests that you submit a bid to supply all or a portion of the material described in the following documents, under the terms of the Contract included herein.

Vendors shall submit their proposals by using Create Quote through the State electronic procurement website, <https://NevadaEPro.com>, in accordance with the instructions provided on the NevadaEPro website.

Refer to Instructions for Vendors Responding to a Bid in the Important Links section on the front page of NevadaEPro for instructions on how to submit a Quote using NevadaEPro

The Material shall be purchased by the CRCNV pursuant to NRS 538.161(2) and its established procedures for Purchasing Electrical Materials for the Power Delivery Project. The contract shall be awarded and administered in accordance with the laws of the State of Nevada.

All Bids must be in accordance with this Request for Bids, the Bid Form and the Agreement published herein, and the documents referenced or included herein. Complete sets of Bid Documents shall be used in preparing Bids; CRCNV assumes no responsibility for error or misinterpretations resulting from the use of incomplete sets of Bid Documents.

Additional copies of documents may be requested by electronic mail to crcadmins@crc.nv.gov.

At said place and time, and promptly thereafter, all bids that have been duly received will be opened and read aloud. The award of the Contract will be made at a later publicly-noticed meeting of the CRCNV.

2. Equipment.

The Equipment to be purchased under the Contract is generally described as follows:

Outdoor type, free standing, single-phase, oil insulated, with energized components supported by either a porcelain or polymer insulating column, with H₁ and H₂ line terminals, and secondary terminal box(es) for conduit entrance and secondary circuit connections. The Material will be received and installed by an installation contractor under a separate contract.

Technical Specifications are included as a part of this Contract. Items referred to as "Division 1" or "Div 1" documents within the Technical Specifications shall be defined as Sections 100-1100 of this Contract.

3. Questions Regarding Request for Bid.

Questions concerning this Request for Bid should use the Bid Q&A feature in NevadaEPro, <https://NevadaEPro.com>.

4. Pricing and Security.

Bids will be received on a unit price basis as described in the Bid Form. Bid Security will not be required. The selected Bidder(s) is required to post a performance bond in an amount equal to the Contract Price.

5. Multiple Awards.

CRCNV may award this contract in part to multiple Bidders.

6. Bid Acceptance.

All bids remain subject to acceptance by the CRCNV for sixty (60) days.

If the CRCNV elects to accept Bidder's Bid, CRCNV shall give the Bidder notice thereof within the number of days set forth in the Bid Form.

Date: October 09, 2023

By:



Robert D. Reese

Assistant Director for Engineering and
Operations

BID RESPONSE DEADLINE:

November 13, 2023

SECTION 200 BID INSTRUCTIONS

1. Bid Form.

The Bid Form is found in section 300. The Bid Form must be completed in ink. The names of all persons signing must be legibly printed below their signatures.

All blanks in the Bid Form must be filled. If a Bidder elects not to submit a bid for a specific item listed in the Bid Form, indicate such intent with the words "No Bid" in lieu of a proposed price. The bid must contain an acknowledgment of receipt of all Addenda, the numbers and dates of which must be filled in on the Bid Form.

No alteration in bids, or in the printed forms therefore, by erasures, interpolations, or otherwise will be acceptable.

2. Bid Security.

Bid security is not required.

3. Bids as Public Records.

The CRCNV is a public agency as defined by state law. As such, it is subject to the Nevada Public Records Law (Chap. 239 of *Nevada Revised Statutes* [NRS]). All of the CRCNV's records are public records (unless otherwise declared by law to be confidential), which are subject to inspection and copying by any person. Bidders are advised that after a bid is received by the CRCNV, its contents will become a public record and nothing contained in the proposal will be deemed to be confidential.

4. Submission of Bids.

Proposals shall be received via <https://NevadaEPro.com> no later than the date and time specified on the General Tab of the Bid Solicitation in NevadaEPro. Proposals that are not submitted by bid opening time and date shall not be accepted. Vendors may submit their proposal any time prior to the deadline stated in NevadaEPro. In the event that dates, and times specified in this document and dates times specified in NevadaEPro conflict, the dates and time in NevadaEPro shall take precedence.

5. Evaluation of Bids.

The Equipment will be purchased by the CRCNV pursuant to NRS 538.161 (2) and the CRCNV's established Procedures for Purchasing Electrical Materials for the Power Delivery Project. The contract will be awarded and administered in accordance with the laws of the State of Nevada.

6. Rejection of Bids.

The CRCNV reserves the right to reject any or all bids, including without limitation the rights to reject any or all nonconforming, non-responsive, unbalanced, or conditional bids, and to reject the bid of any Bidder if the CRCNV believes that it would not be in the best interest of the CRCNV to make an award to that Bidder. The CRCNV also reserves the right to waive formalities.

7. Signing of Contract.

The CRCNV will issue three (3) copies of the Contract Documents to the successful Bidder. Within the number of days set forth in the Bid Form, the successful Bidder must sign all copies of the Contract, leaving the dates blank, must insert the required Bonds and power of attorney in the appropriate places, and deliver all copies to the CRCNV. The CRCNV will, thereafter, execute all copies of the Contract and return one original copy to the Contractor.

8. Performance Bond.

The successful Bidder will be required to furnish a Procurement Performance Bond as security for the faithful performance of the Contract, which must be at least as protective as those bonds otherwise required pursuant to NRS 339.025.

**SECTION 300
BID FORM**

1. Project Identification:

Monthill Substation
Contract No. CRCMH-01
Combined Instrument Transformer

2. This Bid is Submitted By:

Name: Ritz Instrument Transformers, Inc.
Address: 25 Hamburg Avenue
Lavoria, Georgia 30553

3. This Bid is Submitted To:

Colorado River Commission of Nevada
555 E. Washington Avenue, Suite 3100
Las Vegas, Nevada 89101-1065

4. Bid Terms and Conditions.

4.1 The undersigned Bidder proposes and agrees, if this bid is accepted, to enter into a Contract with the CRCNV in the form included in section 400 of this Request for Bid and to perform and furnish all Work as specified or indicated in the Contract Documents within the specified time and for the amount indicated in the bid and in accordance with the other terms and conditions incorporated by the Contract.

4.2 Bidder accepts all of the terms and conditions of the Bid Instructions. This bid remains subject to acceptance for sixty (60) days after the day the bids are due. Bidder will sign and submit the documents required by the Contract Documents within fifteen (15) days after the date of CRCNV's Notice of Award.

4.3 In submitting this bid, Bidder represents that:

4.3.1 Bidder has examined copies of the Request for Bids and all the documents contained therein, and copies of the following Addenda (receipt of which is hereby acknowledged):

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

- 4.3.2. Bidder has become familiar with and satisfied itself as to the general, local, and site conditions that may affect cost, progress, performance, and furnishing of the Equipment.
- 4.3.3 Bidder is familiar with and has satisfied itself as to all federal, state, and local laws and regulations that may affect the cost, progress, performance, and furnishing of the Equipment.
- 4.3.4 Bidder is aware of the general nature of the work to be performed by the CRCNV or others, including the off-loading or installation of Equipment for which this Bid is submitted.
- 4.3.5 Bidder has given CRCNV written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Contract Documents and the written resolution thereof by CRCNV is acceptable to Bidder. The Contract Documents are sufficient to indicate and convey understanding to Bidder of all its terms and conditions for performing and furnishing the Equipment for which this Bid is submitted.
- 4.3.6 This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid. Bidder has not solicited or induced any person, firm, or corporation to refrain from bidding. Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over CRCNV.

5. Bid Price.

Bidder will design, manufacture, assemble, test, ship and provide ancillary services relating to the Equipment in accordance with the Contract Documents and in the amounts stated for unit prices. Conditions may arise which will necessitate changes in the quantities identified herein. The prices quoted per unit must be firm and not dependent on the final quantity of items. The Bidder agrees that increases or decreases in the estimated quantities will not justify unit price revisions.

Unit prices must be stated as firm. Escalation or adjustment factors will not be accepted by the CRCNV.

Unit prices must include labor, equipment, tools, vehicles, materials, supplies, permits, markups, supervision and all related costs.

Bid Item	Specification Section	Description	Unit	Unit Price	Qty	Extended Price	Proposed Manufacturer	Delivery - Weeks After N-T-P*
401	1000	Single-phase, free-standing instrument classed at 69 kV rms (nominal) and as described in Specification No. 33 71 26.23/26. F.O.B. Monthill Substation 4095 E. Flamingo, Las Vegas, NV 89121.	Each	29,800.00	3	89,400.00	Ritz Instrumental Transformers., Inc.	48-50 weeks Ex-factory ARO
CONTRACT PRICE						89,400.00		

*Notice-to-Proceed.

6. Delivery Schedule.

Bidder agrees that the Equipment will be delivered on or before the above stated delivery dates, which dates comply with the times specified in the Contract Documents.

SIGNATURE OF BIDDER

By: Ritz Instrument Transformers, Inc.
(Corporation Name)

By: _____
(Signature of Authorized Person)

Adam Labbe, Regional Sales Manager
(Printed Name and Title)

Business Address:

25 Hamburg Avenue

Lavonia, GA 30553

Phone
No. 706-356-7180
Email: sales@ritz.usa.com

Fax No. 866-772-5245

This Bid is Submitted On: 12/11/2023 01:14:09 PM

SECTION 320
BID ADDENDUM

(Bid Addenda, if any, to be included here when conformed Contract issued for signature).

SECTION 340
BID CLARIFICATIONS AND SUBSTITUTIONS

(Bidder Clarifications and Substitutions proposed by the Bidder and accepted by the CRCNV, if any, to be included here when conformed Contract issued for signature).

**SECTION 400
CONTRACT NO. CRCMH-01
MONTHILL SUBSTATION**

THIS CONTRACT is made and entered into by and between the COLORADO RIVER COMMISSION OF NEVADA, hereinafter referred to as the "CRCNV," and, Ritz Instrument Transformers, Inc., hereinafter referred to as the "Contractor." The CRCNV and the Contractor are sometimes individually referred to as "Party" and collectively referred to as the "Parties."

IN CONSIDERATION of the mutual covenants contained herein, the Parties hereto agree as follows:

1. Agreement to Provide Equipment

CRCNV agrees to purchase and Contractor agrees to design, manufacture, assemble, test, ship, and provide all other ancillary services related to the delivery of the following electrical equipment and materials pursuant to the terms and conditions established in these Contract Documents:

Bid Item	Description
401	Single-phase, free-standing instrument classed at 69 kV rms (nominal) and as described in Specification No. 33 71 26.23/26. F.O.B. Monthill Substation 4095 E. Flamingo, Las Vegas, NV 89121.

2. Definitions

2.1 "Acceptance" or "Final Acceptance" means the formal action by the CRCNV accepting the Equipment, or any portion thereof, as complete and satisfactory, subject to Contractor's warranties.

2.2 "Acceptance Testing" means any testing required by the CRCNV prior to, and as a prerequisite of, CRCNV's Acceptance.

2.3 "Bid Form" means the approved form on which the CRCNV requested that the Contractor prepare and submit a Bid to the CRCNV as an offer to provide the Equipment, which has now been accepted by the CRCNV pursuant to this Contract and is therefore incorporated herein as a part of this Contract.

2.4 "Change Order" means the CRCNV's signed written order to the Contractor authorizing any addition or deletion of, or revision to, the Equipment.

2.5 "Contract Documents" means the documents contained in this conformed and bound volume, including section 100, Request for Bids; section 200, Bid Instructions; section 300, Bid Form; section 320, Bid Addendum; section 340, Bid Clarification; section 350, Disclosure of Ownership/Principles; section 400, Contract No. CRCMH-01, Combined Instrument Transformer; section 500, Performance Bond; and the Specifications contained in section 600 through section 1100. The term includes exhibits

to this Contract attached hereto, if any, Contractor's performance and payment bonds, any notice of award or notice to proceed issued by the CRCNV, Contractor's Proposal, and any documentation submitted by the Contractor and accepted by the CRCNV prior to the execution of this Contract, and all Change Orders amending, modifying, or supplementing this Contract which may be delivered or issued after the effective date of this Contract and are not attached hereto. Submittals are not Contract Documents.

2.6 "Contract Price" means the total compensation payable to the Contractor for the Contractor's performance of this Contract, as proposed by Contractor in Contractor's Bid, and as may be amended by any Change Order pursuant to section 8.

2.7 "Executive Director" means the executive director of the Colorado River Commission of Nevada.

2.8 "Equipment" means the electrical equipment and materials, or any portion thereof, described in the Specifications.

2.9 "Notice to Proceed" means the written notice given by the CRCNV to the Contractor fixing the date on which the Contractor shall start to perform the Contractor's obligations under the Contract Documents.

2.10 "Performance Milestones" means those dates by which particular portions of the Equipment or work related thereto must be complete, as set forth in section 600.

2.11 "Project" means the Monthill Substation.

2.12 "Request for Bids" means the CRCNV's request that the Contractor and others make a Bid to contract with the CRCNV.

2.13 "Specifications" means the technical descriptions of the Equipment and services to be furnished by the Contractor, which are included as part of the CRCNV's Request for Bids, Contractor's Bid, and all modifying addenda and Change Orders thereto.

2.14 "Submittals" includes shop drawings, catalog cuts, samples, operating and maintenance instructions, progress payments, requests, and other documents and items specified to be delivered to the CRCNV.

2.15 "Work" means everything required or reasonably inferred to be furnished and done by the Contractor pursuant to the Contract Documents.

3. CRCNV's Representative

3.1 The CRCNV's Representative shall be Mr. Robert Reese, Assistant Director of Engineering and Operations. The CRCNV's Representative is generally authorized to act fully on behalf of the CRCNV. The CRCNV's Representative has complete authority to transmit instructions, receive information, interpret and define the CRCNV's policies and decisions with respect to the materials, equipment, elements, and systems required under these Contract Documents.

3.2 The address of the CRCNV's Representative is:

Colorado River Commission of Nevada
555 E. Washington Avenue, Suite 3100
Las Vegas, NV 89101-1065

3.3 The CRCNV's Representative may designate any other employee of the CRCNV to perform his responsibilities under this Contract.

4. Contractor's Representative

Within ten (10) days following execution of this Contract by the Contractor, the Contractor must identify in writing the Contractor's Representative. The Contractor's Representative is authorized to act fully on behalf of the Contractor. The Contractor may change or designate another individual as its Contractor's Representative by written notice to the CRCNV.

5. Contract Price

The CRCNV shall pay the Contract Price to the Contractor in current U.S. funds in the amount described in the Contractor's Bid and in accordance with the payment procedures provided in section 7, unless changed in accordance with section 8, for the total cost of the Equipment and for the performance of all the Work described in the Contract Document.

6. Commencement and Completion of Performance

Upon receipt of a written notice to proceed from the CRCNV's Representative, the Contractor shall proceed with the performance of this Contract, pursuing the Work diligently, to the end that the Equipment be manufactured and delivered in accordance with the Performance Milestones.

7. Payment Procedures

7.1 Progress Payments. The Contractor shall submit an application for payment to the CRCNV for the amount of ninety percent (90%) of the Equipment's value, upon shipment of the Equipment.

7.2 Procedure for Progress Payments. CRCNV shall pay Contractor within thirty (30) days after receipt of a correct, itemized invoice identifying the Equipment shipped.

7.3 Application for Final Payment. The Contractor shall submit an application for final payment upon completion and Final Acceptance by the CRCNV of the Contractor's delivery of all Equipment. (See section 600 for date of anticipated Final Acceptance.) The Contractor's application for final payment must be accompanied by the consent of the Contractor's sureties that the CRCNV may release any payment retainage, together with a certified copy of any surety's agent's authority to act for the surety.

7.4 Procedure for Final Payment. The CRCNV shall pay the Contractor within thirty (30) days of receipt of a correct, itemized invoice for the final payment. The CRCNV's payment of the final payment shall constitute a full waiver of all claims by the CRCNV against the Contractor, other than those arising from unsettled liens, from defective work appearing after final inspection, or from the Contractor's failure to comply with the requirements of this Contract. The Contractor's receipt of final payment shall constitute the Contractor's waiver of all claims by the Contractor against the CRCNV, other than those previously made in writing and remaining unresolved at the time of final payment.

8. Changes in the Work, Contract Price or Performance Milestones

8.1 Without invalidating this Contract, the CRCNV may, at any time or from time to time, issue a Change Order requiring additions to, deletions from, or revisions to the Equipment or quantities stated herein. Upon receipt of a Change Order, the Contractor shall proceed with the performance of the Contract Documents as altered by the Change Order. If Contractor's compliance with any Change Order would cause an increase in the Contract Price, the Contractor shall, within fifteen (15) days, notify the CRCNV and submit a signed, written claim therefore including information regarding the events and circumstances and supporting data giving rise to the Contractor's claim. The CRCNV shall approve or disapprove the Contractor's claim within twenty (20) days after receipt of the Contractor's claim and, if approved, issue a Change Order amending the Contract Price.

8.2 If the Contractor's compliance with any Change Order would interfere with the Contractor's ability to complete the performance of this Contract within the Performance Milestones, including final performance of this Contract, the Contractor shall immediately notify the CRCNV and submit a signed, written request for amendment of the Performance Milestones. The CRCNV shall approve or disapprove the Contractor's request within twenty (20) days and, if approved, issue a Change Order amending the Performance Milestones.

8.3 The CRCNV shall not compensate Contractor for additional work performed by the Contractor without authorization or Change Order. The Contractor shall notify its surety of any changes in the general scope of the work to be performed under this Contract.

8.4 This Contract may be amended, modified, or supplemented only by Change Order as provided herein or otherwise by amendment executed in writing by the CRCNV and the Contractor.

9. "Like", "Equivalent" And "Or Equal" Items

9.1 Whenever an item of material or equipment is specified or described in the Request for Bids by using the name of a proprietary item or the name of a particular supplier, the specification or description is intended to establish the type, function, and quality required. "Like, "equivalent" and "or equal" items may be substituted only if, in the CRCNV's sole discretion, although not qualifying as an "or equal" item, is an item essentially equivalent to that named and a substitute therefore. Proposals to substitute like or equivalent items of material or equipment will not be accepted by the CRCNV from anyone other than the Contractor. If the Contractor wishes to furnish or use a substitute item of material or equipment, the Contractor shall first make written application for evaluation thereof to the CRCNV, certifying that the proposed substitute will perform

adequately the functions and achieve the results called for by the general design, be similar in substance to that specified, and be suited to the same use as that specified. The application must state the extent, if any, to which use of the proposed substitute will prejudice Contractor's completion of performance of this Contract on time as required, whether substitution of the item will require a change in this Contract (or in the provisions of any other direct contract with the CRCNV for work related to the Project) or adaptation of the design of the Equipment or the Project to the proposed substitute, and whether incorporation or use of the substitute in connection with the Equipment is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified must be identified in the application, and available maintenance, repair, and replacement service must be indicated. The application must also contain an itemized estimate of all costs or credits that would result directly or indirectly from use of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which must be considered by the CRCNV in evaluating the proposed substitute. The CRCNV may require the Contractor to furnish any additional data about the proposed substitute.

9.2 No "like", "equivalent", "or equal" or other substitutes shall be ordered, installed, or utilized until the CRCNV's review is complete. The CRCNV must be allowed a reasonable time within which to evaluate each of Contractor's proposals for such substitutions. The CRCNV's determination regarding such substitutions must be evidenced either by acceptance of the Contractor's Bid in which the substitution was identified, a written Change Order, or completion of the submittal review procedure.

9.3 The CRCNV may require the Contractor to furnish, at the Contractor's expense, a special performance guarantee or other surety with respect to any "like," "equivalent," "or equal" or other substitutes. Regardless of the CRCNV's decision regarding the Contractor's proposal to substitute an item, the Contractor is liable for the cost of the charges of the CRCNV, including the costs of all data offered in support of any proposed "like" "equivalent," "or equal" or other substitute item, and shall reimburse the CRCNV for those costs. The CRCNV shall record the time required by the CRCNV in such evaluations and in making changes in the Equipment, Project, this Contract (or in the provisions of any other direct contract with CRCNV for work related to the Project) occasioned thereby.

10. Warranty and Guarantee; Tests and Inspections; Correction or Acceptance of Defective Work

10.1 The Contractor warrants and guarantees to the CRCNV that all materials and equipment will be new unless otherwise specified and that all work will be of good quality and free from faults or defects and in accordance with the requirements of the CRCNV's Request for Bids and of any inspections, tests, or approvals referred to herein. The CRCNV is entitled to reject all unsatisfactory, faulty, or defective work and all work not conforming to the CRCNV's Request for Bids at the time of the CRCNV's Acceptance thereof or of such inspections, tests, or approvals.

10.2 The Contractor shall perform all inspections, tests, and obtain all approvals required by this Contract, or by any laws, ordinances, rules, regulations or orders of any public authority having jurisdiction over the Equipment, wherever it may be or become located. The Contractor is responsible for the costs of such inspections, tests or approvals

and shall provide the CRCNV with any certificate of inspection, testing or approval resulting therefrom.

10.3 If the Contractor does not have the necessary test facilities or personnel to perform all required inspections, tests or approvals, the Contractor shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents, which the Contractor cannot perform.

10.4 The Contractor shall provide the CRCNV timely notice of readiness of Equipment for all inspections or tests requiring observation by the CRCNV. The CRCNV's observation of inspections or tests, or inspections or tests performed by persons other than the Contractor, with the exception of Acceptance Testing, does not relieve the Contractor's obligation to perform this Contract as specifically required herein. Compliance is the responsibility of the Contractor. No act or omission on the part of the CRCNV may be construed as relieving the Contractor of this responsibility. Inspection of Equipment later determined to be nonconforming is not cause or excuse for acceptance of the nonconforming Equipment.

10.5 The Contractor shall provide the CRCNV timely notice of readiness of Equipment for Acceptance Testing. The Contractor shall provide the CRCNV reasonable access to the Contractor's premises and provide proper and safe facilities for the CRCNV's observation or conduct of Acceptance Testing.

10.6 If the CRCNV determines, upon Acceptance Testing, or thereafter until the expiration of one year after the date of Final Acceptance, or any such longer period required by the CRCNV's Request for Bids or the Contractor's Proposal, that the Equipment, or any portion thereof, is defective, CRCNV may order the Contractor to correct such defects or replace them within a reasonable time, as may be particularly described in the CRCNV's written order. The Contractor is responsible for the costs of such correction or replacement and for all "in-and-out" costs associated with the removal or replacement of the Equipment, or any portion thereof. The Contract Price must not be changed because of such correction, removal, or replacement. The CRCNV, at CRCNV's expense, will arrange to have the CRCNV's external connections disconnected from defective Equipment in order to facilitate removal of Equipment by the Contractor.

10.7 Nothing in this article concerning the correction or replacement of defective Equipment establishes any period of limitation with respect to any claim by the CRCNV against the Contractor for performance or damages arising out of the Contractor's obligation to perform this Contract.

11. Data, Reports, and Drawings

11.1 All data, reports, drawings and specifications provided to the Contractor by the CRCNV pursuant to this Contract or the CRCNV's Request for Bids remains the property of the CRCNV and must be delivered to the CRCNV upon completion of performance of this Contract. The Contractor may keep copies thereof but may not release those copies without the prior written consent of the CRCNV. Such documents are not intended or represented by CRCNV to be suitable for reuse by the CRCNV or others, either for extension of the Project or for other projects. Any reuse of such documents by the Contractor without the prior written consent of the CRCNV is at the

Contractor's risk and the Contractor shall hold the CRCNV harmless with respect to any liability arising out of such reuse.

11.2 The books, records, documents and accounting procedures and practices of the Contractor relative to direct costs and expenditures under this Contract are subject to inspection, examination and audit by the State, the Commission, the attorney general of Nevada and the Nevada state legislative auditor.

11.3 Subject to applicable state law, the Contractor shall not be restricted in any way from releasing information in response to a subpoena, court order, or legal process, but shall notify the CRCNV of the demand for information before the Contractor responds to such demand.

11.4 The Contractor shall retain its rights in its standard drawing details, designs specifications, databases, computer software and any other proprietary property. Rights to intellectual property developed, utilized, or modified in the performance of the services remain the property of the Contractor.

12. Liquidated Damages

12.1 The CRCNV and the Contractor recognize that time is of the essence of this Contract and that the CRCNV will suffer financial loss if the Equipment is not manufactured or delivered within the times specified as Performance Milestones, plus any extensions thereof allowed by Change Order. The Parties also recognize the delays, expense, and difficulties involved in proving in a legal proceeding the actual loss suffered by the CRCNV if the Equipment is not manufactured or delivered on time or is not acceptable to CRCNV. Accordingly, instead of requiring any such proof, the CRCNV and the Contractor agree that as liquidated damages for delay (but not as a penalty) the Contractor shall, at the CRCNV's election in lieu of termination of this Contract, pay the CRCNV the following sums for each day that expires after the Performance Milestones in the Contractor's Proposal:

Bid Item	Description	Liquidated Damages, Per Day
401	Single-phase, free-standing instrument classed at 69 kV rms (nominal) and as described in Specification No. 33 71 26.23/26. F.O.B. Monthill Substation 4095 E. Flamingo, Las Vegas, NV 89121.	\$500 each unit of the Bid Item

12.2 The total of all liquidated damages assessed by Contractor must not exceed the Contract Price. The CRCNV is entitled to deduct the liquidated damages from any money in its hands, otherwise due, or to become due, to the Contractor, or to initiate applicable dispute resolution procedures and recover liquidated damages for nonperformance of this Contract.

13. Insurance, Bonds, and Indemnification

13.1 **General.** The Contractor must not commence any Work under this Contract until it obtains, at its own expense, all insurance and surety bonds as required in this article. The types of insurance and surety bonds to be obtained are Workers' Compensation, Employers' Liability, Automobile Liability, Commercial General Liability, Transportation, and Performance Bonds, as outlined in the following portions of this article. The Workers' Compensation, Employers' Liability, and Automobile Liability insurance must be maintained in force for the full period of this Contract. The Commercial General Liability insurance must be maintained in force for the full period of this Contract and for one year thereafter.

13.2 **Generally Accepted Professional Practices.** The services provided or procured by the Contractor pursuant to this Contract must be in accordance with generally accepted applicable professional practices and principles. The insurance, bond, and indemnification required by this Contract must be in addition to the Contractor's duty to perform this Contract and are cumulative to any other right of indemnification or contribution, which the CRCNV may have in law, equity or otherwise and must survive the completion of the Contractor's performance of the Work.

13.3 **Contractor's Responsibility.** Nothing contained in these insurance requirements may be construed as limiting the extent of the Contractor's total responsibility for payment if claims arising in whole or in part from the actions of a third party when such actions might be taken as a result of the Contractor's operations under this Contract.

13.4 Minimum Scope and Limits of Insurance.

A. **MINIMUM SCOPE AND LIMITS OF INSURANCE** - Contractor shall provide coverage with limits of liability not less than those stated below. An excess liability policy or umbrella liability policy may be used to meet the minimum liability requirements provided that the coverage is written on a "following form" basis.

1. Commercial General Liability – Occurrence Form

Policy shall include bodily injury, property damage, broad form contractual liability, and XCU coverage.

Minimum Requirements:

- | | |
|---|-------------|
| • General Aggregate | \$2,000,000 |
| • Products – Completed Operations Aggregate | \$1,000,000 |
| • Personal and Advertising Injury | \$1,000,000 |
| • Each Occurrence | \$1,000,000 |

- a. The policy shall be endorsed to include the following additional insured language: "The Colorado River Commission of Nevada shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor, including completed operations".

2. Automobile Liability

Bodily injury and property damage for any owned, hired, and non-owned vehicles used in the performance of this Contract.

- Combined Single Limit (CSL) \$1,000,000

- a. The policy shall be endorsed to include the following additional insured language: "The Colorado River Commission of Nevada shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor, including automobiles owned, leased, hired or borrowed by the Contractor".

3. Worker's Compensation and Employers' Liability

Workers' Compensation	Statutory
Employers' Liability	
Each Accident	\$100,000
Disease – Each Employee	\$100,000
Disease – Policy Limit	\$500,000

- a. Policy shall contain a waiver of subrogation against the State.
- b. This requirement shall not apply when a contractor or subcontractor is exempt under N.R.S., **AND** when such contractor or subcontractor executes the appropriate sole proprietor waiver form.

4. Builders' Risk Insurance or Installation Floater

In an amount equal to the initial Contract Amount plus additional coverage equal to Contract Amount for all subsequent change orders.

- a. The Colorado River Commission of Nevada, shall be Insureds on the policy.
- b. Coverage shall be written on an all-risk, replacement cost basis and shall include coverage for soft costs, flood, and earth movement.
- c. Policy shall be maintained until whichever of the following shall first occur: (1) final payment has been made; or (2) until no person or entity, other than the State of Nevada, has an insurable interest in the property required to be covered.
- d. Policy shall be endorsed such that the insurance shall not be canceled or lapse because of any partial use or occupancy by the State.
- e. Policy must provide coverage from the time any covered property becomes the responsibility of the Contractor, and continue without interruption during construction, renovation, or installation, including any time during which the covered property is being transported to the construction installation site, or awaiting installation, whether on or off-site.
- f. Policy shall contain a waiver of subrogation against the State of Nevada.
- g. Contractor is responsible for the payment of all policy deductibles.

5. **Transportation (Cargo) Insurance**

In an amount equal to the initial Contract Amount plus additional coverage equal to Contract Amount for all subsequent change orders.

a. Transportation insurance must be of the "all risks" type and must provide coverage against physical loss or damage to equipment and materials in transit to the designated location. The insurance must include the interests of the Contractor, the Owner, and their respective representatives and agents, each of whom is deemed to have an insurable interest and must be listed as a named insured. The coverage amount must be not less than the full value of items exposed to risk in transit at any one time.

b. Transportation insurance must provide for losses to be payable to the Contractor and the Owner as their interests may appear and shall contain a waiver of subrogation rights against the insured parties. For insurance purposes, the risk of loss to equipment and materials remains with the Contractor until the equipment and materials are accepted by the assignee general construction contractor at the designated location.

c. The Contractor shall submit a copy of the transportation insurance policy to the Owner at least thirty (30) days before the scheduled shipping date. The policy must quote the insuring agreement, must list all exclusions, and must state that thirty (30) days' written notice must be given to the Owner before the policy is changed or canceled.

B. **ADDITIONAL INSURANCE REQUIREMENTS:** The policies shall include, or be endorsed to include the following provisions:

1. On insurance policies where the Colorado River Commission of Nevada, is named as an additional insured, the CRCNV shall be an additional insured to the full limits of liability purchased by the Contractor even if those limits of liability are in excess of those required by this Contract.
2. The Contractor's insurance coverage shall be primary insurance and non-contributory with respect to all other available sources.

C. **NOTICE OF CANCELLATION:** Contractor shall for each insurance policy required by the insurance provisions of this Contract shall not be suspended, voided, or canceled except after providing thirty (30) days prior written notice been given to the State, except when cancellation is for non-payment of premium, then ten (10) days prior notice may be given. Such notice shall be sent directly to **Robert Reese, Colorado River Commission of Nevada, 555 E. Washington Avenue, Suite 3100, Las Vegas, Nevada 89101-1065**. Should contractor fail to provide State timely notice, contractor will be considered in breach and subject to cure provisions set forth within this contract.

D. **ACCEPTABILITY OF INSURERS:** Insurance is to be placed with insurers duly licensed or authorized to do business in the state of Nevada and with an "A.M. Best" rating of not less than A-VII. The State in no way warrants that the above-required minimum insurer rating is sufficient to protect the Contractor from potential insurer insolvency.

- E. **VERIFICATION OF COVERAGE:** Contractor shall furnish the State with certificates of insurance (ACORD form or equivalent approved by the State) as required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

13.5 Endorsements. All endorsements must be dated, reflect the name of the insurance company, the type of insurance and policy number, be executed by a duly authorized representative of the insurance company and be attached to the certificate. The additional insureds must be included by endorsement.

13.6 Waiver of Subrogation. By endorsement (ISO Form #CG 24 04 11 85 or its equivalent), the Contractor's insurance carriers (except Nevada Workers' Compensation) shall waive their rights of recovery against the Colorado River Commission of Nevada, and its successors or assigns including its commissioners, officers and employees individually and collectively.

13.7 Primary Insurance. In the event of any claim by a third party for loss, the insurance policies of the Contractor must be primary insurance with respect to any of the CRCNV's insurance whose insurance must stand in an unbroken chain of coverage excess of the Contractor's scheduled underlying primary coverage.

13.8 Cost of Claims. The Contractor is responsible for the cost of any claims under any policy with deductibles or self-insured retention.

13.9 CRCNV's Right to Obtain Insurance. If the Contractor fails to procure or maintain insurance as required herein, the CRCNV must have the right, in addition to other rights or remedies, if the CRCNV so chooses, to procure or maintain the said insurance for and in the name of the Contractor with the CRCNV as co-insured, and the Contractor shall pay the cost thereof and furnish all necessary information to make effective and maintain such insurance. In the event the Contractor fails to pay such costs, the CRCNV is entitled to set off any sums from the compensation set forth in this Contract and directly pay for such coverage.

13.10 Deductibles. With respect to any and all insurance required under this article, the deductible must not exceed \$2,500.00, without the prior written approval of the CRCNV.

13.12 Evidence of Insurance Required. Before commencement of the Work, the Contractor and the Contractor's subcontractors must have delivered to the CRCNV certificates of insurance and required endorsements that attest to the fact that the Contractor and the Contractor's subcontractors have obtained the insurance as required by this Contract.

13.13 Indemnification; Limited Liability.

13.13.1 To the fullest extent permitted by law, the Contractor hereby indemnifies and saves harmless and defends the CRCNV, the CRCNV(s) of all property where this Contract will be performed, the Southern Nevada Water Authority and its member agencies, and each of their directors, officers, employees, and agents; not excluding the CRCNV's right to participate, against any and all claims, liability, loss,

damage, cost, expense, award, fine or judgment (including attorneys' fees and costs) arising out of or resulting from the Contractor's conduct or performance of this Contract, including (without limitation) such claims, liability, loss, damage, cost, expense, award, fine or judgments which are attributable to or arising by reason of death or bodily injury of persons, injury or damage to property, defects in workmanship or materials, or design defects caused or resulting from the Contractor's acts or omissions, except to the extent those losses are solely caused by the CRCNV, its employees or agents under its direct control. In claims against any person or entity indemnified under this article by an employee of the Contractor, anyone directly or indirectly employed by the Contractor or anyone for whose acts the Contractor may be liable, the indemnification obligation under this article is not limited by a limitation on amount or type of damages, compensation or benefits payable by or for Contractor's workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts. It is the Contractor's sole responsibility to ascertain that the insurance requirements of this Contract are fulfilled. In the event that they are not, the Contractor is not relieved of his duty to perform, indemnify, defend and hold harmless the CRCNV nor is the CRCNV liable to the Contractor or any others in the event the Contractor's insurance, as accepted by the CRCNV, fails to meet the full requirements herein.

13.13.2 The CRCNV, an agency of the State of Nevada, will not waive and intends to assert available NRS chapter 41 liability limitations in all cases. Contract liability of both Parties is not subject to punitive damages. Liquidated damages do not apply unless otherwise specifically provided in the Contract Documents. Damages for any CRCNV breach must never exceed the amount of funds appropriated or authorized for payment under this Contract, but not yet paid to the Contractor, for the fiscal year budget in existence at the time of the breach. Damages for any Contractor breach must not exceed 150 percent of the contract maximum "not to exceed" value. Contractor's tort liability is not limited.

13.14 Performance Bond. The Contractor must furnish with the executed Contract, a performance bond in the amount of the Contract Price as security for faithful performance of all Contractors' obligations under this Contract. The Contractor must maintain that performance bond in effect during the term of this Contract and for one year thereafter. The performance bond must be executed by a surety or sureties included in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies as published in Circular 570 by the Audit Staff Bureau of Government Financial Operations, U.S. Treasury Department". A certified copy of the agent's authority to act must accompany a bond signed by an agent. Only surety companies authorized to do business in, and having an agent for services of process in the state of Nevada will be acceptable. If the surety on any bond furnished by the Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in Nevada, or it ceases to meet the requirements of the preceding sub-article, the Contractor shall within ten (10) days thereafter substitute another bond and surety, both of which must be acceptable to the CRCNV.

14. Risk Of Delay

14.1 The Contractor shall accept the risk of any delays caused by the CRCNV. If the Contractor is delayed in the performance of this Contract because of such conditions, the Contractor shall have no claim against the CRCNV for damages or contract adjustment other than an extension of Performance Milestones and the waiving of liquidated damages during the period occasioned by the delay.

14.2 If the Contractor is delayed due to circumstances beyond the Contractor's control, including, but not limited to, actions or failures of any of the CRCNV's other contractors, fires, floods, labor disputes, pandemics, epidemics, abnormal weather conditions, or acts of God, the Contractor shall immediately notify the CRCNV and submit a signed, written request for amendment of the Project Milestones. The CRCNV shall approve or disapprove the Contractor's request within twenty (20) days and, if approved, issue a Change Order amending the Project Milestones.

14.3 The CRCNV reserves the right to order the Contractor to delay shipment of Equipment in accordance with Performance Milestones. If such a delay is ordered by the CRCNV in writing, the CRCNV shall reimburse the Contractor for the Contractor's costs which would not have been incurred except for the delay ordered by the CRCNV. Such costs may include reasonable storage costs, insurance, and transportation to a reasonable storage facility.

15. Effect and Termination

15.1 This Contract shall become effective as of the date of its execution and shall remain in effect, unless terminated earlier by the CRCNV as provided for herein, until one year after the CRCNV's Final Acceptance of the Equipment and Final Payment of the Contractor.

15.2 **Failure to meet Performance Milestones.** The CRCNV reserves the right to cancel any portion of the Contractor's performance of this Contract which is not performed within the Performance Milestones. In the event of such cancellation, the CRCNV shall pay the Contractor in full for any portion of the Equipment which has been accepted by the CRCNV.

15.3 **Stop Work.** If at any time the CRCNV should determine the Contractor's work or the Equipment to be defective, or if the Contractor fails to supply suitable materials, equipment or supplies, the CRCNV may order Contractor to stop work, or any portion thereof, until the cause of such order has been eliminated.

15.4 **CRCNV's Right to Take Possession and Terminate.** If the Contractor is adjudged to be bankrupt or insolvent, or makes an assignment for the benefit of its creditors, or if a trustee files a petition against the Contractor to take advantage of any debtor's act or to reorganize the Contractor under bankruptcy or similar laws; if Contractor repeatedly fails to supply suitable materials or equipment in the performance of this Contract; if Contractor fails to make prompt payments for labor, materials, or equipment; if Contractor disregards any laws, ordinances, rules, regulation or orders of any public body having jurisdiction over the Equipment or the Contractor's performance of this Contract; or, if the Contractor disregards the CRCNV's orders or Change Orders under this Contract, then the CRCNV may, without prejudice to any other right or remedy the

CRCNV may have, and after giving the Contractor and his surety at least seven days' written notice, terminate this Contract and take possession of all Equipment then delivered, and obtain all additional Equipment required by this Contract from third party sources by whatever method the CRCNV may choose. In such case, the Contractor shall not be entitled to receive any further payment. If the unpaid balance of the Contract Price exceeds the CRCNV's direct and indirect costs of obtaining additional Equipment required by this Contract, including compensation of additional professional services, such excess must be paid to the Contractor. If such costs exceed such unpaid balance, the Contractor shall pay the CRCNV the difference.

16. Taxes.

The Contractor must promptly pay all taxes that are lawfully assessed against the Contractor in connection with the Work. The CRCNV is exempt from sales tax pursuant to a ruling and determination of the attorney general of the State of Nevada.

17. Unemployment Compensation.

The Contractor must at all times comply with the requirements of Nevada Revised Statutes ("NRS") chapter 612 (Unemployment Compensation).

18. Discrimination.

The Contractor shall not, during its performance of this Contract, discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, or age, including, but not limited to, the following: employment, upgrading, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor shall insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials. Any violation of such provision by the subcontractor constitutes a material breach of this Contract.

19. Disputes.

Controversies arising out of this Contract must be resolved pursuant to the jurisdiction and substantive law of the courts of competent jurisdiction of the State of Nevada.

20. Waiver of Claims.

The CRCNV's making and the Contractor's acceptance of final payment constitute a waiver of all claims by the CRCNV against the Contractor and the Contractor against the CRCNV, except claims arising from unsettled liens, from defective work appearing after final inspection, or from failure to comply with the Contract or the terms of any special guarantees specified therein. The CRCNV's making and the Contractor's acceptance of final payment does not constitute a waiver by the CRCNV of any rights in respect of the Contractor's continuing obligations under the Contract, nor a waiver of those claims previously made in writing and still unsettled.

21. Notices.

21.1 Any notice, demand, or request required or authorized by this Contract to be served, given, or made shall be deemed properly served, given or made if delivered in person or sent by electronic mail and certified mail, postage prepaid, to the persons specified below:

Colorado River Commission of Nevada
c/o Executive Director
555 E. Washington Ave., Suite 3100
Las Vegas, NV 89101-1065
Email: CRCAdmins@crc.nv.gov

Ritz Instrument Transformers, Inc
c/o. Regional Sales Manager
25 Hamburg Avenue
Lavoria, Georgia 30553
Email: sales@ritz.usa.com

21.2 Either Party may at any time, by written notice to the other Party, designate different or additional persons or different addresses for the giving of notices, demands, or requests hereunder.

22. Submission of Claims.

Should the CRCNV or the Contractor suffer injury or damage to person or property because of any error, omission, or act of the other Party or of any of the other Party's employees or agents or others for whose acts the other Party is legally liable, claim must be made in writing to the other Party within a reasonable time of the first observance of such injury or damage. The provisions of this article shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or repose.

23. Assignment of Contract.

The Contractor shall not assign or otherwise transfer its rights or obligations under this Contract without the prior written approval of the CRCNV. This Contract inures to the benefit of and is binding upon the respective successors and assigns of the Parties to this Contract but any assignment or other transfer of this Contract does not relieve the Parties of any obligation hereunder.

24. Severability.

Should any provision of this Contract for any reason be declared invalid or unenforceable by final and applicable order of any court or regulatory body having jurisdiction, such decision shall not affect the validity of the remaining portions, and the remaining portions shall remain in effect as if this Contract had been executed without the invalid portion. In the event any provision of this Contract is declared invalid, the Parties shall promptly renegotiate to restore this Contract as near as possible to its original intent and effect.

25. Survival.

Any provision of this Contract that expressly or by implication comes into or remains in force following the termination or expiration of this Contract survives the termination or expiration of this Contract.

26. Applicable Law; Venue.

This Contract and the rights of the Parties hereto must be interpreted, governed, and construed in accordance with the laws of the State of Nevada. The Parties consent to the venue and jurisdiction of the state of and federal courts within Clark County, Nevada.

27. Article Headings.

The article headings in this Contract are included only for convenience and reference and the Parties intend that they be disregarded in interpreting this Contract.

28. Waiver.

Either of the Parties shall have the right to excuse or waive performance by the other Party of any obligation under this Contract by a written notice signed by the Party so excusing or waiving. No delay in exercising any right or remedy shall constitute a waiver thereof, and no waiver by either party of the breach of any covenant of this Contract shall be construed as a waiver of any preceding or succeeding breach of the same or any other covenant or condition of this Contract.

29. Entire Agreement; Contractor Certification.

This Contract, together with the other Contract Documents, comprises the entire agreement between the CRCNV and the Contractor for the performance of the Work. The Contractor hereby certifies that the Contractor has read and understands every provision contained in the Contract Documents. The Contractor is bound and must comply with each and every term, condition, and covenant set forth in the Contract Documents.

30. Authority to Execute.

Each individual signing this Contract represents and warrants that the Party represented has duly authorized such individual to execute this Contract with the intent that the Party be bound and obligated hereby.

IN WITNESS WHEREOF, the Contractor and the CRCNV have executed three duplicate originals of this Contract this _____ day of _____, 2024. The CRCNV will retain two counterparts and one counterpart will be delivered to the Contractor.

CONTRACTOR

By: _____

Its: Regional Sales Manager

ATTEST

Tyler Jackson



COLORADO RIVER COMMISSION OF NEVADA

By: _____

Puoy K. Premsrirut
Chairwoman

ATTEST

Eric Witkoski
Executive Director

Approved as to Form:

Michelle Briggs
Special Counsel for Attorney General

**SECTION 500
PERFORMANCE BOND**

CONTRACTOR (Name and Address):

Ritz Instrument Transformers, Inc.
25 Hamburg Avenue
Lavoria, Georgia 30553

SURETY (Name and Principal Place of Business):

CRCNV (Name and Address):

Colorado River Commission of Nevada
555 E. Washington Avenue
Suite 3100
Las Vegas, Nevada 89101-1065

CONTRACT

Date: _____

Amount: _____

\$ _____

Description: Contract No. CRCMH-01,
Monthill Substation

Location: Clark County, Nevada

BOND

Date (Not earlier than Contract Date): _____

Modifications to this Bond Form:

CONTRACTOR AS PRINCIPAL (Seal below)

Company: _____

Signature: _____

Name and Title: _____

Attest: _____

Name and Title: _____

SURETY (Seal below)

Company: _____

Signature: _____

Name and Title: _____

Attest: _____

Name and Title: _____

1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the CRCNV for the performance of the Contract, which is incorporated herein by reference.
2. If the Contractor performs the Contract, the Surety and the Contractor have no obligation under this Bond, except to participate in conferences as provided in paragraph 3.1.
3. If there is no CRCNV Default, the Surety's obligation under this Bond arises after:
 - 3.1 The CRCNV has notified the Contractor and the Surety at its address described in subsection 9 below, that the CRCNV is considering declaring the Contractor in default and has requested and attempted to arrange a conference with the Contractor and Surety, to be held not later than fifteen (15) days after receipt of such notice, to discuss methods of performing the Contract. If the CRCNV, the Contractor, and the Surety agree, the Contractor must be allowed a reasonable time to perform the Contract, but such an agreement does not waive the CRCNV's right, if any, subsequently to declare a Contractor Default; and
 - 3.2 The CRCNV has declared a Contractor Default and formally terminated the Contractor's right to complete the Contract. Such Contractor Default must not be declared earlier than twenty (20) days after the Contractor and the Surety have received notice as provided in paragraph 3.1; and
 - 3.3 The CRCNV has agreed to pay the balance of the Contract Price to the Surety in accordance with the terms of the Contract or to a contractor selected to perform the Contract in accordance with the terms of the Contract with the CRCNV.
4. When the CRCNV has satisfied the conditions of subsection 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 4.1 Arrange for the Contractor, with the consent of the CRCNV, to perform and complete the Contract; or
 - 4.2 Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or
 - 4.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the CRCNV for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by the CRCNV and the contractor selected with the CRCNV's concurrence, to be secured with a performance bond executed by a qualified Surety equivalent to the bond issued on the Contract, and paid to the CRCNV the amount of damages as described in subsection 6 of the Balance of the Contract Price incurred by the CRCNV resulting from the Contractor's Default; or

- 4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:
- 4.4.1 After investigation, determine the amount for which it may be liable to the CRCNV and, as soon as practicable after the amount is determined, tender payment therefore to the CRCNV; or
- 4.4.2 Deny liability in whole or in part and notify the CRCNV citing the reasons therefore. If the Surety does not proceed as provided in subsection 4, with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen (15) days after receipt of an additional written notice from the CRCNV to the Surety demanding that the Surety perform its obligations under this Bond, and the CRCNV is entitled to enforce any remedy available to the CRCNV. If the Surety proceeds as provided in paragraph 4.4, and the CRCNV returns the payment tendered or the Surety has denied liability, in whole or in part, without further notice the CRCNV is entitled to enforce any remedy available to the CRCNV.
5. After the CRCNV has terminated the Contractor's right to complete the Contract, and if the Surety elects to act under paragraphs 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the CRCNV must not be greater than those of the Contractor under the Contract and the responsibilities of the CRCNV to the Surety must not be greater than those of the CRCNV under the Contract. To the limit of the amount of this Bond, but subject to commitment by the CRCNV of the Balance of the Contract Price to the mitigation of costs and damages on the Contract, the Surety is obligated without duplication for:
- 5.1 The responsibilities of the Contractor for correction of defective work and completion of the Contract;
- 5.2 Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the action or failure to act of the Surety under subsection 4; and
- 5.3 Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or nonperformance of the Contractor.
6. The Surety is not liable to the CRCNV or others for obligations of the Contractor that are unrelated to the Contract, and the Balance of the Contract Price must not be reduced or set off on account of any such unrelated obligations. No right of action accrues on this Bond to any person or entity other than the CRCNV or its heirs, executors, administrators, or successors.
7. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.

8. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work is performed under the Contract and must be initiated within two years after the Contractor's Default, or within two years after the Contractor ceased working, or within two years after the Surety refuses or fails to perform its obligation under this Bond, whichever occurs first. If the provisions of this subsection are void or prohibited by law, the minimum of limitation available to sureties as a defense in the jurisdiction of the court is applicable.
9. Notice to the Surety, the CRCNV, or the Contractor must be mailed or delivered to the address shown on the signature page of this performance bond.
10. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the work is performed any provision of this bond conflicting with such statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
11. Definitions.
 - 11.1 "Balance of the Contract Price" means the total amount payable by the CRCNV to the Contractor under the Contract after all proper adjustments have been made, including allowances to the Contractor of any amounts received or to be received by the CRCNV in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Contract.
 - 11.2 "Contract" means the agreement between the CRCNV and the Contractor identified on the signature page, including all the Contract documents and changes thereto.
 - 11.3 "Contractor Default" means a failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.
 - 11.4 "CRCNV Default" means a failure of the CRCNV, which has neither been remedied nor waived, to pay the Contractor or to perform in complete or comply with the other terms of this Contract.

SECTION 600 SUMMARY OF THE WORK

1. Project Description.

1.1 Monthill Substation is a 69 kV facility that will be constructed in Southern Nevada.

2. Work Under This Contract.

2.1 This Contract is to engineer, manufacture, assemble, test, ship, and provide ancillary services relating to the procurement of Combined Instrument Transformer as specified herein.

2.2 It is anticipated that no one single supplier can provide a bid for all items, thus the Contract may be awarded in parts.

3. Delivery.

3.1 Bid Item 401 shall be shipped F.O.B. by the Contractor to Monthill Substation 4095 E. Flamingo, Las Vegas, NV 89121.

3.2 The Contractor shall notify the following designated point of contact at least one (1) week in advance of any delivery date, and shall not make any shipments without prior approval.

Mr. Robert Reese
Colorado River Commission of Nevada
Telephone: (702) 856-3611
Cell Phone: (702) 682-6972
Email: breese@crc.nv.gov

3.3 No delivery will be approved until proper Submittals pertaining to storage and installation have been received and accepted.

3.4 Any items shipped without prior notification and approval may be returned to the point of origin, or unloaded and stored at a place and in a manner determined by the CRCNV, and the Contractor will be charged with any additional expense resulting therefrom.

4. Work by the CRCNV.

4.1 The CRCNV or its construction contractor will receive, unload, move, store, place, assemble, and install the Equipment furnished under this Contract No. CRCMH-01.

4.2 The CRCNV will test Equipment supplied under this Contract No. CRCMH-01, and shall perform energization and startup of the new facilities.

5. Work Schedule.

5.1 In order to satisfy the engineering information requirements for design and to allow the construction contractor sufficient time for installation, this Contract shall adhere to the following Performance Milestones.

5.1.1 Work Schedule:

5.1.1.1 Compliance Submittals within forty-five (45) days after notice to proceed (see sections 1000 and 1100 for requirements).

5.1.1.2 Maintenance and installation instructions within sixty (60) days after notice to proceed.

5.1.1.3 Delivery beginning on or after January 06, 2026, and ending on or before February 27, 2026.

5.2 The anticipated Final Acceptance Date for all Equipment is March 31, 2026.

6. Measurement and Payment.

All Equipment indicated in the Contract Documents must be included in the unit prices for the applicable Item(s). Equipment will be paid on a per unit basis. Change orders will be paid as stated in the change order.

7. Copies Of Documents.

7.1 After execution of the Contract, the Contractor will be provided at no cost one (1) set of fully executed Contract Documents.

7.2 Additional copies of above documents will be supplied upon request at the cost of printing and delivery.

SECTION 700 SUBMITTALS

1. General Information.

1.1 Submittals to be provided by the Contractor for the Equipment to be furnished are identified in this section 700 of the Contract Documents.

1.2 Submittal Types:

1.2.1 Compliance Submittals are shop drawings, product data, and samples that are prepared by the Contractor and submitted by the Contractor to the CRCNV as a basis for approval. The Contractor must not proceed with the Work affected by or related to a Compliance Submittal until the CRCNV has approved such submittal.

1.2.1.1 Shop drawings include custom-prepared data of all types including drawings, diagrams, performance curves, material schedules, templates, installation and maintenance instructions, and similar information applicable to the Equipment.

1.2.1.2 Product data includes standard printed information on materials, products and systems; not custom-prepared for this Project, other than the designation of selections from available choices.

1.2.1.3 Samples include both fabricated and unfabricated physical examples of materials, and products; both as complete units and as smaller portions of units of testing and analysis.

1.2.2 Procedure Submittals are narrative descriptions and/or drawings provided by the Contractor describing the methods, techniques, Equipment and processes to be used to complete all or some portion of the work. The CRCNV must review Procedure Submittals, but such review does not relieve the Contractor of its responsibility to determine its own means and methods for the Work.

1.3 Submittals must be of the quality for legibility and reproduction purposes. Every line, character and letter must be clearly legible. Drawings such as reproducible's must be useable for further reproduction to yield legible hard copies.

1.4 All words and dimensional units must be in the English language.

1.5 Submittals must be complete with respect to dimensions, design criteria, materials of construction, and other information specified to enable the CRCNV to review the information effectively.

1.6 The CRCNV may copy and use for internal operations and staff training purposes any and all submittals required by this Contract and approved for final distribution, whether or not such documents are copyrighted, at no additional cost to the CRCNV. If permission to copy any such submittal for the purposes stated is unreasonably withheld from the CRCNV by the Contractor or any Subcontractor, manufacturer, or Supplier, the Contractor shall provide fifty (50) copies plus the number of copies required in the following subsection to be submitted for approval.

2. Compliance Submittals.

2.1 When Compliance Submittals are required for a Bid Item they shall include but not be limited to, the following:

2.1.1 Manufacturer's specifications.

2.1.2 Catalog cut sheets, or parts thereof, of manufactured Equipment.

2.1.3 Shop fabrication and erection drawings.

2.1.4 General outline drawings of Equipment showing overall dimensions, location of major components, weights, and center of gravity, and location of required building openings and floor plates.

2.1.5 Detailed Equipment installation drawings, showing foundation details, anchor bolt sizes and locations, base plate sizes, location of CRCNV's connections, and all clearances required for erection, operation, and disassembly for maintenance.

2.1.6 Schematic diagrams for electrical items, showing external connections, terminal block numbers, internal wiring diagrams, and one-line diagrams.

2.1.7 Bills of material and spare parts lists.

2.1.8 Instruction books and operating manuals.

2.1.9 Material lists or schedules.

2.1.10 Performance tests on equipment by manufacturers.

2.1.11 Samples and color charts.

2.1.12 All drawings, catalogs, or parts thereof, manufacturer's specifications and data, samples, instructions, and other information specified or necessary:

2.1.12.1 For CRCNV to determine that the Equipment conforms to the design concept and comply with the intent of the Contract Documents.

2.1.12.2 For the proper erection, installation, operation and maintenance of the Equipment which CRCNV will review for general content but not for substance.

2.1.12.3 For CRCNV to determine what supports, anchorages, structural details, connections, and services are required for the Equipment, and the effects on contiguous or related structures, equipment, and materials.

2.2 At the time of each Compliance Submittal submission, call to the attention of CRCNV in the letter of transmittal any deviations from the requirements of the Contract Documents.

2.3 Make all modifications noted or indicated by CRCNV and return revised prints, copies, or samples until accepted. Direct specific attention in writing on revised Submittals, to changes other than the modifications called for by CRCNV on previous Submittals. After Submittals have been accepted, submit copies thereof for final distribution. Prints of accepted drawings transmitted for final distribution will not be further reviewed and are not to be revised. If errors are discovered during manufacture or fabrication, correct the Submittal and resubmit for review.

2.4 Equipment requiring a Compliance Submittal shall not be shipped until the Submittal has been stamped "Submittal Accepted" by CRCNV.

2.5 Except as otherwise specified, transmit all Compliance Submittals in the quantity as follows:

2.5.1 Initial Submittal – Four (4) copies to the CRCNV. One (1) copy will be returned to the Contractor.

2.5.2 Resubmittals – Four (4) copies to CRCNV. One (1) copy will be returned to the Contractor.

2.5.3 Samples must be of sufficient size and quantity to clearly illustrate the functional characteristics of the product and its full range of color, texture, and pattern.

2.6 The CRCNV will review and return Compliance Submittals with appropriate notations. The CRCNV's review action stamp will appear on all Compliance Submittals of the Contractor when returned by the CRCNV. The CRCNV's acceptance of Compliance Submittals will not relieve the Contractor from his responsibility as stated in the Contract.

2.7 Compliance Submittal Action Stamp. CRCNV's review action stamp, will appear on all Compliance Submittals of Contractor when returned by CRCNV. Review status designations listed on CRCNV's action stamp are defined as follows:

2.7.1 SUBMITTAL ACCEPTED Signifies Equipment represented by the submittal conforms to the design concept and complies with the intent of the Contract Documents. Copies of the Submittal are to be transmitted to CRCNV for final distribution.

2.7.2 SUBMITTAL ACCEPTABLE AS NOTED (REVISE & RESUBMIT) Signifies Equipment represented by the Submittal as noted conforms to the design concept and complies with the intent of the Contract Documents. Contractor is to proceed with fabrication or procurement of the items and with related work in accordance with CRCNV's notations and is to submit a revised Submittal responsive to notations marked on the returned Submittal or written in the letter of transmittal.

2.7.3 SUBMITTAL NOT ACCEPTED AS NOTED (REVISE & RESUBMIT) Signifies Equipment represented by the Submittal appears to conform with the design concept and comply with the intent of the Contract Documents but information is either insufficient in detail or contains discrepancies which prevent CRCNV from completing his review. Contractor is to resubmit revised information responsive to CRCNV's annotations on the returned Submittal or written in the letter of transmittal. Fabrication or procurement of items represented by the Submittal and related Work is not to proceed until the Submittal is acceptable.

2.7.4 SUBMITTAL NOT ACCEPTABLE (SUBMIT ANEW) Signifies Equipment represented by the Submittal does not conform to the design concept or comply with the intent of the Contract Documents and is disapproved. Contractor is to submit Compliance Submittals responsive to the Contract Documents.

3. Procedure Submittals.

3.1 When required, transmit all Procedure Submittals in the quantity as follows:

3.2.1 Initial Submittal: Four (4) copies to the CRCNV. One (1) copy will be returned to the Contractor.

3.2.2 Resubmittals: Four (4) copies to the CRCNV. One (1) copy will be returned to the Contractor.

SECTION 800 EQUIPMENT

1. Quality Assurance.

1.1 Conform to applicable specifications, codes, standards, and requirements of regulatory agencies.

1.2 Provide equipment or material that comply with the requirements of the Contract Documents, undamaged, and, unless otherwise indicated, new and unused at the time of installation. Provide equipment or material that are complete with all accessories, trim, finish, safety guards, and other devices and details needed for a complete installation and for the intended use and effect.

1.2.1 Where they are available and if they comply with the Contract Documents, provide Equipment of types that have been produced and used successfully in similar situations on other projects.

1.2.2 Where, because of the nature of its application, CRCNV is likely to need replacement parts or additional amounts of the Equipment at a later date, either for maintenance and repair or replacement, provide standard products for which the manufacturer has published assurances that the Equipment and its parts are likely to be available to the CRCNV at a later date.

1.3 Comply with size, make, type, and quality specified, or as specifically approved in writing by the CRCNV.

1.4 If the Equipment is manufactured or fabricated:

1.4.1 Design, fabricate and assemble in accordance with the best engineering and shop practices.

1.4.2 Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.

1.4.3 Two or more items of the same kind and by the same manufacturer must be identical.

1.4.4 Equipment must be suitable for the service conditions intended.

1.4.5 Capacities, sizes and dimensions shown or specified must be adhered to unless variations are specifically approved in writing.

2. Transportation and Handling.

2.1 The Contractor shall prepare Equipment for shipment in a manner to facilitate unloading and handling, and to protect against damage or unnecessary exposure in transit and storage. Provisions for protection must include the following:

2.1.1 Crates or other suitable packaging materials.

2.1.2 Covers and other means to prevent corrosion, moisture damage, mechanical injury, and accumulation of dirt in motors, electrical equipment, and machinery.

2.1.3 Suitable rust-preventative compound on exposed machined surfaces and unpainted iron and steel.

2.1.4 Grease packing or oil lubrication in all bearings and similar items.

2.1.5 Moisture absorbing media in cabinets and electrical enclosures.

2.2 Tag or mark each item of Equipment with the Contract Number and Bid Item number as identified in the Contract Documents or on Compliance Submittals. Include complete packing lists and bills of material with each shipment. Each piece of every item need not be marked separately provided that all pieces of each item are packed or bundled together and the packages or bundles are properly tagged or marked.

2.3 The Contractor shall mail bills of material to the CRCNV prior to delivery of each shipment and shall include bills of material with each shipment.

2.4 Furnish the CRCNV with all requirements for unloading and handling of Equipment upon delivery sufficiently in advance to allow the CRCNV sufficient preparation time. Include type and capacity of unloading equipment required as applicable.

2.5 Deliver all Equipment by truck.

2.6 Deliver Equipment in an undamaged condition, in original containers or packaging, with identifying labels intact and legible.

2.7 Mark partial deliveries of component parts to identify the Equipment, to permit easy accumulation of parts, and to facilitate assembly.

2.8 The CRCNV shall receive, check, unload, inventory, accept and store all Equipment delivered to the specified location in accordance with proper notice.

3. Storage and Protection.

3.1 Furnish the CRCNV with all requirements for storage and protection of all Equipment sufficiently in advance of delivery to allow sufficient preparation time.

3.2 The CRCNV will furnish all facilities needed for storage of Equipment at the project site.

3.3 After delivery and acceptance, the CRCNV will assume responsibility for and protect all Equipment in accordance with the Contractor's recommendations.

SECTION 900 MANUFACTURER'S FIELD SERVICE

1. Services Required.

1.1 The requirement to provide a manufacturer's representative on-site during installation and startup of the Equipment is identified in those sections of this Contract providing the specifications for the Equipment. If the requirement to provide a manufacturer's representative is not identified, such service is optional by the Contractor.

1.2 If a manufacturer's representative is specified and required for the Equipment furnished:

1.2.1 Furnish the services of qualified, competent field representative and necessary assistants for the Equipment. The field representative must be certified by the manufacturer of the specified product or system as having the necessary knowledge and experience to perform the required functions.

1.2.2 The manufacturer's field personnel shall perform the following:

1.2.2.1 Observe the erection, installation, start-up, and testing of Equipment.

1.2.2.2 Instruct and guide the CRCNV in proper procedures.

1.2.2.3 Supervise the initial start-up, operational check, and any required adjustments of the Equipment.

1.2.2.4 Instruct CRCNV's designated personnel in proper operation and maintenance of all Equipment.

1.2.3 The field representative shall report to the site at times designated by CRCNV.

1.2.4 The field representative must be acceptable to the CRCNV and must not be changed during the installation operations without the CRCNV's consent unless the field representative proves unsatisfactory to the Contractor.

SECTION 1000
33 71 26.23/26
Combined Instrument Transformers

SECTION 1100
Drawing List

<u>Drawing Number</u>	<u>Description</u>
ESX11	Electrical One Line Relaying Diagram
ESX12	Electrical One Line Relaying Diagram
ESX21	Electrical Three Line Diagram Metering
ESX22	Electrical Three Line Diagram HVCB 52TA
ESX23	Electrical Three Line Diagram HVCB 52TB
ESX24	Electrical Three Line Diagram Transformer TA
ESX25	Electrical Three Line Diagram Transformer TB
ESX26	Electrical Three Line Diagram MVCB 52MA, PT-MA & SSVT-TA
ESX27	Electrical Three Line Diagram MVCB 52MA, PT-MA & SSVT-TB

**COLORADO RIVER COMMISSION OF NEVADA
AGENDA ITEM H
FOR MEETING OF MARCH 12, 2024**

SUBJECT: *For Possible Action:* Consideration of and possible action to approve contract CRCMH-02 between successful bidder, Virginia Transformer Corp., and the Colorado River Commission of Nevada based on bid solicitation 69CRC-S2540 for Monthill Substation for two Liquid Filled Main Power Transformers for a total of \$3,599,000.

RELATED TO AGENDA ITEM:

None.

RECOMMENDATION OR RECOMMENDED MOTION: Staff recommends the Commission approve the contract CRCMH-02 with Virginia Transformer Corp. and authorize the Executive Director to sign the contract on behalf of the Commission.

FISCAL IMPACT:

None.

STAFF COMMENTS AND BACKGROUND:

A. Background on Operations

Pursuant to NRS 538.161, the Colorado River Commission of Nevada (Commission) may execute contracts, for the planning, and development of any facilities for the generation or transmission of electricity for the greatest possible benefit to the state. Additionally, the Commission has a Facilities Development Agreement with the Southern Nevada Water Authority (SNWA) for the purpose of “creating a cooperative relationship to jointly develop, operate, maintain, use and replace a Power System” for SNWA and its members. SNWA has requested the Commission assist in the design, procure, and construct a new substation at Monthill. The proposed purchase contract is put forward for approval as part of work the Commission will perform for SNWA for the Monthill project.

B. Background of Bid/Procurement

On October 10, 2023, bid solicitation 69CRC-S2540 was posted in NVEPro. Bid solicitations were sent to 31 vendors registered with NVEPro, and additional independent vendors directly via email. The deadline for bid proposals closed at 2:00 p.m. on November 13, 2023. Two quotes were received through NVEPro. The evaluation team had no technical exceptions and recommended approval of the bid of Virginia Transformer Corp.

This Contract is to design, manufacture, assemble, test, ship, and provide all other ancillary services relating to the procurement of two Liquid Filled Main Power Transformers. The Equipment will be purchased by the Commission pursuant to NRS 538.161 (2) and the Commission’s established Procedures for Purchasing Electrical Materials for the Power Delivery Project and State Administrative Manual (SAM) 0326.

Staff’s Recommendation

Staff recommends the Commission approve the contract with Virginia Transformer Corp. and authorize the Executive Director to sign it on behalf of the Commission.



**Colorado River Commission of Nevada
555 East Washington Avenue, Suite 3100
Las Vegas, Nevada 89101-1065**

Monthill Substation

**Contract No. CRCMH-02
Liquid-Filled Main Power Transformer (MPT)**

Bid Documents and Specifications

For Award:
March 12, 2024

MONTHILL SUBSTATION

Contract No. CRCMH-02 Liquid-Filled Main Power Transformer (MPT)

Bid Documents and Specifications

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SECTION 100 REQUEST FOR BIDS

1. Notice.

The Colorado River Commission of Nevada (CRCNV) hereby requests that you submit a bid to supply all or a portion of the material described in the following documents, under the terms of the Contract included herein.

Vendors shall submit their proposals by using Create Quote through the State electronic procurement website, <https://NevadaEPro.com>, in accordance with the instructions provided on the NevadaEPro website.

Refer to Instructions for Vendors Responding to a Bid in the Important Links section on the front page of NevadaEPro for instructions on how to submit a Quote using NevadaEPro

The Material shall be purchased by the CRCNV pursuant to NRS 538.161(2) and its established procedures for Purchasing Electrical Materials for the Power Delivery Project. The contract shall be awarded and administered in accordance with the laws of the State of Nevada.

All Bids must be in accordance with this Request for Bids, the Bid Form and the Agreement published herein, and the documents referenced or included herein. Complete sets of Bid Documents shall be used in preparing Bids; CRCNV assumes no responsibility for error or misinterpretations resulting from the use of incomplete sets of Bid Documents.

Additional copies of documents may be requested by electronic mail to crcadmins@crc.nv.gov.

At said place and time, and promptly thereafter, all bids that have been duly received will be opened and read aloud. The award of the Contract will be made at a later publicly-noticed meeting of the CRCNV.

2. Equipment.

The Equipment to be purchased under the Contract is generally described as follows:

69Δ-12.47Y/7.20 kV, 12/16/20 MVA, three-phase, two-winding transformer. The MPT is being used as single customer distribution substation main power transformer for a water pumping facility. As such, the MPT will function as a step-down transformer. The MPT will be operating under full-load conditions for much of the time, consequently, load losses will be given careful consideration in the evaluation of each Supplier's proposal. The Material will be received and installed by an installation contractor under a separate contract.

Technical Specifications are included as a part of this Contract. Items referred to as "Division 1" or "Div 1" documents within the Technical Specifications shall be defined as Sections 100-1100 of this Contract.

3. Questions Regarding Request for Bid.

Questions concerning this Request for Bid should use the Bid Q&A feature in NevadaEPro, <https://NevadaEPro.com>.

4. Pricing and Security.

Bids will be received on a unit price basis as described in the Bid Form. Bid Security will not be required. The selected Bidder(s) is required to post a performance bond in an amount equal to the Contract Price.

5. Multiple Awards.

CRCNV may award this contract in part to multiple Bidders.

6. Bid Acceptance.

All bids remain subject to acceptance by the CRCNV for sixty (60) days.

If the CRCNV elects to accept Bidder's Bid, CRCNV shall give the Bidder notice thereof within the number of days set forth in the Bid Form.

Date: October 9, 2023

By:



Robert D. Reese

Assistant Director for Engineering and
Operations

BID RESPONSE DEADLINE:

November 13, 2023

SECTION 200 BID INSTRUCTIONS

1. Bid Form.

The Bid Form is found in section 300. The Bid Form must be completed in ink. The names of all persons signing must be legibly printed below their signatures.

All blanks in the Bid Form must be filled. If a Bidder elects not to submit a bid for a specific item listed in the Bid Form, indicate such intent with the words "No Bid" in lieu of a proposed price. The bid must contain an acknowledgment of receipt of all Addenda, the numbers and dates of which must be filled in on the Bid Form.

No alteration in bids, or in the printed forms therefore, by erasures, interpolations, or otherwise will be acceptable.

2. Bid Security.

Bid security is not required.

3. Bids as Public Records.

The CRCNV is a public agency as defined by state law. As such, it is subject to the Nevada Public Records Law (Chap. 239 of *Nevada Revised Statutes* [NRS]). All of the CRCNV's records are public records (unless otherwise declared by law to be confidential), which are subject to inspection and copying by any person. Bidders are advised that after a bid is received by the CRCNV, its contents will become a public record and nothing contained in the proposal will be deemed to be confidential.

4. Submission of Bids.

Proposals shall be received via <https://NevadaEPro.com> no later than the date and time specified on the General Tab of the Bid Solicitation in NevadaEPro. Proposals that are not submitted by bid opening time and date shall not be accepted. Vendors may submit their proposal any time prior to the deadline stated in NevadaEPro. In the event that dates, and times specified in this document and dates times specified in NevadaEPro conflict, the dates and time in NevadaEPro shall take precedence.

5. Evaluation of Bids.

The Equipment will be purchased by the CRCNV pursuant to NRS 538.161 (2) and the CRCNV's established Procedures for Purchasing Electrical Materials for the Power Delivery Project. The contract will be awarded and administered in accordance with the laws of the State of Nevada.

6. Rejection of Bids.

The CRCNV reserves the right to reject any or all bids, including without limitation the rights to reject any or all nonconforming, non-responsive, unbalanced, or conditional bids, and to reject the bid of any Bidder if the CRCNV believes that it would not be in the best interest of the CRCNV to make an award to that Bidder. The CRCNV also reserves the right to waive formalities.

7. Signing of Contract.

The CRCNV will issue three (3) copies of the Contract Documents to the successful Bidder. Within the number of days set forth in the Bid Form, the successful Bidder must sign all copies of the Contract, leaving the dates blank, must insert the required Bonds and power of attorney in the appropriate places, and deliver all copies to the CRCNV. The CRCNV will, thereafter, execute all copies of the Contract and return one original copy to the Contractor.

8. Performance Bond.

The successful Bidder will be required to furnish a Procurement Performance Bond as security for the faithful performance of the Contract, which must be at least as protective as those bonds otherwise required pursuant to NRS 339.025.

**SECTION 300
BID FORM**

1. Project Identification:

Monthill Substation
Contract No. CRCMH-02
Liquid-Filled Main Power Transformer (MPT)

2. This Bid is Submitted By:

Name: Virginia Transformer Corp
Address: 220 Glade View Drive
Roanoke, VA 24012

3. This Bid is Submitted To:

Colorado River Commission of Nevada
555 E. Washington Avenue, Suite 3100
Las Vegas, Nevada 89101-1065

4. Bid Terms and Conditions.

4.1 The undersigned Bidder proposes and agrees, if this bid is accepted, to enter into a Contract with the CRCNV in the form included in section 400 of this Request for Bid and to perform and furnish all Work as specified or indicated in the Contract Documents within the specified time and for the amount indicated in the bid and in accordance with the other terms and conditions incorporated by the Contract.

4.2 Bidder accepts all of the terms and conditions of the Bid Instructions. This bid remains subject to acceptance for sixty (60) days after the day the bids are due. Bidder will sign and submit the documents required by the Contract Documents within fifteen (15) days after the date of CRCNV's Notice of Award.

4.3 In submitting this bid, Bidder represents that:

4.3.1 Bidder has examined copies of the Request for Bids and all the documents contained therein, and copies of the following Addenda (receipt of which is hereby acknowledged):

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

- 4.3.2. Bidder has become familiar with and satisfied itself as to the general, local, and site conditions that may affect cost, progress, performance, and furnishing of the Equipment.
- 4.3.3 Bidder is familiar with and has satisfied itself as to all federal, state, and local laws and regulations that may affect the cost, progress, performance, and furnishing of the Equipment.
- 4.3.4 Bidder is aware of the general nature of the work to be performed by the CRCNV or others, including the off-loading or installation of Equipment for which this Bid is submitted.
- 4.3.5 Bidder has given CRCNV written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Contract Documents and the written resolution thereof by CRCNV is acceptable to Bidder. The Contract Documents are sufficient to indicate and convey understanding to Bidder of all its terms and conditions for performing and furnishing the Equipment for which this Bid is submitted.
- 4.3.6 This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid. Bidder has not solicited or induced any person, firm, or corporation to refrain from bidding. Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over CRCNV.

5. Bid Price.

Bidder will design, manufacture, assemble, test, ship and provide ancillary services relating to the Equipment in accordance with the Contract Documents and in the amounts stated for unit prices. Conditions may arise which will necessitate changes in the quantities identified herein. The prices quoted per unit must be firm and not dependent on the final quantity of items. The Bidder agrees that increases or decreases in the estimated quantities will not justify unit price revisions.

Unit prices must be stated as firm. Escalation or adjustment factors will not be accepted by the CRCNV.

Unit prices must include labor, equipment, tools, vehicles, materials, supplies, permits, markups, supervision and all related costs.

Bid Item	Specification Section	Description	Unit	Unit Price	Qty	Extended Price	Proposed Manufacturer	Delivery - Weeks After N-T-P*
401	1000	3-Phase 69-12.47 kV, (delta-wye), 12/16/20 MVA 2 winding main power transformer with secondary load tap changer as described in Specification No. 33 73 13.01. F.O.B. Monthill Substation 4095 E. Flamingo, Las Vegas, NV 89121.	Each	\$1,799,500	2	\$3,599,000	Virginia Transformer Corp	110 - 112* * after Order Acknowledgment
CONTRACT PRICE								

*Notice-to-Proceed.

6. Delivery Schedule.

Bidder agrees that the Equipment will be delivered on or before the above stated delivery dates, which dates comply with the times specified in the Contract Documents.

SIGNATURE OF BIDDER

By: Virginia Transformer Corp
(Corporation Name)

By: 
(Signature of Authorized Person)

Joshua Yun - Vice Pres. of Sales
(Printed Name and Title)

Business Address:

220 Glade View Drive
Roanoke, VA 24012

Phone		Fax No.	
No.	<u>540-682-5095</u>		<u>540-345-7692</u>
Email:	<u>sunny_xavier@vatransformer.com</u>		

This Bid is Submitted On: . November 13, 2023

SECTION 320
BID ADDENDUM

(Bid Addenda, if any, to be included here when conformed Contract issued for signature).

SECTION 340
BID CLARIFICATIONS AND SUBSTITUTIONS

(Bidder Clarifications and Substitutions proposed by the Bidder and accepted by the CRCNV, if any, to be included here when conformed Contract issued for signature).

**SECTION 400
CONTRACT NO. CRCMH-02
MONTHILL SUBSTATION**

THIS CONTRACT is made and entered into by and between the COLORADO RIVER COMMISSION OF NEVADA, hereinafter referred to as the "CRCNV," and Virginia Transformer Corp., hereinafter referred to as the "Contractor." The CRCNV and the Contractor are sometimes individually referred to as "Party" and collectively referred to as the "Parties."

IN CONSIDERATION of the mutual covenants contained herein, the Parties hereto agree as follows:

1. Agreement to Provide Equipment

CRCNV agrees to purchase and Contractor agrees to design, manufacture, assemble, test, ship, and provide all other ancillary services related to the delivery of the following electrical equipment and materials pursuant to the terms and conditions established in these Contract Documents:

Bid Item	Description
401	3-Phase 69-12.47 kV, (delta-wye), 12/16/20 MVA 2 winding main power transformer with secondary load tap changer as described in Specification No. 33 73 13.01. F.O.B. Monthill Substation 4095 E. Flamingo, Las Vegas, NV 89121.

2. Definitions

2.1 "Acceptance" or "Final Acceptance" means the formal action by the CRCNV accepting the Equipment, or any portion thereof, as complete and satisfactory, subject to Contractor's warranties.

2.2 "Acceptance Testing" means any testing required by the CRCNV prior to, and as a prerequisite of, CRCNV's Acceptance.

2.3 "Bid Form" means the approved form on which the CRCNV requested that the Contractor prepare and submit a Bid to the CRCNV as an offer to provide the Equipment, which has now been accepted by the CRCNV pursuant to this Contract and is therefore incorporated herein as a part of this Contract.

2.4 "Change Order" means the CRCNV's signed written order to the Contractor authorizing any addition or deletion of, or revision to, the Equipment.

2.5 "Contract Documents" means the documents contained in this conformed and bound volume, including section 100, Request for Bids; section 200, Bid Instructions; section 300, Bid Form; section 320, Bid Addendum; section 340, Bid Clarification; section 400, Contract No. CRCMH-02, Liquid-Filled Main Power Transformer (MPT); section

500, Performance Bond; and the Specifications contained in section 600 through section 1100. The term includes exhibits to this Contract attached hereto, if any, Contractor's performance and payment bonds, any notice of award or notice to proceed issued by the CRCNV, Contractor's Proposal, and any documentation submitted by the Contractor and accepted by the CRCNV prior to the execution of this Contract, and all Change Orders amending, modifying, or supplementing this Contract which may be delivered or issued after the effective date of this Contract and are not attached hereto. Submittals are not Contract Documents.

2.6 "Contract Price" means the total compensation payable to the Contractor for the Contractor's performance of this Contract, as proposed by Contractor in Contractor's Bid, and as may be amended by any Change Order pursuant to section 8.

2.7 "Executive Director" means the executive director of the Colorado River Commission of Nevada.

2.8 "Equipment" means the electrical equipment and materials, or any portion thereof, described in the Specifications.

2.9 "Notice to Proceed" means the written notice given by the CRCNV to the Contractor fixing the date on which the Contractor shall start to perform the Contractor's obligations under the Contract Documents.

2.10 "Performance Milestones" means those dates by which particular portions of the Equipment or work related thereto must be complete, as set forth in section 600.

2.11 "Project" means the Monthill Substation.

2.12 "Request for Bids" means the CRCNV's request that the Contractor and others make a Bid to contract with the CRCNV.

2.13 "Specifications" means the technical descriptions of the Equipment and services to be furnished by the Contractor, which are included as part of the CRCNV's Request for Bids, Contractor's Bid, and all modifying addenda and Change Orders thereto.

2.14 "Submittals" includes shop drawings, catalog cuts, samples, operating and maintenance instructions, progress payments, requests, and other documents and items specified to be delivered to the CRCNV.

2.15 "Work" means everything required or reasonably inferred to be furnished and done by the Contractor pursuant to the Contract Documents.

3. CRCNV's Representative

3.1 The CRCNV's Representative shall be Mr. Robert Reese, Assistant Director of Engineering and Operations. The CRCNV's Representative is generally authorized to act fully on behalf of the CRCNV. The CRCNV's Representative has complete authority to transmit instructions, receive information, interpret and define the

CRCNV's policies and decisions with respect to the materials, equipment, elements, and systems required under these Contract Documents.

3.2 The address of the CRCNV's Representative is:

Colorado River Commission of Nevada
555 E. Washington Avenue, Suite 3100
Las Vegas, NV 89101-1065

3.3 The CRCNV's Representative may designate any other employee of the CRCNV to perform his responsibilities under this Contract.

4. Contractor's Representative

Within ten (10) days following execution of this Contract by the Contractor, the Contractor must identify in writing the Contractor's Representative. The Contractor's Representative is authorized to act fully on behalf of the Contractor. The Contractor may change or designate another individual as its Contractor's Representative by written notice to the CRCNV.

5. Contract Price

The CRCNV shall pay the Contract Price to the Contractor in current U.S. funds in the amount described in the Contractor's Bid and in accordance with the payment procedures provided in section 7, unless changed in accordance with section 8, for the total cost of the Equipment and for the performance of all the Work described in the Contract Document.

6. Commencement and Completion of Performance

Upon receipt of a written notice to proceed from the CRCNV's Representative, the Contractor shall proceed with the performance of this Contract, pursuing the Work diligently, to the end that the Equipment be manufactured and delivered in accordance with the Performance Milestones.

7. Payment Procedures

7.1 Progress Payments. The Contractor shall submit an application for payment to the CRCNV as follows: 30% shall be due at Purchase Order, 30% shall be due at drawing submission (not to exceed 30 days from the date of submission, and 30% shall be due at shipment (not to exceed 30 days from the date of shipment). 10% shall be due 60 days after the date of delivery or placement into Buyer requested storage.

7.2 Procedure for Progress Payments. CRCNV shall pay Contractor within thirty (30) days after receipt of a correct, itemized invoice.

7.3 Application for Final Payment. The Contractor shall submit an application for final payment, based upon agreed upon payment milestones, upon completion and Final Acceptance by the CRCNV of the Contractor's delivery of all Equipment. (See section 600 for date of anticipated Final Acceptance.) The Contractor's application for final

payment must be accompanied by the consent of the Contractor's sureties that the CRCNV may release any payment retainage, together with a certified copy of any surety's agent's authority to act for the surety.

7.4 Procedure for Final Payment. The CRCNV shall pay the Contractor within thirty (30) days of receipt of a correct, itemized invoice for the final payment. The CRCNV's payment of the final payment shall constitute a full waiver of all claims by the CRCNV against the Contractor, other than those arising from unsettled liens, from defective work appearing after final inspection, or from the Contractor's failure to comply with the requirements of this Contract. The Contractor's receipt of final payment shall constitute the Contractor's waiver of all claims by the Contractor against the CRCNV, other than those previously made in writing and remaining unresolved at the time of final payment.

8. Changes in the Work, Contract Price or Performance Milestones

8.1 Without invalidating this Contract, the CRCNV may, at any time or from time to time, issue a Change Order requiring additions to, deletions from, or revisions to the Equipment or quantities stated herein. Upon receipt of a Change Order, the Contractor shall proceed with the performance of the Contract Documents as altered by the Change Order. If Contractor's compliance with any Change Order would cause an increase in the Contract Price, the Contractor shall, within fifteen (15) business days, notify the CRCNV and submit a signed, written claim therefore including information regarding the events and circumstances and supporting data giving rise to the Contractor's claim. The CRCNV shall approve or disapprove the Contractor's claim within twenty (20) business days after receipt of the Contractor's claim and, if approved, issue a Change Order amending the Contract Price.

8.2 If the Contractor's compliance with any Change Order would interfere with the Contractor's ability to complete the performance of this Contract within the Performance Milestones, including final performance of this Contract, the Contractor shall immediately notify the CRCNV and submit a signed, written request for amendment of the Performance Milestones. The CRCNV shall approve or disapprove the Contractor's request within twenty (20) business days and, if approved, issue a Change Order amending the Performance Milestones.

8.3 The CRCNV shall not compensate Contractor for additional work performed by the Contractor without authorization or Change Order. The Contractor shall notify its surety of any changes in the general scope of the work to be performed under this Contract.

8.4 This Contract may be amended, modified, or supplemented only by Change Order as provided herein or otherwise by amendment executed in writing by the CRCNV and the Contractor.

9. "Like", "Equivalent" And "Or Equal" Items

9.1 Whenever an item of material or equipment is specified or described in the Request for Bids by using the name of a proprietary item or the name of a particular supplier, the specification or description is intended to establish the type, function, and

quality required. "Like," "equivalent" and "or equal" items may be substituted only if, in the CRCNV's sole discretion, although not qualifying as an "or equal" item, is an item essentially equivalent to that named and a substitute therefore. Proposals to substitute like or equivalent items of material or equipment will not be accepted by the CRCNV from anyone other than the Contractor. If the Contractor wishes to furnish or use a substitute item of material or equipment, the Contractor shall first make written application for evaluation thereof to the CRCNV, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified, and be suited to the same use as that specified. The application must state the extent, if any, to which use of the proposed substitute will prejudice Contractor's completion of performance of this Contract on time as required, whether substitution of the item will require a change in this Contract (or in the provisions of any other direct contract with the CRCNV for work related to the Project) or adaptation of the design of the Equipment or the Project to the proposed substitute, and whether incorporation or use of the substitute in connection with the Equipment is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified must be identified in the application, and available maintenance, repair, and replacement service must be indicated. The application must also contain an itemized estimate of all costs or credits that would result directly or indirectly from use of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which must be considered by the CRCNV in evaluating the proposed substitute. The CRCNV may require the Contractor to furnish any additional data about the proposed substitute.

9.2 No "like," "equivalent," "or equal" or other substitutes shall be ordered, installed, or utilized until the CRCNV's review is complete. The CRCNV must be allowed a reasonable time within which to evaluate each of Contractor's proposals for such substitutions. The CRCNV's determination regarding such substitutions must be evidenced either by acceptance of the Contractor's Bid in which the substitution was identified, a written Change Order, or completion of the submittal review procedure.

9.3 The CRCNV may require the Contractor to furnish, at the Contractor's expense, a special performance guarantee or other surety with respect to any "like," "equivalent," "or equal" or other substitutes. Regardless of the CRCNV's decision regarding the Contractor's proposal to substitute an item, the Contractor is liable for the cost of the charges of the CRCNV, including the costs of all data offered in support of any proposed "like" "equivalent," "or equal" or other substitute item, and shall reimburse the CRCNV for those costs. The CRCNV shall record the time required by the CRCNV in such evaluations and in making changes in the Equipment, Project, this Contract (or in the provisions of any other direct contract with CRCNV for work related to the Project) occasioned thereby.

10. Warranty and Guarantee; Tests and Inspections; Correction or Acceptance of Defective Work

10.1 The Contractor warrants and guarantees to the CRCNV that all materials and equipment will be new unless otherwise specified and that all work will be of good quality and free from faults or defects and in accordance with the requirements of the CRCNV's Request for Bids and of any inspections, tests, or approvals referred to herein.

The CRCNV is entitled to reject all unsatisfactory, faulty, or defective work and all work not conforming to the CRCNV's Request for Bids at the time of the CRCNV's Acceptance thereof or of such inspections, tests, or approvals.

10.2 The Contractor shall perform all inspections, tests, and obtain all approvals required by this Contract, or by any laws, ordinances, rules, regulations or orders of any public authority having jurisdiction over the Equipment, wherever it may be or become located. The Contractor is responsible for the costs of such inspections, tests or approvals and shall provide the CRCNV with any certificate of inspection, testing or approval resulting therefrom.

10.3 If the Contractor does not have the necessary test facilities or personnel to perform all required inspections, tests or approvals, the Contractor shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents, which the Contractor cannot perform.

10.4 The Contractor shall provide the CRCNV timely notice of readiness of Equipment for all inspections or tests requiring observation by the CRCNV. The CRCNV's observation of inspections or tests, or inspections or tests performed by persons other than the Contractor, with the exception of Acceptance Testing, does not relieve the Contractor's obligation to perform this Contract as specifically required herein. Compliance is the responsibility of the Contractor. No act or omission on the part of the CRCNV may be construed as relieving the Contractor of this responsibility. Inspection of Equipment later determined to be nonconforming is not cause or excuse for acceptance of the nonconforming Equipment.

10.5 The Contractor shall provide the CRCNV timely notice of readiness of Equipment for Acceptance Testing. The Contractor shall provide the CRCNV reasonable access to the Contractor's premises and provide proper and safe facilities for the CRCNV's observation or conduct of Acceptance Testing.

10.6 For the period set forth below in this section, Contractor warrants that the Equipment and such portion of the Equipment as has been repaired or replaced by Contractor under this warranty, shall be free from defects in material, workmanship, or title at the time of delivery and shall perform during the warranty period in accordance with the specifications incorporated herein. Should any failure to conform to these warranties (excluding any defects in title) be discovered and brought to Contractor's attention during the warranty period and be substantiated by examination at Contractor's factory or by authorized field personnel, then (i) Contractor shall correct such failure by repair or replacement of the nonconforming item or portion thereof with CRCNV promptly making product available to be worked by Contractor's personnel or agents without interference with no additional cost to the Contractor; or (ii) Contractor shall ship the Equipment needing repair to Contractor's plant at Contractor's exclusive option, for repair or replacement of the nonconforming item or portion thereof. The Contractor is responsible for the costs of such correction or replacement and for all "in-and-out" costs associated with the removal or replacement of the Equipment, or any portion thereof. The Contract Price must not be changed because of such correction, removal, or replacement. The CRCNV, at CRCNV's expense, will arrange to have the CRCNV's external connections disconnected from defective Equipment in order to facilitate removal of Equipment by the

Contractor. CRCNV will be responsible for all costs associated with isolating the Equipment from energized sources to allow for safe clearances for removal. CRCNV will make Equipment ready for shipment in the condition it was originally received per the Outline Drawing with clear and free access by carrier.

CRCNV agrees that this remedy shall be its sole and exclusive remedy against Contractor and that no other remedy shall be available or pursued by CRCNV against Contractor for a breach of the warranty identified in this section. In no event shall Contractor be liable for any costs or expenses in excess of those described in this section and expressly excluding any liability or damages for special, incidental, or consequential damages.

The warranty period for newly manufactured items shall extend 60 months from the date of first energization or 60 months from the date of delivery whichever occurs first or unless a different warranty period is agreed to by Contractor. The warranty period for repaired/refurbished articles shall extend for the unexpired warranty period of the item repaired or replaced or for 90 days, whichever is longer. This warranty shall be voided and not extend to any item that upon examination by Contractor is found to have been subject to:

- a) mishandling, misuse, negligence, or accident.
- b) storage, installation, operation, testing, or maintenance that either was not in accordance with Seller's specifications, instructions, manuals, or otherwise improper, or contrary to industry standards.
- c) tampering as evidenced for example by broken seals, damaged packaging containers, etc.
- d) testing of equipment above normally accepted field tests.
- e) repair or alteration by anyone other than Seller without Seller's express advance written approval.
- f) payment(s) not received per terms of sale.

Failure to promptly notify Contractor in writing upon discovery of any non-conforming items during the warranty period shall void the warranty as to such items. CRCNV shall describe any such non-conformity in detail, expressing its position as to return of any article under the remedy provided herein. No returns shall be accepted without prior approval by Contractor. Where a failure cannot be corrected by Contractor's reasonable efforts, the parties shall mutually agree upon an equitable adjustment to the Contract Price which shall be the cost to CRCNV to replace the defective or non-conforming Equipment or portion thereof. THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND CONTRACTOR DISCLAIMS IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

10.8 Contractor warrants that all work hereunder shall be performed in accordance with the standards employed by Contractor in performing the same or similar services for itself. Contractor disclaims any and all other representations or warranties expressed or implied including without limitation any representation or warranty that any unauthorized entry, burglary, theft, embezzlement, or any other crimes will be prevented by the

equipment and/or installation. Except as otherwise required by the Contract Documents, Contractor's installation services and installation warranty does not include or imply any assistance for system field troubleshooting and no back charges for such services shall be accepted without the prior written consent of Contractor's authorized representative.

11. Data, Reports, and Drawings

11.1 All data, reports, drawings and specifications provided to the Contractor by the CRCNV pursuant to this Contract or the CRCNV's Request for Bids remains the property of the CRCNV and must be delivered to the CRCNV upon completion of performance of this Contract. The Contractor may keep copies thereof but may not release those copies without the prior written consent of the CRCNV. Such documents are not intended or represented by CRCNV to be suitable for reuse by the CRCNV or others, either for extension of the Project or for other projects. Any reuse of such documents by the Contractor without the prior written consent of the CRCNV is at the Contractor's risk and the Contractor shall hold the CRCNV harmless with respect to any liability arising out of such reuse.

11.2 The books, records, documents and accounting procedures and practices of the Contractor relative to direct costs and expenditures under this Contract are subject to inspection, examination and audit by the State, the Commission, the attorney general of Nevada and the Nevada state legislative auditor.

11.3 Subject to applicable state law, the Contractor shall not be restricted in any way from releasing information in response to a subpoena, court order, or legal process, but shall notify the CRCNV of the demand for information before the Contractor responds to such demand.

11.4 The Contractor shall retain its rights in its standard drawing details, designs specifications, databases, computer software and any other proprietary property. Rights to intellectual property developed, utilized, or modified in the performance of the services remain the property of the Contractor.

12. Liquidated Damages

12.1 The CRCNV and the Contractor recognize that time is of material importance of this Contract and that the CRCNV will suffer financial loss if the Equipment is not manufactured or delivered within the times specified as Performance Milestones, plus any extensions thereof allowed by Change Order. The Parties also recognize the delays, expense, and difficulties involved in proving in a legal proceeding the actual loss suffered by the CRCNV if the Equipment is not manufactured or delivered on time or is not acceptable to CRCNV. Accordingly, instead of requiring any such proof, the CRCNV and the Contractor agree that as liquidated damages for delay (but not as a penalty) the Contractor shall, at the CRCNV's election in lieu of termination of this Contract, pay the CRCNV the following sums for each day that expires after the Performance Milestones in the Contractor's Proposal:

Bid Item	Description	Liquidated Damages, Per Day
401	3-Phase 69-12.47 kV, (delta-wye), 12/16/20 MVA 2 winding main power transformer with secondary load tap changer as described in Specification No. 33 73 13.01. F.O.B. Monthill Substation 4095 E. Flamingo, Las Vegas, NV 89121.	\$500 each offending unit of the Bid Item

12.2 The total of all liquidated damages assessed by Contractor must not exceed 5% of the offending unit Contract Price. The CRCNV is entitled to deduct the liquidated damages from any money in its hands, otherwise due on the last milestone, or to become due, to the Contractor, or to initiate applicable dispute resolution procedures and recover liquidated damages for nonperformance of this Contract.

13. Insurance, Bonds, and Indemnification

13.1 **General.** The Contractor must not commence any Work under this Contract until it obtains, at its own expense, all insurance and surety bonds as required in this article. The types of insurance and surety bonds to be obtained are Workers' Compensation, Employers' Liability, Automobile Liability, Commercial General Liability, Transportation, and Performance Bonds, as outlined in the following portions of this article. The Workers' Compensation, Employers' Liability, and Automobile Liability insurance must be maintained in force for the full period of this Contract. The Commercial General Liability insurance must be maintained in force for the full period of this Contract and for one year thereafter.

13.2 **Generally Accepted Professional Practices.** The services provided or procured by the Contractor pursuant to this Contract must be in accordance with generally accepted applicable professional practices and principles. The insurance, bond, and indemnification required by this Contract must be in addition to the Contractor's duty to perform this Contract and are cumulative to any other right of indemnification or contribution, which the CRCNV may have in law, equity or otherwise and must survive the completion of the Contractor's performance of the Work.

13.3 **Contractor's Responsibility.** Nothing contained in these insurance requirements may be construed as limiting the extent of the Contractor's total responsibility for payment if claims arising in whole or in part from the actions of a third party when such actions might be taken as a result of the Contractor's operations under this Contract.

13.4 Minimum Scope and Limits of Insurance.

A. **MINIMUM SCOPE AND LIMITS OF INSURANCE** - Contractor shall provide coverage with limits of liability not less than those stated below. An excess liability policy or umbrella liability policy may be used to meet the minimum liability requirements provided that the coverage is written on a "following form" basis.

1. Commercial General Liability – Occurrence Form

Policy shall include bodily injury, property damage, broad form contractual liability, and XCU coverage.

Minimum Requirements:

- General Aggregate \$2,000,000
- Products – Completed Operations Aggregate \$1,000,000
- Personal and Advertising Injury \$1,000,000
- Each Occurrence \$1,000,000

- a. The policy shall be endorsed to include the following additional insured language: "The Colorado River Commission of Nevada shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor, including completed operations".

2. Automobile Liability

Bodily injury and property damage for any owned, hired, and non-owned vehicles used in the performance of this Contract.

- Combined Single Limit (CSL) \$1,000,000

- a. The policy shall be endorsed to include the following additional insured language: "The Colorado River Commission of Nevada shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor, including automobiles owned, leased, hired or borrowed by the Contractor".

3. Worker's Compensation and Employers' Liability

Workers' Compensation	Statutory
Employers' Liability	
Each Accident	\$100,000
Disease – Each Employee	\$100,000
Disease – Policy Limit	\$500,000

- a. Policy shall contain a waiver of subrogation against the State.
- b. This requirement shall not apply when a contractor or subcontractor is exempt under N.R.S., **AND** when such contractor or subcontractor executes the appropriate sole proprietor waiver form.

4. Builders' Risk Insurance or Installation Floater

In an amount equal to the initial Contract Amount plus additional coverage equal to Contract Amount for all subsequent change orders.

- a. The Colorado River Commission of Nevada, shall be Insureds on the policy.
- b. Coverage shall be written on an all-risk, replacement cost basis and shall include coverage for soft costs, flood, and earth movement.
- c. Policy shall be maintained until whichever of the following shall first occur:
(1) final payment has been made; or (2) until no person or entity, other

than the State of Nevada, has an insurable interest in the property required to be covered.

- d. Policy shall be endorsed such that the insurance shall not be canceled or lapse because of any partial use or occupancy by the State.
- e. Policy must provide coverage from the time any covered property becomes the responsibility of the Contractor, and continue without interruption during construction, renovation, or installation, including any time during which the covered property is being transported to the construction installation site, or awaiting installation, whether on or off-site.
- f. Policy shall contain a waiver of subrogation against the State of Nevada.
- g. Contractor is responsible for the payment of all policy deductibles.

5. Transportation(Cargo) Insurance

In an amount equal to the initial Contract Amount plus additional coverage equal to Contract Amount for all subsequent change orders.

- a. Transportation insurance must be of the "all risks" type and must provide coverage against physical loss or damage to equipment and materials in transit to the designated location. The insurance must include the interests of the Contractor, the Owner, and their respective representatives and agents, each of whom is deemed to have an insurable interest and must be listed as a named insured. The coverage amount must be not less than the full value of items exposed to risk in transit at any one time.
- b. Transportation insurance must provide for losses to be payable to the Contractor and the Owner as their interests may appear and shall contain a waiver of subrogation rights against the insured parties. For insurance purposes, the risk of loss to equipment and materials remains with the Contractor until the equipment and materials are accepted by the assignee general construction contractor at the designated location.
- c. The Contractor shall submit a copy of the transportation insurance policy to the Owner at least thirty (30) days before the scheduled shipping date. The policy must quote the insuring agreement, must list all exclusions, and must state that thirty (30) days' written notice must be given to the Owner before the policy is changed or canceled.

B. **ADDITIONAL INSURANCE REQUIREMENTS:** The policies shall include, or be endorsed to include the following provisions:

- 1. On insurance policies where the Colorado River Commission of Nevada, is named as an additional insured, the CRCNV shall be an additional insured to the full limits of liability purchased by the Contractor even if those limits of liability are in excess of those required by this Contract.
- 2. The Contractor's insurance coverage shall be primary insurance and non-contributory with respect to all other available sources.

C. **NOTICE OF CANCELLATION:** Contractor shall for each insurance policy required by the insurance provisions of this Contract shall not be suspended, voided, or canceled except after providing thirty (30) days prior written notice been given to the State, except when cancellation is for non-payment of premium,

then ten (10) days prior notice may be given. Such notice shall be sent directly to **Robert Reese, Colorado River Commission of Nevada, 555 E. Washington Avenue, Suite 3100, Las Vegas, Nevada 89101-1065**. Should contractor fail to provide State timely notice, contractor will be considered in breach and subject to cure provisions set forth within this contract.

- D. **ACCEPTABILITY OF INSURERS:** Insurance is to be placed with insurers duly licensed or authorized to do business in the state of Nevada and with an "A.M. Best" rating of not less than A-VII. The State in no way warrants that the above-required minimum insurer rating is sufficient to protect the Contractor from potential insurer insolvency.
- E. **VERIFICATION OF COVERAGE:** Contractor shall furnish the State with certificates of insurance (ACORD form or equivalent approved by the State) as required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

13.5 Endorsements. All endorsements must be dated, reflect the name of the insurance company, the type of insurance and policy number, be executed by a duly authorized representative of the insurance company and be attached to the certificate. The additional insureds must be included by endorsement.

13.6 Waiver of Subrogation. By endorsement (ISO Form #CG 24 04 11 85 or its equivalent), the Contractor's insurance carriers (except Nevada Workers' Compensation) shall waive their rights of recovery against the Colorado River Commission of Nevada, and its successors or assigns including its commissioners, officers and employees individually and collectively.

13.7 Primary Insurance. In the event of any claim by a third party for loss, the insurance policies of the Contractor must be primary insurance with respect to any of the CRCNV's insurance whose insurance must stand in an unbroken chain of coverage excess of the Contractor's scheduled underlying primary coverage.

13.8 Cost of Claims. The Contractor is responsible for the cost of any claims under any policy with deductibles or self-insured retention.

13.9 CRCNV's Right to Obtain Insurance. If the Contractor fails to procure or maintain insurance as required herein, the CRCNV must have the right, in addition to other rights or remedies, if the CRCNV so chooses, to procure or maintain the said insurance for and in the name of the Contractor with the CRCNV as co-insured, and the Contractor shall pay the cost thereof and furnish all necessary information to make effective and maintain such insurance. In the event the Contractor fails to pay such costs, the CRCNV is entitled to set off any sums from the compensation set forth in this Contract and directly pay for such coverage.

13.10 Deductibles. With respect to any and all insurance required under this article, the deductible must not exceed \$2,500.00, without the prior written approval of the CRCNV.

13.12 Evidence of Insurance Required. Before commencement of the Work, the Contractor and the Contractor's subcontractors must have delivered to the CRCNV certificates of insurance and required endorsements that attest to the fact that the Contractor and the Contractor's subcontractors have obtained the insurance as required by this Contract.

13.13 Indemnification; Limited Liability.

13.13.1 To the fullest extent permitted by law, the Contractor hereby indemnifies and saves harmless and defends the CRCNV, the CRCNV(s) of property where this Contract will be performed, the Southern Nevada Water Authority and its member agencies, and each of their directors, officers, employees, and agents; not excluding the CRCNV's right to participate, against any and all claims, liability, , damage, cost, expense, award, fine or judgment (including attorneys' fees and costs) arising out of or resulting from the Contractor's conduct or performance of this Contract, including (without limitation) such claims, liability, damage, cost, expense, award, fine or judgments which are attributable to or arising by reason of death or bodily injury of persons, injury or damage to property, defects in workmanship or materials, or design defects caused or resulting from the Contractor's acts or omissions, except to the extent those losses are solely caused by the CRCNV, its employees or agents under its direct control. In claims against any person or entity indemnified under this article by an employee of the Contractor, anyone directly or indirectly employed by the Contractor or anyone for whose acts the Contractor may be liable, the indemnification obligation under this article is not limited by a limitation on amount or type of damages, compensation or benefits payable by or for Contractor's workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts. It is the Contractor's sole responsibility to ascertain that the insurance requirements of this Contract are fulfilled. In the event that they are not, the Contractor is not relieved of his duty to perform, indemnify, defend and hold harmless the CRCNV nor is the CRCNV liable to the Contractor or any others in the event the Contractor's insurance, as accepted by the CRCNV, fails to meet the full requirements herein. Contractor's liability under this section shall be only to the proportionate extent of Contractor's fault, negligence, or responsibility and not for any portion of any claim under this section that is the fault, negligence or responsibility of other parties including the Indemnified Parties.

13.13.2 The CRCNV, an agency of the State of Nevada, will not waive and intends to assert available NRS chapter 41 liability limitations in all cases. Contractor's tort liability is not limited. Neither party shall be liable to the other for any incidental, indirect, special, punitive, or consequential damages for contract liability. regardless of whether liability would arise under contract or tort (including negligence and strict liability), warranty, indemnity, or otherwise. Neither party's liability on any claim for loss or damage arising out of this Contract or from the performance or breach thereof shall exceed the price of the item giving rise to the claims for loss or damage in the event more than one item is included in the Contract Documents with distinct pricing being allocated to each item in arriving at the total contract/order price.

13.14 Performance Bond. The Contractor must furnish with the executed Contract, a performance bond in the amount of the Contract Price as security for faithful performance of all Contractors' obligations under this Contract. The Contractor must

maintain that performance bond in effect during the term of this Contract and for one year thereafter. The performance bond must be executed by a surety or sureties included in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies as published in Circular 570 by the Audit Staff Bureau of Government Financial Operations, U.S. Treasury Department". A certified copy of the agent's authority to act must accompany a bond signed by an agent. Only surety companies authorized to do business in, and having an agent for services of process in the state of Nevada will be acceptable. If the surety on any bond furnished by the Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in Nevada, or it ceases to meet the requirements of the preceding sub-article, the Contractor shall within ten (10) days thereafter substitute another bond and surety, both of which must be acceptable to the CRCNV.

14. Risk Of Delay

14.1 The Contractor shall accept the risk of any delays caused by the CRCNV. If the Contractor is delayed in the performance of this Contract because of such conditions, the Contractor shall have no claim against the CRCNV for damages or contract adjustment other than an extension of Performance Milestones and the waiving of liquidated damages during the period occasioned by the delay. Any extended delays requested by the CRCNV beyond 20 days which result in the loss of the scheduled production slot will be subject to a re-scheduling fee of 30% of the specific order value.

14.2 If the Contractor is delayed due to circumstances beyond the Contractor's control, including, but not limited to, actions or failures of any of the CRCNV's other contractors, fires, floods, labor disputes, pandemics, epidemics, quarantines, national strikes, abnormal weather conditions, or acts of God, the Contractor shall immediately notify the CRCNV and submit a signed, written request for amendment of the Project Milestones. The CRCNV shall approve or disapprove the Contractor's request within twenty (20) business days and, if approved, issue a Change Order amending the Project Milestones.

15. Effect and Termination

15.1 This Contract shall become effective as of the date of its execution and shall remain in effect, unless terminated earlier by the CRCNV as provided for herein, until one year after the CRCNV's Final Acceptance of the Equipment and Final Payment of the Contractor.

15.2 **Failure to meet Performance Milestones.** The CRCNV reserves the right to cancel any portion of the Contractor's performance of this Contract which is not performed within the Performance Milestones when the Contractor fails to provide a reasonable plan to cure. In the event of such cancellation, the CRCNV shall pay the Contractor in full for any portion of the Equipment which has been accepted by the CRCNV.

15.3 **Stop Work.** If at any time the CRCNV should determine the Contractor's work or the Equipment to be defective, or if the Contractor fails to supply materials,

equipment or supplies per agreed upon specifications, the CRCNV may order Contractor to stop work, or any portion thereof, until the cause of such defect has been eliminated.

15.4 CRCNV's Right to Take Possession and Terminate. If the Contractor is adjudged to be bankrupt or insolvent, or makes an assignment for the benefit of its creditors, or if a trustee files a petition against the Contractor to take advantage of any debtor's act or to reorganize the Contractor under bankruptcy or similar laws; if Contractor repeatedly fails to supply suitable materials or equipment in the performance of this Contract; if Contractor fails to make prompt payments for labor, materials, or equipment; if Contractor disregards any laws, ordinances, rules, regulation or orders of any public body having jurisdiction over the Equipment or the Contractor's performance of this Contract; or, if the Contractor disregards the CRCNV's orders or Change Orders under this Contract, then the CRCNV may, without prejudice to any other right or remedy the CRCNV may have, and after giving the Contractor and his surety at least fourteen business days' written notice, terminate this Contract and take possession of all Equipment then delivered, and obtain all additional Equipment required by this Contract from third party sources by whatever method the CRCNV may choose. In such case, the Contractor shall not be entitled to receive any further payment. If the unpaid balance of the Contract Price exceeds the CRCNV's direct and indirect costs of obtaining additional Equipment required by this Contract, including compensation of additional professional services, such excess must be paid to the Contractor not to exceed the Contract Price. If such costs exceed such unpaid balance, the Contractor shall pay the CRCNV the difference.

16. Taxes.

The Contractor must promptly pay all taxes that are lawfully assessed against the Contractor in connection with the Work. The CRCNV is exempt from sales tax pursuant to a ruling and determination of the attorney general of the State of Nevada.

15.5 Contractor's Right to Terminate: Contractor, in addition to all other rights and remedies under the Contract Documents, shall have the right to cancel and terminate CRCNV's order if CRCNV fails to make payment as due, after reasonable notice to cure, or if CRCNV is adjudicated bankrupt, files a petition in bankruptcy, makes an assignment for the benefit of creditors or if action under any law for the relief of debtors is taken. In the event of cancellation and termination of CRCNV's order under this section, Contractor shall have no further liability to CRCNV and Contractor shall not be liable for any costs of cancellation, special, incidental or consequential damages (including punitive or exemplary damages) for any cause or of any nature whatsoever. All cancellations or terminations by Contractor under this section shall be subject to the following cancellation or termination charges:

- 30 % of order amount after order entry by Contractor.
- Additional 15 % of order amount after outline drawing completion / submission.
- If manufacturing has begun, charges will be based upon commitments for materials and percent completion in addition to the 45% for engineering and order entry.

17. Unemployment Compensation.

The Contractor must at all times comply with the requirements of Nevada Revised Statutes ("NRS") chapter 612 (Unemployment Compensation).

18. Discrimination.

The Contractor shall not, during its performance of this Contract, discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, or age, including, but not limited to, the following: employment, upgrading, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor shall insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials. Any violation of such provision by the subcontractor constitutes a material breach of this Contract.

19. Disputes.

Controversies arising out of this Contract must be resolved pursuant to the jurisdiction and substantive law of the courts of competent jurisdiction of the State of Nevada.

20. Waiver of Claims.

The CRCNV's making and the Contractor's acceptance of final payment constitute a waiver of all claims by the CRCNV against the Contractor and the Contractor against the CRCNV, except claims arising from unsettled liens, from defective work appearing after final inspection, or from failure to comply with the Contract or the terms of any special guarantees specified therein. The CRCNV's making and the Contractor's acceptance of final payment does not constitute a waiver by the CRCNV of any rights in respect of the Contractor's continuing obligations under the Contract, nor a waiver of those claims previously made in writing and still unsettled.

21. Notices.

21.1 Any notice, demand, or request required or authorized by this Contract to be served, given, or made shall be deemed properly served, given or made if delivered in person or sent by electronic mail and certified mail, postage prepaid, to the persons specified below:

Colorado River Commission of Nevada
c/o Executive Director
555 E. Washington Ave., Suite 3100
Las Vegas, NV 89101-1065
Email: CRCAAdmins@crc.nv.gov

Virgina Transformer Corp.
c/o Vice President of Sales
220 Glade View Drive
Roanoke, VA 24012

21.2 Either Party may at any time, by written notice to the other Party, designate different or additional persons or different addresses for the giving of notices, demands, or requests hereunder.

22. Submission of Claims.

Should the CRCNV or the Contractor suffer injury or damage to person or property because of any error, omission, or act of the other Party or of any of the other Party's employees or agents or others for whose acts the other Party is legally liable, claim must be made in writing to the other Party within a reasonable time of the first observance of such injury or damage. The provisions of this article shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or repose.

23. Assignment of Contract.

Neither party shall assign or otherwise transfer its rights or obligations under this Contract without the prior written approval of the other party. This Contract inures to the benefit of and is binding upon the respective successors and assigns of the Parties to this Contract but any assignment or other transfer of this Contract does not relieve the Parties of any obligation hereunder.

24. Severability.

Should any provision of this Contract for any reason be declared invalid or unenforceable by final and applicable order of any court or regulatory body having jurisdiction, such decision shall not affect the validity of the remaining portions, and the remaining portions shall remain in effect as if this Contract had been executed without the invalid portion. In the event any provision of this Contract is declared invalid, the Parties shall promptly renegotiate to restore this Contract as near as possible to its original intent and effect.

25. Survival.

Any provision of this Contract that expressly or by implication comes into or remains in force following the termination or expiration of this Contract survives the termination or expiration of this Contract.

26. Applicable Law; Venue.

This Contract and the rights of the Parties hereto must be interpreted, governed, and construed in accordance with the laws of the State of Nevada. The Parties consent to the venue and jurisdiction of the state of and federal courts within Clark County, Nevada.

27. Article Headings; Business Day.

The article headings in this Contract are included only for convenience and reference and the Parties intend that they be disregarded in interpreting this Contract. The term *business day* means Monday through Friday, except state holidays specified in NRS 236.015 or any day with respect to which state offices in Clark County, Nevada are closed.

28. Waiver.

Either of the Parties shall have the right to excuse or waive performance by the other Party of any obligation under this Contract by a written notice signed by the Party so excusing or waiving. No delay in exercising any right or remedy shall constitute a waiver thereof, and no waiver by either party of the breach of any covenant of this Contract shall be construed as a waiver of any preceding or succeeding breach of the same or any other covenant or condition of this Contract.

29. Entire Agreement; Contractor Certification.

This Contract, together with the other Contract Documents, comprises the entire agreement between the CRCNV and the Contractor for the performance of the Work. The Contractor hereby certifies that the Contractor has read and understands every provision contained in the Contract Documents. The Contractor is bound and must comply with each and every term, condition, and covenant set forth in the Contract Documents.

30. Authority to Execute.

Each individual signing this Contract represents and warrants that the Party represented has duly authorized such individual to execute this Contract with the intent that the Party be bound and obligated hereby.

31. Storage.

Contractor does not provide post manufacturing completion storage. If CRCNV requires storage post manufacturing completion storage delivery address must be provided within 5 business days or ready to ship notification. CRCNV will be provided with manual to maintain manufacturer's warranty during storage upon placement into storage. All outstanding balances will become due within 30 days of placement into storage. Any liquidated damages on the face of the purchase order will be deemed as waived if the Equipment is placed into storage. Risk of loss and title transfer to CRCNV upon placement into storage.

32. Surcharge.

In a force majeure like event prior to completion of core and coil for the Equipment any components such as, freight, labor, core steel, etc. (excluding copper and mineral oil) are subject to abnormal price increases, that raise the overall cost of the unit by two percent (2%) or more, and Contractor is not able to otherwise mitigate these increases

during the period between the proposal date and the shipment date, Contractor may pass along those specific incremental cost increases which shall not exceed 6% of the total cost of the unit. Contractor will provide evidence of the specific cost increases, in the event they occur, and adjustment is sought.

33. Intellectual Property.

Upon receipt of full payment for the Equipment and conditioned upon CRCNV not defaulting on its obligations under this Agreement, Contractor hereby grants to CRCNV a perpetual, royalty-free license to use the Intellectual Property Rights of Contractor which are incorporated in the Equipment. Such license is limited solely to the use of the Equipment by CRCNV for the purposes and at the location described in your Proposal. CRCNV may only transfer this license to a third party upon first providing Contractor with a written acknowledgment by such transferee of Contractor's ownership of its Intellectual Property Rights contained in the Equipment.

IN WITNESS WHEREOF, the Contractor and the CRCNV have executed three duplicate originals of this Contract this _____ day of _____, 2024. The CRCNV will retain two counterparts and one counterpart will be delivered to the Contractor.

CONTRACTOR

By: _____

Its: _____

ATTEST

COLORADO RIVER COMMISSION OF NEVADA

By: _____

Puoy K. Premsrirut
Chairwoman

ATTEST

Eric Witkoski
Executive Director

Approved as to Form:

Michelle Briggs
Special Counsel for Attorney General

**SECTION 500
PERFORMANCE BOND**

CONTRACTOR (Name and Address):

Virginia Transformer Corp.
220 Glade View Drive
Roanoke, VA 24012

SURETY (Name and Principal Place of Business):

CRCNV (Name and Address):

Colorado River Commission of Nevada
555 E. Washington Avenue
Suite 3100
Las Vegas, Nevada 89101-1065

CONTRACT

Date:

Amount:

\$

Description: Contract No. CRCMH-02,
Monthill Substation

Location: Clark County, Nevada

BOND

Date (Not earlier than Contract Date):

Modifications to this Bond Form:

CONTRACTOR AS PRINCIPAL (Seal below)

Company:

Signature: _____

Name and Title: _____

Attest: _____

Name and Title: _____

SURETY (Seal below)

Company:

Signature: _____

Name and Title: _____

Attest: _____

Name and Title: _____

1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the CRCNV for the performance of the Contract, which is incorporated herein by reference.
2. If the Contractor performs the Contract, the Surety and the Contractor have no obligation under this Bond, except to participate in conferences as provided in paragraph 3.1.
3. If there is no CRCNV Default, the Surety's obligation under this Bond arises after:
 - 3.1 The CRCNV has notified the Contractor and the Surety at its address described in subsection 9 below, that the CRCNV is considering declaring the Contractor in default and has requested and attempted to arrange a conference with the Contractor and Surety, to be held not later than fifteen (15) days after receipt of such notice, to discuss methods of performing the Contract. If the CRCNV, the Contractor, and the Surety agree, the Contractor must be allowed a reasonable time to perform the Contract, but such an agreement does not waive the CRCNV's right, if any, subsequently to declare a Contractor Default; and
 - 3.2 The CRCNV has declared a Contractor Default and formally terminated the Contractor's right to complete the Contract. Such Contractor Default must not be declared earlier than twenty (20) days after the Contractor and the Surety have received notice as provided in paragraph 3.1; and
 - 3.3 The CRCNV has agreed to pay the balance of the Contract Price to the Surety in accordance with the terms of the Contract or to a contractor selected to perform the Contract in accordance with the terms of the Contract with the CRCNV.
4. When the CRCNV has satisfied the conditions of subsection 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 4.1 Arrange for the Contractor, with the consent of the CRCNV, to perform and complete the Contract; or
 - 4.2 Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or
 - 4.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the CRCNV for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by the CRCNV and the contractor selected with the CRCNV's concurrence, to be secured with a performance bond executed by a qualified Surety equivalent to the bond issued on the Contract, and paid to the CRCNV the amount of damages as described in subsection 6 of the Balance of the Contract Price incurred by the CRCNV resulting from the Contractor's Default; or

- 4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:
- 4.4.1 After investigation, determine the amount for which it may be liable to the CRCNV and, as soon as practicable after the amount is determined, tender payment therefore to the CRCNV; or
- 4.4.2 Deny liability in whole or in part and notify the CRCNV citing the reasons therefore. If the Surety does not proceed as provided in subsection 4, with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen (15) days after receipt of an additional written notice from the CRCNV to the Surety demanding that the Surety perform its obligations under this Bond, and the CRCNV is entitled to enforce any remedy available to the CRCNV. If the Surety proceeds as provided in paragraph 4.4, and the CRCNV returns the payment tendered or the Surety has denied liability, in whole or in part, without further notice the CRCNV is entitled to enforce any remedy available to the CRCNV.
5. After the CRCNV has terminated the Contractor's right to complete the Contract, and if the Surety elects to act under paragraphs 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the CRCNV must not be greater than those of the Contractor under the Contract and the responsibilities of the CRCNV to the Surety must not be greater than those of the CRCNV under the Contract. To the limit of the amount of this Bond, but subject to commitment by the CRCNV of the Balance of the Contract Price to the mitigation of costs and damages on the Contract, the Surety is obligated without duplication for:
- 5.1 The responsibilities of the Contractor for correction of defective work and completion of the Contract;
- 5.2 Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the action or failure to act of the Surety under subsection 4; and
- 5.3 Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or nonperformance of the Contractor.
6. The Surety is not liable to the CRCNV or others for obligations of the Contractor that are unrelated to the Contract, and the Balance of the Contract Price must not be reduced or set off on account of any such unrelated obligations. No right of action accrues on this Bond to any person or entity other than the CRCNV or its heirs, executors, administrators, or successors.
7. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.

8. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work is performed under the Contract and must be initiated within two years after the Contractor's Default, or within two years after the Contractor ceased working, or within two years after the Surety refuses or fails to perform its obligation under this Bond, whichever occurs first. If the provisions of this subsection are void or prohibited by law, the minimum of limitation available to sureties as a defense in the jurisdiction of the court is applicable.
9. Notice to the Surety, the CRCNV, or the Contractor must be mailed or delivered to the address shown on the signature page of this performance bond.
10. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the work is performed any provision of this bond conflicting with such statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
11. Definitions.
 - 11.1 "Balance of the Contract Price" means the total amount payable by the CRCNV to the Contractor under the Contract after all proper adjustments have been made, including allowances to the Contractor of any amounts received or to be received by the CRCNV in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Contract.
 - 11.2 "Contract" means the agreement between the CRCNV and the Contractor identified on the signature page, including all the Contract documents and changes thereto.
 - 11.3 "Contractor Default" means a failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.
 - 11.4 "CRCNV Default" means a failure of the CRCNV, which has neither been remedied nor waived, to pay the Contractor or to perform in complete or comply with the other terms of this Contract.

SECTION 600 SUMMARY OF THE WORK

1. Project Description.

1.1 Monthill Substation is a 69 kV facility that will be constructed in Southern Nevada.

2. Work Under This Contract.

2.1 This Contract is to engineer, manufacture, assemble, test, ship, and provide ancillary services relating to the procurement of Liquid-Filled Main Power Transformer (MPT) as specified herein.

2.2 It is anticipated that no one single supplier can provide a bid for all items, thus the Contract may be awarded in parts.

3. Delivery.

3.1 Bid Item 401 shall be shipped F.O.B. by the Contractor to Monthill Substation 4095 E. Flamingo, Las Vegas, NV 89121.

3.2 The Contractor shall notify the following designated point of contact at least one (1) week in advance of any delivery date, and shall not make any shipments without prior approval.

Mr. Robert Reese
Colorado River Commission of Nevada
Telephone: (702) 856-3611
Cell Phone: (702) 682-6972
Email: breesee@crc.nv.gov

3.3 No delivery will be approved until proper Submittals pertaining to storage and installation have been received and accepted.

3.4 Any items shipped without prior notification and approval may be returned to the point of origin, or unloaded and stored at a place and in a manner determined by the CRCNV, and the Contractor will be charged with any additional expense resulting therefrom.

3.5 Contractor reserves the right to deliver up to three months early with advanced notice.

4. Work by the CRCNV.

4.1 The CRCNV or its construction contractor will receive, unload, move, store, place, assemble, and install the Equipment furnished under this Contract No. CRCMH-02.

4.2 The CRCNV will test Equipment supplied under this Contract No. CRCMH-02, and shall perform energization and startup of the new facilities.

5. Work Schedule.

5.1 In order to satisfy the engineering information requirements for design and to allow the construction contractor sufficient time for installation, this Contract shall adhere to the following Performance Milestones.

5.1.1 Work Schedule:

5.1.1.1 Compliance Submittals within forty-five (45) days after notice to proceed (see sections 1000 and 1100 for requirements).

5.1.1.2 Maintenance and installation instructions within sixty (60) days after notice to proceed.

5.1.1.3 Delivery beginning on or after January 06, 2026, and ending on or before February 27, 2026.

5.2 The anticipated Final Acceptance Date for all Equipment is March 31, 2026.

6. Measurement and Payment.

All Equipment indicated in the Contract Documents must be included in the unit prices for the applicable Item(s). Equipment will be paid on a per unit basis. Change orders will be paid as stated in the change order.

7. Copies Of Documents.

7.1 After execution of the Contract, the Contractor will be provided at no cost one (1) set of fully executed Contract Documents.

7.2 Additional copies of above documents will be supplied upon request at the cost of printing and delivery.

SECTION 700 SUBMITTALS

1. General Information.

1.1 Submittals to be provided by the Contractor for the Equipment to be furnished are identified in this section 700 of the Contract Documents.

1.2 Submittal Types:

1.2.1 Compliance Submittals are shop drawings, product data, and samples that are prepared by the Contractor and submitted by the Contractor to the CRCNV as a basis for approval. The Contractor must not proceed with the Work affected by or related to a Compliance Submittal until the CRCNV has approved such submittal.

1.2.1.1 Shop drawings include custom-prepared data of all types including drawings, diagrams, performance curves, material schedules, templates, installation and maintenance instructions, and similar information applicable to the Equipment.

1.2.1.2 Product data includes standard printed information on materials, products and systems; not custom-prepared for this Project, other than the designation of selections from available choices.

1.2.1.3 Samples include both fabricated and unfabricated physical examples of materials, and products; both as complete units and as smaller portions of units of testing and analysis.

1.2.2 Procedure Submittals are narrative descriptions and/or drawings provided by the Contractor describing the methods, techniques, Equipment and processes to be used to complete all or some portion of the work. The CRCNV must review Procedure Submittals, but such review does not relieve the Contractor of its responsibility to determine its own means and methods for the Work.

1.3 Submittals must be of the quality for legibility and reproduction purposes. Every line, character and letter must be clearly legible. Drawings such as reproducible's must be useable for further reproduction to yield legible hard copies.

1.4 All words and dimensional units must be in the English language.

1.5 Submittals must be complete with respect to dimensions, design criteria, materials of construction, and other information specified to enable the CRCNV to review the information effectively.

1.6 The CRCNV may copy and use for internal operations and staff training purposes any and all submittals required by this Contract and approved for final distribution, whether or not such documents are copyrighted, at no additional cost to the CRCNV. If permission to copy any such submittal for the purposes stated is unreasonably withheld from the CRCNV by the Contractor or any Subcontractor, manufacturer, or Supplier, the Contractor shall provide fifty (50) copies plus the number of copies required in the following subsection to be submitted for approval.

2. Compliance Submittals.

2.1 When Compliance Submittals are required for a Bid Item they shall include but not be limited to, the following:

2.1.1 Manufacturer's specifications.

2.1.2 Catalog cut sheets, or parts thereof, of manufactured Equipment.

2.1.3 Shop fabrication and erection drawings.

2.1.4 General outline drawings of Equipment showing overall dimensions, location of major components, weights, and center of gravity, and location of required building openings and floor plates.

2.1.5 Detailed Equipment installation drawings, showing foundation details, anchor bolt sizes and locations, base plate sizes, location of CRCNV's connections, and all clearances required for erection, operation, and disassembly for maintenance.

2.1.6 Schematic diagrams for electrical items, showing external connections, terminal block numbers, internal wiring diagrams, and one-line diagrams.

2.1.7 Bills of material and spare parts lists.

2.1.8 Instruction books and operating manuals.

2.1.9 Material lists or schedules.

2.1.10 Performance tests on equipment by manufacturers.

2.1.11 Samples and color charts.

2.1.12 All drawings, catalogs, or parts thereof, manufacturer's specifications and data, samples, instructions, and other information specified or necessary:

2.1.12.1 For CRCNV to determine that the Equipment conforms to the design concept and comply with the intent of the Contract Documents.

2.1.12.2 For the proper erection, installation, operation and maintenance of the Equipment which CRCNV will review for general content but not for substance.

2.1.12.3 For CRCNV to determine what supports, anchorages, structural details, connections, and services are required for the Equipment, and the effects on contiguous or related structures, equipment, and materials.

2.2 At the time of each Compliance Submittal submission, call to the attention of CRCNV in the letter of transmittal any deviations from the requirements of the Contract Documents.

2.3 Make all modifications noted or indicated by CRCNV and return revised prints, copies, or samples until accepted. Direct specific attention in writing on revised Submittals, to changes other than the modifications called for by CRCNV on previous Submittals. After Submittals have been accepted, submit copies thereof for final distribution. Prints of accepted drawings transmitted for final distribution will not be further reviewed and are not to be revised. If errors are discovered during manufacture or fabrication, correct the Submittal and resubmit for review.

2.4 Equipment requiring a Compliance Submittal shall not be shipped until the Submittal has been stamped "Submittal Accepted" by CRCNV.

2.5 Except as otherwise specified, transmit all Compliance Submittals in the quantity as follows:

2.5.1 Initial Submittal – Four (4) copies to the CRCNV. One (1) copy will be returned to the Contractor.

2.5.2 Resubmittals – Four (4) copies to CRCNV. One (1) copy will be returned to the Contractor.

2.5.3 Samples must be of sufficient size and quantity to clearly illustrate the functional characteristics of the product and its full range of color, texture, and pattern.

2.6 The CRCNV will review and return Compliance Submittals with appropriate notations. The CRCNV's review action stamp will appear on all Compliance Submittals of the Contractor when returned by the CRCNV. The CRCNV's acceptance of Compliance Submittals will not relieve the Contractor from his responsibility as stated in the Contract.

2.7 Compliance Submittal Action Stamp. CRCNV's review action stamp, will appear on all Compliance Submittals of Contractor when returned by CRCNV. Review status designations listed on CRCNV's action stamp are defined as follows:

2.7.1 SUBMITTAL ACCEPTED Signifies Equipment represented by the submittal conforms to the design concept and complies with the intent of the Contract Documents. Copies of the Submittal are to be transmitted to CRCNV for final distribution.

2.7.2 SUBMITTAL ACCEPTABLE AS NOTED (REVISE & RESUBMIT) Signifies Equipment represented by the Submittal as noted conforms to the design concept and complies with the intent of the Contract Documents. Contractor is to proceed with fabrication or procurement of the items and with related work in accordance with CRCNV's notations and is to submit a revised Submittal responsive to notations marked on the returned Submittal or written in the letter of transmittal.

2.7.3 SUBMITTAL NOT ACCEPTED AS NOTED (REVISE & RESUBMIT) Signifies Equipment represented by the Submittal appears to conform with the design concept and comply with the intent of the Contract Documents but information is either insufficient in detail or contains discrepancies which prevent CRCNV from completing his review. Contractor is to resubmit revised information responsive to CRCNV's annotations on the returned Submittal or written in the letter of transmittal. Fabrication or procurement of items represented by the Submittal and related Work is not to proceed until the Submittal is acceptable.

2.7.4 SUBMITTAL NOT ACCEPTABLE (SUBMIT ANEW) Signifies Equipment represented by the Submittal does not conform to the design concept or comply with the intent of the Contract Documents and is disapproved. Contractor is to submit Compliance Submittals responsive to the Contract Documents.

3. Procedure Submittals.

3.1 When required, transmit all Procedure Submittals in the quantity as follows:

3.2.1 Initial Submittal: Four (4) copies to the CRCNV. One (1) copy will be returned to the Contractor.

3.2.2 Resubmittals: Four (4) copies to the CRCNV. One (1) copy will be returned to the Contractor.

SECTION 800 EQUIPMENT

1. **Quality Assurance.**

1.1 Conform to applicable specifications, codes, standards, and requirements of regulatory agencies.

1.2 Provide equipment or material that comply with the requirements of the Contract Documents, undamaged, and, unless otherwise indicated, new and unused at the time of installation. Provide equipment or material that are complete with all accessories, trim, finish, safety guards, and other devices and details needed for a complete installation and for the intended use and effect.

1.2.1 Where they are available and if they comply with the Contract Documents, provide Equipment of types that have been produced and used successfully in similar situations on other projects.

1.2.2 Where, because of the nature of its application, CRCNV is likely to need replacement parts or additional amounts of the Equipment at a later date, either for maintenance and repair or replacement, provide standard products for which the manufacturer has published assurances that the Equipment and its parts are likely to be available to the CRCNV at a later date.

1.3 Comply with size, make, type, and quality specified, or as specifically approved in writing by the CRCNV.

1.4 If the Equipment is manufactured or fabricated:

1.4.1 Design, fabricate and assemble in accordance with the best engineering and shop practices.

1.4.2 Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.

1.4.3 Two or more items of the same kind and by the same manufacturer must be identical.

1.4.4 Equipment must be suitable for the service conditions intended.

1.4.5 Capacities, sizes and dimensions shown or specified must be adhered to unless variations are specifically approved in writing.

2. Transportation and Handling.

2.1 The Contractor shall prepare Equipment for shipment in a manner to facilitate unloading and handling, and to protect against damage or unnecessary exposure in transit and storage. Provisions for protection must include the following:

2.1.1 Crates or other suitable packaging materials.

2.1.2 Covers and other means to prevent corrosion, moisture damage, mechanical injury, and accumulation of dirt in motors, electrical equipment, and machinery.

2.1.3 Suitable rust-preventative compound on exposed machined surfaces and unpainted iron and steel.

2.1.4 Grease packing or oil lubrication in all bearings and similar items.

2.1.5 Moisture absorbing media in cabinets and electrical enclosures.

2.2 Tag or mark each item of Equipment with the Contract Number and Bid Item number as identified in the Contract Documents or on Compliance Submittals. Include complete packing lists and bills of material with each shipment. Each piece of every item need not be marked separately provided that all pieces of each item are packed or bundled together and the packages or bundles are properly tagged or marked.

2.3 The Contractor shall mail bills of material to the CRCNV prior to delivery of each shipment and shall include bills of material with each shipment.

2.4 Furnish the CRCNV with all requirements for unloading and handling of Equipment upon delivery sufficiently in advance to allow the CRCNV sufficient preparation time. Include type and capacity of unloading equipment required as applicable.

2.5 Deliver all Equipment by truck.

2.6 Deliver Equipment in an undamaged condition, in original containers or packaging, with identifying labels intact and legible.

2.7 Mark partial deliveries of component parts to identify the Equipment, to permit easy accumulation of parts, and to facilitate assembly.

2.8 The CRCNV shall receive, check, unload, inventory, accept and store all Equipment delivered to the specified location in accordance with proper notice.

3. Storage and Protection.

3.1 Furnish the CRCNV with all requirements for storage and protection of all Equipment sufficiently in advance of delivery to allow sufficient preparation time.

3.2 The CRCNV will furnish all facilities needed for storage of Equipment at the project site.

3.3 After delivery and acceptance, the CRCNV will assume responsibility for and protect all Equipment in accordance with the Contractor's recommendations.

SECTION 900 MANUFACTURER'S FIELD SERVICE

1. Services Required.

1.1 The requirement to provide a manufacturer's representative on-site during installation and startup of the Equipment is identified in those sections of this Contract providing the specifications for the Equipment. If the requirement to provide a manufacturer's representative is not identified, such service is optional by the Contractor.

1.2 If a manufacturer's representative is specified and required for the Equipment furnished:

1.2.1 Furnish the services of qualified, competent field representative and necessary assistants for the Equipment. The field representative must be certified by the manufacturer of the specified product or system as having the necessary knowledge and experience to perform the required functions.

1.2.2 The manufacturer's field personnel shall perform the following:

1.2.2.1 Observe the erection, installation, start-up, and testing of Equipment.

1.2.2.2 Instruct and guide the CRCNV in proper procedures.

1.2.2.3 Supervise the initial start-up, operational check, and any required adjustments of the Equipment.

1.2.2.4 Instruct CRCNV's designated personnel in proper operation and maintenance of all Equipment.

1.2.3 The field representative shall report to the site at times designated by CRCNV.

1.2.4 The field representative must be acceptable to the CRCNV and must not be changed during the installation operations without the CRCNV's consent unless the field representative proves unsatisfactory to the Contractor.

SECTION 1000
33 73 13.01
Liquid-Filled Main Power Transformer (MPT)

SECTION 1100
Drawing List

<u>Drawing Number</u>	<u>Description</u>
ESX11	Electrical One Line Relaying Diagram
ESX12	Electrical One Line Relaying Diagram
ESX21	Electrical Three Line Diagram Metering
ESX22	Electrical Three Line Diagram HVCB 52TA
ESX23	Electrical Three Line Diagram HVCB 52TB
ESX24	Electrical Three Line Diagram Transformer TA
ESX25	Electrical Three Line Diagram Transformer TB
ESX26	Electrical Three Line Diagram MVCB 52MA, PT-MA & SSVT-TA
ESX27	Electrical Three Line Diagram MVCB 52MA, PT-MA & SSVT-TB

**COLORADO RIVER COMMISSION OF NEVADA
AGENDA ITEM I
FOR MEETING OF MARCH 12, 2024**

SUBJECT: *For Possible Action:* Consideration of and possible action to approve contract CRCMH-04 between successful bidder, Peak Substation, LLC, and the Colorado River Commission of Nevada, based on bid solicitation 69CRC-S2538 for Monthill Substation Project for three Gas High-Voltage Circuit Breakers for a total of \$450,000.

RELATED TO AGENDA ITEM:

None.

RECOMMENDATION OR RECOMMENDED MOTION: Staff recommends the Commission approve the contract CRCMH-04 with Peak Substation, LLC and authorize the Executive Director to sign the contract on behalf of the Commission.

FISCAL IMPACT:

None.

STAFF COMMENTS AND BACKGROUND:

A. Background on Operations

Pursuant to NRS 538.161, the Colorado River Commission of Nevada (Commission) may execute contracts, for the planning, and development of any facilities for the generation or transmission of electricity for the greatest possible benefit to the state. Additionally, the Commission has a Facilities Development Agreement with the Southern Nevada Water Authority (SNWA) for the purpose of “creating a cooperative relationship to jointly develop, operate, maintain, use and replace a Power System” for SNWA and its members. SNWA has requested the Commission assist in the design, procure, and construct a new substation at Monthill. The proposed purchase contract is put forward for approval as part of work the Commission will perform for SNWA for the Monthill project.

B. Background of Bid/Procurement

On October 10, 2023, bid solicitation 69CRC-S2538 was posted in NVEPro. Bid solicitations were sent to 29 vendors registered with NVEPro, and additional independent vendors directly via email. The deadline for bid proposals closed at 2:00 p.m. on November 13, 2023. One quote was received through NVEPro from a qualified bidder. The evaluation team had no technical exceptions and recommended approval.

This Contract is to design, manufacture, assemble, test, ship, and provide all other ancillary services relating to the procurement of three Gas High-Voltage Circuit Breaker at a cost of \$150,000 for each and a total of \$450,000. The Equipment will be purchased by the Commission pursuant to NRS 538.161 (2) and the Commission’s established Procedures for Purchasing Electrical Materials for the Power Delivery Project and State Administrative Manual (SAM) 0326.

C. Staff’s recommendation

Staff recommends the Commission approve the contract with Peak Substation Services and authorize the Executive Director to sign it on behalf of the Commission.



**Colorado River Commission of Nevada
555 East Washington Avenue, Suite 3100
Las Vegas, Nevada 89101-1065**

Monthill Substation

**Contract No. CRCMH-04
Gas High-Voltage Circuit Breaker (BRKR)**

Bid Documents and Specifications

For Award:
March 12, 2024

MONTHILL SUBSTATION

Contract No. CRCMH-04 Gas High-Voltage Circuit Breaker (BRKR)

Bid Documents and Specifications

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SECTION 100 REQUEST FOR BIDS

1. Notice.

The Colorado River Commission of Nevada (CRCNV) hereby requests that you submit a bid to supply all or a portion of the material described in the following documents, under the terms of the Contract included herein.

Vendors shall submit their proposals by using Create Quote through the State electronic procurement website, <https://NevadaEPro.com>, in accordance with the instructions provided on the NevadaEPro website.

Refer to Instructions for Vendors Responding to a Bid in the Important Links section on the front page of NevadaEPro for instructions on how to submit a Quote using NevadaEPro

The Material shall be purchased by the CRCNV pursuant to NRS 538.161(2) and its established procedures for Purchasing Electrical Materials for the Power Delivery Project. The contract shall be awarded and administered in accordance with the laws of the State of Nevada.

All Bids must be in accordance with this Request for Bids, the Bid Form and the Agreement published herein, and the documents referenced or included herein. Complete sets of Bid Documents shall be used in preparing Bids; CRCNV assumes no responsibility for error or misinterpretations resulting from the use of incomplete sets of Bid Documents.

Additional copies of documents may be requested by electronic mail to crcadmins@crc.nv.gov.

At said place and time, and promptly thereafter, all bids that have been duly received will be opened and read aloud. The award of the Contract will be made at a later publicly-noticed meeting of the CRCNV.

2. Equipment.

The Equipment to be purchased under the Contract is generally described as follows:

69 kV dead-tank circuit breaker, with three group-operated interrupting contacts contained in separate tanks, internally insulated with SF6 gas, constituting a pole or phase of the three-phase, three-pole, breaker. Breaker poles are to be mounted on a common frame, with polymer housed bushings, and a common stored energy operating drive mechanism.. The Material will be received and installed by an installation contractor under a separate contract.

Technical Specifications are included as a part of this Contract. Items referred to as "Division 1" or "Div 1" documents within the Technical Specifications shall be defined as Sections 100-1100 of this Contract.

3. Questions Regarding Request for Bid.

Questions concerning this Request for Bid should use the Bid Q&A feature in NevadaEPro, <https://NevadaEPro.com>.

4. Pricing and Security.

Bids will be received on a unit price basis as described in the Bid Form. Bid Security will not be required. The selected Bidder(s) is required to post a performance bond in an amount equal to the Contract Price.

5. Multiple Awards.

CRCNV may award this contract in part to multiple Bidders.

6. Bid Acceptance.

All bids remain subject to acceptance by the CRCNV for sixty (60) days.

If the CRCNV elects to accept Bidder's Bid, CRCNV shall give the Bidder notice thereof within the number of days set forth in the Bid Form.

Date: October 9, 2023

By:



Robert D. Reese

Assistant Director for Engineering and
Operations

BID RESPONSE DEADLINE:

November 13, 2023

SECTION 200 BID INSTRUCTIONS

1. Bid Form.

The Bid Form is found in section 300. The Bid Form must be completed in ink. The names of all persons signing must be legibly printed below their signatures.

All blanks in the Bid Form must be filled. If a Bidder elects not to submit a bid for a specific item listed in the Bid Form, indicate such intent with the words "No Bid" in lieu of a proposed price. The bid must contain an acknowledgment of receipt of all Addenda, the numbers and dates of which must be filled in on the Bid Form.

No alteration in bids, or in the printed forms therefore, by erasures, interpolations, or otherwise will be acceptable.

2. Bid Security.

Bid security is not required.

3. Bids as Public Records.

The CRCNV is a public agency as defined by state law. As such, it is subject to the Nevada Public Records Law (Chap. 239 of *Nevada Revised Statutes* [NRS]). All of the CRCNV's records are public records (unless otherwise declared by law to be confidential), which are subject to inspection and copying by any person. Bidders are advised that after a bid is received by the CRCNV, its contents will become a public record and nothing contained in the proposal will be deemed to be confidential.

4. Submission of Bids.

Proposals shall be received via <https://NevadaEPro.com> no later than the date and time specified on the General Tab of the Bid Solicitation in NevadaEPro. Proposals that are not submitted by bid opening time and date shall not be accepted. Vendors may submit their proposal any time prior to the deadline stated in NevadaEPro. In the event that dates, and times specified in this document and dates times specified in NevadaEPro conflict, the dates and time in NevadaEPro shall take precedence.

5. Evaluation of Bids.

The Equipment will be purchased by the CRCNV pursuant to NRS 538.161 (2) and the CRCNV's established Procedures for Purchasing Electrical Materials for the Power Delivery Project. The contract will be awarded and administered in accordance with the laws of the State of Nevada.

6. Rejection of Bids.

The CRCNV reserves the right to reject any or all bids, including without limitation the rights to reject any or all nonconforming, non-responsive, unbalanced, or conditional bids, and to reject the bid of any Bidder if the CRCNV believes that it would not be in the best interest of the CRCNV to make an award to that Bidder. The CRCNV also reserves the right to waive formalities.

7. Signing of Contract.

The CRCNV will issue three (3) copies of the Contract Documents to the successful Bidder. Within the number of days set forth in the Bid Form, the successful Bidder must sign all copies of the Contract, leaving the dates blank, must insert the required Bonds and power of attorney in the appropriate places, and deliver all copies to the CRCNV. The CRCNV will, thereafter, execute all copies of the Contract and return one original copy to the Contractor.

8. Performance Bond.

The successful Bidder will be required to furnish a Procurement Performance Bond as security for the faithful performance of the Contract, which must be at least as protective as those bonds otherwise required pursuant to NRS 339.025.

**SECTION 300
BID FORM**

1. Project Identification:

Monthill Substation
Contract No. CRCMH-04
Gas High-Voltage Circuit Breaker (BRKR)

2. This Bid is Submitted By:

Name: PEARL SUBSTATION SERVICES LLC
Address: 801 12TH AVE. NORTH
ORLANDO, FL 32803

3. This Bid is Submitted To:

Colorado River Commission of Nevada
555 E. Washington Avenue, Suite 3100
Las Vegas, Nevada 89101-1065

4. Bid Terms and Conditions.

4.1 The undersigned Bidder proposes and agrees, if this bid is accepted, to enter into a Contract with the CRCNV in the form included in section 400 of this Request for Bid and to perform and furnish all Work as specified or indicated in the Contract Documents within the specified time and for the amount indicated in the bid and in accordance with the other terms and conditions incorporated by the Contract.

4.2 Bidder accepts all of the terms and conditions of the Bid Instructions. This bid remains subject to acceptance for sixty (60) days after the day the bids are due. Bidder will sign and submit the documents required by the Contract Documents within fifteen (15) days after the date of CRCNV's Notice of Award.

4.3 In submitting this bid, Bidder represents that:

4.3.1 Bidder has examined copies of the Request for Bids and all the documents contained therein, and copies of the following Addenda (receipt of which is hereby acknowledged):

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

- 4.3.2. Bidder has become familiar with and satisfied itself as to the general, local, and site conditions that may affect cost, progress, performance, and furnishing of the Equipment.
- 4.3.3 Bidder is familiar with and has satisfied itself as to all federal, state, and local laws and regulations that may affect the cost, progress, performance, and furnishing of the Equipment.
- 4.3.4 Bidder is aware of the general nature of the work to be performed by the CRCNV or others, including the off-loading or installation of Equipment for which this Bid is submitted.
- 4.3.5 Bidder has given CRCNV written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Contract Documents and the written resolution thereof by CRCNV is acceptable to Bidder. The Contract Documents are sufficient to indicate and convey understanding to Bidder of all its terms and conditions for performing and furnishing the Equipment for which this Bid is submitted.
- 4.3.6 This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid. Bidder has not solicited or induced any person, firm, or corporation to refrain from bidding. Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over CRCNV.

5. Bid Price.

Bidder will design, manufacture, assemble, test, ship and provide ancillary services relating to the Equipment in accordance with the Contract Documents and in the amounts stated for unit prices. Conditions may arise which will necessitate changes in the quantities identified herein. The prices quoted per unit must be firm and not dependent on the final quantity of items. The Bidder agrees that increases or decreases in the estimated quantities will not justify unit price revisions.

Unit prices must be stated as firm. Escalation or adjustment factors will not be accepted by the CRCNV.

Unit prices must include labor, equipment, tools, vehicles, materials, supplies, permits, markups, supervision and all related costs.

Bid Item	Specification Section	Description	Unit	Unit Price	Qty	Extended Price	Proposed Manufacturer	Delivery - Weeks After N-T-P*
401	1000	Power circuit breaker, 69 kV (nominal), 1200 A, 31.5 kAIC as described in Specification section 33 75 19. F.O.B. Monthill Substation 4095 E. Flamingo, Las Vegas, NV 89121.	Each	150,000.-	3	\$450,000.-	HITACHI	104
CONTRACT PRICE							\$450,000.-	

*Notice-to-Proceed.

6. Delivery Schedule.

Bidder agrees that the Equipment will be delivered on or before the above stated delivery dates, which dates comply with the times specified in the Contract Documents.

SIGNATURE OF BIDDER

By: PEAW SUBSTATION SERVICES
(Corporation Name)

By: 
(Signature of Authorized Person)

John Arthur
(Printed Name and Title)

Business Address:

801 1st AVE NORTH
BIRMINGHAM, AL 35203

Phone

Fax No.

No.

205-324-0955

205-324-0955

Email:

john@peawsubstation.com

This Bid is Submitted On: November 13, 2023 12:17:51

SECTION 320
BID ADDENDUM

(Bid Addenda, if any, to be included here when conformed Contract issued for signature).

SECTION 340
BID CLARIFICATIONS AND SUBSTITUTIONS

(Bidder Clarifications and Substitutions proposed by the Bidder and accepted by the CRCNV, if any, to be included here when conformed Contract issued for signature).

**SECTION 400
CONTRACT NO. CRCMH-04
MONTHILL SUBSTATION**

THIS CONTRACT is made and entered into by and between the COLORADO RIVER COMMISSION OF NEVADA, hereinafter referred to as the “CRCNV,” and, PEAK SUBSTATION, LLC., hereinafter referred to as the “Contractor.” The CRCNV and the Contractor are sometimes individually referred to as “Party” and collectively referred to as the “Parties.”

IN CONSIDERATION of the mutual covenants contained herein, the Parties hereto agree as follows:

1. Agreement to Provide Equipment

CRCNV agrees to purchase and Contractor agrees to design, manufacture, assemble, test, ship, and provide all other ancillary services related to the delivery of the following electrical equipment and materials pursuant to the terms and conditions established in these Contract Documents:

Bid Item	Description
401	Power circuit breaker, 69 kV (nominal), 1200 A, 31.5 kAIC as described in Specification section 33 75 19. F.O.B. Monthill Substation 4095 E. Flamingo, Las Vegas, NV 89121.

2. Definitions

2.1 “Acceptance” or “Final Acceptance” means the formal action by the CRCNV accepting the Equipment, or any portion thereof, as complete and satisfactory, subject to Contractor’s warranties.

2.2 “Acceptance Testing” means any testing required by the CRCNV prior to, and as a prerequisite of, CRCNV’s Acceptance.

2.3 “Bid Form” means the approved form on which the CRCNV requested that the Contractor prepare and submit a Bid to the CRCNV as an offer to provide the Equipment, which has now been accepted by the CRCNV pursuant to this Contract and is therefore incorporated herein as a part of this Contract.

2.4 “Change Order” means the CRCNV’s signed written order to the Contractor authorizing any addition or deletion of, or revision to, the Equipment.

2.5 “Contract Documents” means the documents contained in this conformed and bound volume, including section 100, Request for Bids; section 200, Bid Instructions; section 300, Bid Form; section 320, Bid Addendum; section 340, Bid Clarification; section 350, Disclosure of Ownership/Principles; section 400, Contract No. CRCMH-04, Gas High-Voltage Circuit Breaker (BRKR); section 500, Performance Bond; and the Specifications contained in section 600 through section 1100. The term includes exhibits

to this Contract attached hereto, if any, Contractor's performance and payment bonds, any notice of award or notice to proceed issued by the CRCNV, Contractor's Proposal, and any documentation submitted by the Contractor and accepted by the CRCNV prior to the execution of this Contract, and all Change Orders amending, modifying, or supplementing this Contract which may be delivered or issued after the effective date of this Contract and are not attached hereto. Submittals are not Contract Documents.

2.6 "Contract Price" means the total compensation payable to the Contractor for the Contractor's performance of this Contract, as proposed by Contractor in Contractor's Bid, and as may be amended by any Change Order pursuant to section 8.

2.7 "Executive Director" means the executive director of the Colorado River Commission of Nevada.

2.8 "Equipment" means the electrical equipment and materials, or any portion thereof, described in the Specifications.

2.9 "Notice to Proceed" means the written notice given by the CRCNV to the Contractor fixing the date on which the Contractor shall start to perform the Contractor's obligations under the Contract Documents.

2.10 "Performance Milestones" means those dates by which particular portions of the Equipment or work related thereto must be complete, as set forth in section 600.

2.11 "Project" means the Monthill Substation.

2.12 "Request for Bids" means the CRCNV's request that the Contractor and others make a Bid to contract with the CRCNV.

2.13 "Specifications" means the technical descriptions of the Equipment and services to be furnished by the Contractor, which are included as part of the CRCNV's Request for Bids, Contractor's Bid, and all modifying addenda and Change Orders thereto.

2.14 "Submittals" includes shop drawings, catalog cuts, samples, operating and maintenance instructions, progress payments, requests, and other documents and items specified to be delivered to the CRCNV.

2.15 "Work" means everything required or reasonably inferred to be furnished and done by the Contractor pursuant to the Contract Documents.

3. CRCNV's Representative

3.1 The CRCNV's Representative shall be Mr. Robert Reese, Assistant Director of Engineering and Operations. The CRCNV's Representative is generally authorized to act fully on behalf of the CRCNV. The CRCNV's Representative has complete authority to transmit instructions, receive information, interpret and define the CRCNV's policies and decisions with respect to the materials, equipment, elements, and systems required under these Contract Documents.

3.2 The address of the CRCNV's Representative is:

Colorado River Commission of Nevada
555 E. Washington Avenue, Suite 3100
Las Vegas, NV 89101-1065

3.3 The CRCNV's Representative may designate any other employee of the CRCNV to perform his responsibilities under this Contract.

4. Contractor's Representative

Within ten (10) days following execution of this Contract by the Contractor, the Contractor must identify in writing the Contractor's Representative. The Contractor's Representative is authorized to act fully on behalf of the Contractor. The Contractor may change or designate another individual as its Contractor's Representative by written notice to the CRCNV.

5. Contract Price

The CRCNV shall pay the Contract Price to the Contractor in current U.S. funds in the amount described in the Contractor's Bid and in accordance with the payment procedures provided in section 7, unless changed in accordance with section 8, for the total cost of the Equipment and for the performance of all the Work described in the Contract Document.

6. Commencement and Completion of Performance

Upon receipt of a written notice to proceed from the CRCNV's Representative, the Contractor shall proceed with the performance of this Contract, pursuing the Work diligently, to the end that the Equipment be manufactured and delivered in accordance with the Performance Milestones.

7. Payment Procedures

7.1 **Progress Payments.** The Contractor shall submit an application for payment to the CRCNV for the amount of ninety percent (90%) of the Equipment's value, upon shipment of the Equipment.

7.2 Procedure for Progress Payments. CRCNV shall pay Contractor within thirty (30) days after receipt of a correct, itemized invoice identifying the Equipment shipped.

7.3 Application for Final Payment. The Contractor shall submit an application for final payment upon completion and Final Acceptance by the CRCNV of the Contractor's delivery of all Equipment. (See section 600 for date of anticipated Final Acceptance.) The Contractor's application for final payment must be accompanied by the consent of the Contractor's sureties that the CRCNV may release any payment retainage, together with a certified copy of any surety's agent's authority to act for the surety.

7.4 Procedure for Final Payment. The CRCNV shall pay the Contractor within thirty (30) days of receipt of a correct, itemized invoice for the final payment. The CRCNV's payment of the final payment shall constitute a full waiver of all claims by the CRCNV against the Contractor, other than those arising from unsettled liens, from defective work appearing after final inspection, or from the Contractor's failure to comply with the requirements of this Contract. The Contractor's receipt of final payment shall constitute the Contractor's waiver of all claims by the Contractor against the CRCNV, other than those previously made in writing and remaining unresolved at the time of final payment.

8. Changes in the Work, Contract Price or Performance Milestones

8.1 Without invalidating this Contract, the CRCNV may, at any time or from time to time, issue a Change Order requiring additions to, deletions from, or revisions to the Equipment or quantities stated herein. Upon receipt of a Change Order, the Contractor shall proceed with the performance of the Contract Documents as altered by the Change Order. If Contractor's compliance with any Change Order would cause an increase in the Contract Price, the Contractor shall, within fifteen (15) days, notify the CRCNV and submit a signed, written claim therefore including information regarding the events and circumstances and supporting data giving rise to the Contractor's claim. The CRCNV shall approve or disapprove the Contractor's claim within twenty (20) days after receipt of the Contractor's claim and, if approved, issue a Change Order amending the Contract Price.

8.2 If the Contractor's compliance with any Change Order would interfere with the Contractor's ability to complete the performance of this Contract within the Performance Milestones, including final performance of this Contract, the Contractor shall immediately notify the CRCNV and submit a signed, written request for amendment of the Performance Milestones. The CRCNV shall approve or disapprove the Contractor's request within twenty (20) days and, if approved, issue a Change Order amending the Performance Milestones.

8.3 The CRCNV shall not compensate Contractor for additional work performed by the Contractor without authorization or Change Order. The Contractor shall notify its surety of any changes in the general scope of the work to be performed under this Contract.

8.4 This Contract may be amended, modified, or supplemented only by Change Order as provided herein or otherwise by amendment executed in writing by the CRCNV and the Contractor.

9. “Like”, “Equivalent” And “Or Equal” Items

9.1 Whenever an item of material or equipment is specified or described in the Request for Bids by using the name of a proprietary item or the name of a particular supplier, the specification or description is intended to establish the type, function, and quality required. “Like”, “equivalent” and “or equal” items may be substituted only if, in the CRCNV’s sole discretion, although not qualifying as an “or equal” item, is an item essentially equivalent to that named and a substitute therefore. Proposals to substitute like or equivalent items of material or equipment will not be accepted by the CRCNV from anyone other than the Contractor. If the Contractor wishes to furnish or use a substitute item of material or equipment, the Contractor shall first make written application for evaluation thereof to the CRCNV, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified, and be suited to the same use as that specified. The application must state the extent, if any, to which use of the proposed substitute will prejudice Contractor’s completion of performance of this Contract on time as required, whether substitution of the item will require a change in this Contract (or in the provisions of any other direct contract with the CRCNV for work related to the Project) or adaptation of the design of the Equipment or the Project to the proposed substitute, and whether incorporation or use of the substitute in connection with the Equipment is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified must be identified in the application, and available maintenance, repair, and replacement service must be indicated. The application must also contain an itemized estimate of all costs or credits that would result directly or indirectly from use of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which must be considered by the CRCNV in evaluating the proposed substitute. The CRCNV may require the Contractor to furnish any additional data about the proposed substitute.

9.2 No “like”, “equivalent”, “or equal” or other substitutes shall be ordered, installed, or utilized until the CRCNV’s review is complete. The CRCNV must be allowed a reasonable time within which to evaluate each of Contractor’s proposals for such substitutions. The CRCNV’s determination regarding such substitutions must be evidenced either by acceptance of the Contractor’s Bid in which the substitution was identified, a written Change Order, or completion of the submittal review procedure.

9.3 The CRCNV may require the Contractor to furnish, at the Contractor’s expense, a special performance guarantee or other surety with respect to any “like,” “equivalent,” “or equal” or other substitutes. Regardless of the CRCNV’s decision regarding the Contractor’s proposal to substitute an item, the Contractor is liable for the cost of the charges of the CRCNV, including the costs of all data offered in support of any proposed “like” “equivalent,” “or equal” or other substitute item, and shall reimburse the CRCNV for those costs. The CRCNV shall record the time required by the CRCNV in such evaluations and in making changes in the Equipment, Project, this Contract (or in the provisions of any other direct contract with CRCNV for work related to the Project) occasioned thereby.

10. Warranty and Guarantee; Tests and Inspections; Correction or Acceptance of Defective Work

10.1 The Contractor warrants and guarantees to the CRCNV that all materials and equipment will be new unless otherwise specified and that all work will be of good quality and free from faults or defects and in accordance with the requirements of the CRCNV's Request for Bids and of any inspections, tests, or approvals referred to herein. The CRCNV is entitled to reject all unsatisfactory, faulty, or defective work and all work not conforming to the CRCNV's Request for Bids at the time of the CRCNV's Acceptance thereof or of such inspections, tests, or approvals.

10.2 The Contractor shall perform all inspections, tests, and obtain all approvals required by this Contract, or by any laws, ordinances, rules, regulations or orders of any public authority having jurisdiction over the Equipment, wherever it may be or become located. The Contractor is responsible for the costs of such inspections, tests or approvals and shall provide the CRCNV with any certificate of inspection, testing or approval resulting therefrom.

10.3 If the Contractor does not have the necessary test facilities or personnel to perform all required inspections, tests or approvals, the Contractor shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents, which the Contractor cannot perform.

10.4 The Contractor shall provide the CRCNV timely notice of readiness of Equipment for all inspections or tests requiring observation by the CRCNV. The CRCNV's observation of inspections or tests, or inspections or tests performed by persons other than the Contractor, with the exception of Acceptance Testing, does not relieve the Contractor's obligation to perform this Contract as specifically required herein. Compliance is the responsibility of the Contractor. No act or omission on the part of the CRCNV may be construed as relieving the Contractor of this responsibility. Inspection of Equipment later determined to be nonconforming is not cause or excuse for acceptance of the nonconforming Equipment.

10.5 The Contractor shall provide the CRCNV timely notice of readiness of Equipment for Acceptance Testing. The Contractor shall provide the CRCNV reasonable access to the Contractor's premises and provide proper and safe facilities for the CRCNV's observation or conduct of Acceptance Testing.

10.6 If the CRCNV determines, upon Acceptance Testing, or thereafter until the expiration of one year after the date of Final Acceptance, or any such longer period required by the CRCNV's Request for Bids or the Contractor's Proposal, that the Equipment, or any portion thereof, is defective, CRCNV may order the Contractor to correct such defects or replace them within a reasonable time, as may be particularly described in the CRCNV's written order. The Contractor is responsible for the costs of such correction or replacement and for all "in-and-out" costs associated with the removal or replacement of the Equipment, or any portion thereof. The Contract Price must not be changed because of such correction, removal, or replacement. The CRCNV, at CRCNV's expense, will arrange to have the CRCNV's external connections disconnected from defective Equipment in order to facilitate removal of Equipment by the Contractor.

10.7 Nothing in this article concerning the correction or replacement of defective Equipment establishes any period of limitation with respect to any claim by the CRCNV against the Contractor for performance or damages arising out of the Contractor's obligation to perform this Contract.

11. Data, Reports, and Drawings

11.1 All data, reports, drawings and specifications provided to the Contractor by the CRCNV pursuant to this Contract or the CRCNV's Request for Bids remains the property of the CRCNV and must be delivered to the CRCNV upon completion of performance of this Contract. The Contractor may keep copies thereof but may not release those copies without the prior written consent of the CRCNV. Such documents are not intended or represented by CRCNV to be suitable for reuse by the CRCNV or others, either for extension of the Project or for other projects. Any reuse of such documents by the Contractor without the prior written consent of the CRCNV is at the Contractor's risk and the Contractor shall hold the CRCNV harmless with respect to any liability arising out of such reuse.

11.2 The books, records, documents and accounting procedures and practices of the Contractor relative to direct costs and expenditures under this Contract are subject to inspection, examination and audit by the State, the Commission, the attorney general of Nevada and the Nevada state legislative auditor.

11.3 Subject to applicable state law, the Contractor shall not be restricted in any way from releasing information in response to a subpoena, court order, or legal process, but shall notify the CRCNV of the demand for information before the Contractor responds to such demand.

11.4 The Contractor shall retain its rights in its standard drawing details, designs specifications, databases, computer software and any other proprietary property. Rights to intellectual property developed, utilized, or modified in the performance of the services remain the property of the Contractor.

12. Liquidated Damages

12.1 The CRCNV and the Contractor recognize that time is of the essence of this Contract and that the CRCNV will suffer financial loss if the Equipment is not manufactured or delivered within the times specified as Performance Milestones, plus any extensions thereof allowed by Change Order. The Parties also recognize the delays, expense, and difficulties involved in proving in a legal proceeding the actual loss suffered by the CRCNV if the Equipment is not manufactured or delivered on time or is not acceptable to CRCNV. Accordingly, instead of requiring any such proof, the CRCNV and the Contractor agree that as liquidated damages for delay (but not as a penalty) the Contractor shall, at the CRCNV's election in lieu of termination of this Contract, pay the CRCNV the following sums for each day that expires after the Performance Milestones in the Contractor's Proposal:

Bid Item	Description	Liquidated Damages, Per Day
401	Power circuit breaker, 69 kV (nominal), 1200 A, 31.5 kAIC as described in Specification section 33 75 19. F.O.B. Monthill Substation 4095 E. Flamingo, Las Vegas, NV 89121.	\$500 each unit of the Bid Item

12.2 The total of all liquidated damages assessed by Contractor must not exceed the Contract Price. The CRCNV is entitled to deduct the liquidated damages from any money in its hands, otherwise due, or to become due, to the Contractor, or to initiate applicable dispute resolution procedures and recover liquidated damages for nonperformance of this Contract.

13. Insurance, Bonds, and Indemnification

13.1 **General.** The Contractor must not commence any Work under this Contract until it obtains, at its own expense, all insurance and surety bonds as required in this article. The types of insurance and surety bonds to be obtained are Workers' Compensation, Employers' Liability, Automobile Liability, Commercial General Liability, Transportation, and Performance Bonds, as outlined in the following portions of this article. The Workers' Compensation, Employers' Liability, and Automobile Liability insurance must be maintained in force for the full period of this Contract. The Commercial General Liability insurance must be maintained in force for the full period of this Contract and for one year thereafter.

13.2 **Generally Accepted Professional Practices.** The services provided or procured by the Contractor pursuant to this Contract must be in accordance with generally accepted applicable professional practices and principles. The insurance, bond, and indemnification required by this Contract must be in addition to the Contractor's duty to perform this Contract and are cumulative to any other right of indemnification or contribution, which the CRCNV may have in law, equity or otherwise and must survive the completion of the Contractor's performance of the Work.

13.3 **Contractor's Responsibility.** Nothing contained in these insurance requirements may be construed as limiting the extent of the Contractor's total responsibility for payment if claims arising in whole or in part from the actions of a third party when such actions might be taken as a result of the Contractor's operations under this Contract.

13.4 Minimum Scope and Limits of Insurance.

A. **MINIMUM SCOPE AND LIMITS OF INSURANCE** - Contractor shall provide coverage with limits of liability not less than those stated below. An excess liability policy or umbrella liability policy may be used to meet the minimum liability requirements provided that the coverage is written on a "following form" basis.

1. Commercial General Liability – Occurrence Form

Policy shall include bodily injury, property damage, broad form contractual liability, and XCU coverage.

Minimum Requirements:

- General Aggregate \$2,000,000
- Products – Completed Operations Aggregate \$1,000,000
- Personal and Advertising Injury \$1,000,000
- Each Occurrence \$1,000,000

- a. The policy shall be endorsed to include the following additional insured language: "The Colorado River Commission of Nevada shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor, including completed operations".

2. Automobile Liability

Bodily injury and property damage for any owned, hired, and non-owned vehicles used in the performance of this Contract.

- Combined Single Limit (CSL) \$1,000,000

- a. The policy shall be endorsed to include the following additional insured language: "The Colorado River Commission of Nevada shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor, including automobiles owned, leased, hired or borrowed by the Contractor".

3. Worker's Compensation and Employers' Liability

Workers' Compensation	Statutory
Employers' Liability	
Each Accident	\$100,000
Disease – Each Employee	\$100,000
Disease – Policy Limit	\$500,000

- a. Policy shall contain a waiver of subrogation against the State.
- b. This requirement shall not apply when a contractor or subcontractor is exempt under N.R.S., **AND** when such contractor or subcontractor executes the appropriate sole proprietor waiver form.

4. Builders' Risk Insurance or Installation Floater

In an amount equal to the initial Contract Amount plus additional coverage equal to Contract Amount for all subsequent change orders.

- a. The Colorado River Commission of Nevada, shall be Insureds on the policy.
- b. Coverage shall be written on an all-risk, replacement cost basis and shall include coverage for soft costs, flood, and earth movement.
- c. Policy shall be maintained until whichever of the following shall first occur: (1) final payment has been made; or (2) until no person or entity, other than the State of Nevada, has an insurable interest in the property required to be covered.

- d. Policy shall be endorsed such that the insurance shall not be canceled or lapse because of any partial use or occupancy by the State.
- e. Policy must provide coverage from the time any covered property becomes the responsibility of the Contractor, and continue without interruption during construction, renovation, or installation, including any time during which the covered property is being transported to the construction installation site, or awaiting installation, whether on or off-site.
- f. Policy shall contain a waiver of subrogation against the State of Nevada.
- g. Contractor is responsible for the payment of all policy deductibles.

5. Transportation(Cargo) Insurance

In an amount equal to the initial Contract Amount plus additional coverage equal to Contract Amount for all subsequent change orders.

- a. Transportation insurance must be of the “all risks” type and must provide coverage against physical loss or damage to equipment and materials in transit to the designated location. The insurance must include the interests of the Contractor, the Owner, and their respective representatives and agents, each of whom is deemed to have an insurable interest and must be listed as a named insured. The coverage amount must be not less than the full value of items exposed to risk in transit at any one time.
- b. Transportation insurance must provide for losses to be payable to the Contractor and the Owner as their interests may appear and shall contain a waiver of subrogation rights against the insured parties. For insurance purposes, the risk of loss to equipment and materials remains with the Contractor until the equipment and materials are accepted by the assignee general construction contractor at the designated location.
- c. The Contractor shall submit a copy of the transportation insurance policy to the Owner at least thirty (30) days before the scheduled shipping date. The policy must quote the insuring agreement, must list all exclusions, and must state that thirty (30) days’ written notice must be given to the Owner before the policy is changed or canceled.

B. **ADDITIONAL INSURANCE REQUIREMENTS:** The policies shall include, or be endorsed to include the following provisions:

- 1. On insurance policies where the Colorado River Commission of Nevada, is named as an additional insured, the CRCNV shall be an additional insured to the full limits of liability purchased by the Contractor even if those limits of liability are in excess of those required by this Contract.
- 2. The Contractor's insurance coverage shall be primary insurance and non-contributory with respect to all other available sources.

- C. **NOTICE OF CANCELLATION:** Contractor shall for each insurance policy required by the insurance provisions of this Contract shall not be suspended, voided, or canceled except after providing thirty (30) days prior written notice been given to the State, except when cancellation is for non-payment of premium, then ten (10) days prior notice may be given. Such notice shall be sent directly to **Robert Reese, Colorado River Commission of Nevada, 555 E. Washington Avenue, Suite 3100, Las Vegas, Nevada 89101-1065**. Should contractor fail to provide State timely notice, contractor will be considered in breach and subject to cure provisions set forth within this contract.
- D. **ACCEPTABILITY OF INSURERS:** Insurance is to be placed with insurers duly licensed or authorized to do business in the state of Nevada and with an "A.M. Best" rating of not less than A-VII. The State in no way warrants that the above-required minimum insurer rating is sufficient to protect the Contractor from potential insurer insolvency.
- E. **VERIFICATION OF COVERAGE:** Contractor shall furnish the State with certificates of insurance (ACORD form or equivalent approved by the State) as required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

13.5 **Endorsements.** All endorsements must be dated, reflect the name of the insurance company, the type of insurance and policy number, be executed by a duly authorized representative of the insurance company and be attached to the certificate. The additional insureds must be included by endorsement.

13.6 **Waiver of Subrogation.** By endorsement (ISO Form #CG 24 04 11 85 or its equivalent), the Contractor's insurance carriers (except Nevada Workers' Compensation) shall waive their rights of recovery against the Colorado River Commission of Nevada, and its successors or assigns including its commissioners, officers and employees individually and collectively.

13.7 **Primary Insurance.** In the event of any claim by a third party for loss, the insurance policies of the Contractor must be primary insurance with respect to any of the CRCNV's insurance whose insurance must stand in an unbroken chain of coverage excess of the Contractor's scheduled underlying primary coverage.

13.8 **Cost of Claims.** The Contractor is responsible for the cost of any claims under any policy with deductibles or self-insured retention.

13.9 **CRCNV's Right to Obtain Insurance.** If the Contractor fails to procure or maintain insurance as required herein, the CRCNV must have the right, in addition to other rights or remedies, if the CRCNV so chooses, to procure or maintain the said insurance for and in the name of the Contractor with the CRCNV as co-insured, and the Contractor shall pay the cost thereof and furnish all necessary information to make effective and maintain such insurance. In the event the Contractor fails to pay such costs, the CRCNV is entitled to set off any sums from the compensation set forth in this Contract and directly pay for such coverage.

13.10 Deductibles. With respect to any and all insurance required under this article, the deductible must not exceed \$2,500.00, without the prior written approval of the CRCNV.

13.12 Evidence of Insurance Required. Before commencement of the Work, the Contractor and the Contractor's subcontractors must have delivered to the CRCNV certificates of insurance and required endorsements that attest to the fact that the Contractor and the Contractor's subcontractors have obtained the insurance as required by this Contract.

13.13 Indemnification; Limited Liability.

13.13.1 To the fullest extent permitted by law, the Contractor hereby indemnifies and saves harmless and defends the CRCNV, the CRCNV(s) of all property where this Contract will be performed, the Southern Nevada Water Authority and its member agencies, and each of their directors, officers, employees, and agents; not excluding the CRCNV's right to participate, against any and all claims, liability, loss, damage, cost, expense, award, fine or judgment (including attorneys' fees and costs) arising out of or resulting from the Contractor's conduct or performance of this Contract, including (without limitation) such claims, liability, loss, damage, cost, expense, award, fine or judgments which are attributable to or arising by reason of death or bodily injury of persons, injury or damage to property, defects in workmanship or materials, or design defects caused or resulting from the Contractor's acts or omissions, except to the extent those losses are solely caused by the CRCNV, its employees or agents under its direct control. In claims against any person or entity indemnified under this article by an employee of the Contractor, anyone directly or indirectly employed by the Contractor or anyone for whose acts the Contractor may be liable, the indemnification obligation under this article is not limited by a limitation on amount or type of damages, compensation or benefits payable by or for Contractor's workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts. It is the Contractor's sole responsibility to ascertain that the insurance requirements of this Contract are fulfilled. In the event that they are not, the Contractor is not relieved of his duty to perform, indemnify, defend and hold harmless the CRCNV nor is the CRCNV liable to the Contractor or any others in the event the Contractor's insurance, as accepted by the CRCNV, fails to meet the full requirements herein.

13.13.2 The CRCNV, an agency of the State of Nevada, will not waive and intends to assert available NRS chapter 41 liability limitations in all cases. Contract liability of both Parties is not subject to punitive damages. Liquidated damages do not apply unless otherwise specifically provided in the Contract Documents. Damages for any CRCNV breach must never exceed the amount of funds appropriated or authorized for payment under this Contract, but not yet paid to the Contractor, for the fiscal year budget in existence at the time of the breach. Damages for any Contractor breach must not exceed 150 percent of the contract maximum "not to exceed" value. Contractor's tort liability is not limited.

13.14 Performance Bond. The Contractor must furnish with the executed Contract, a performance bond in the amount of the Contract Price as security for faithful performance of all Contractors' obligations under this Contract. The Contractor must

maintain that performance bond in effect during the term of this Contract and for one year thereafter. The performance bond must be executed by a surety or sureties included in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies as published in Circular 570 by the Audit Staff Bureau of Government Financial Operations, U.S. Treasury Department". A certified copy of the agent's authority to act must accompany a bond signed by an agent. Only surety companies authorized to do business in, and having an agent for services of process in the state of Nevada will be acceptable. If the surety on any bond furnished by the Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in Nevada, or it ceases to meet the requirements of the preceding sub-article, the Contractor shall within ten (10) days thereafter substitute another bond and surety, both of which must be acceptable to the CRCNV.

14. Risk Of Delay

14.1 The Contractor shall accept the risk of any delays caused by the CRCNV. If the Contractor is delayed in the performance of this Contract because of such conditions, the Contractor shall have no claim against the CRCNV for damages or contract adjustment other than an extension of Performance Milestones and the waiving of liquidated damages during the period occasioned by the delay.

14.2 If the Contractor is delayed due to circumstances beyond the Contractor's control, including, but not limited to, actions or failures of any of the CRCNV's other contractors, fires, floods, labor disputes, pandemics, epidemics, abnormal weather conditions, or acts of God, the Contractor shall immediately notify the CRCNV and submit a signed, written request for amendment of the Project Milestones. The CRCNV shall approve or disapprove the Contractor's request within twenty (20) days and, if approved, issue a Change Order amending the Project Milestones.

14.3 The CRCNV reserves the right to order the Contractor to delay shipment of Equipment in accordance with Performance Milestones. If such a delay is ordered by the CRCNV in writing, the CRCNV shall reimburse the Contractor for the Contractor's costs which would not have been incurred except for the delay ordered by the CRCNV. Such costs may include reasonable storage costs, insurance, and transportation to a reasonable storage facility.

15. Effect and Termination

15.1 This Contract shall become effective as of the date of its execution and shall remain in effect, unless terminated earlier by the CRCNV as provided for herein, until one year after the CRCNV's Final Acceptance of the Equipment and Final Payment of the Contractor.

15.2 **Failure to meet Performance Milestones.** The CRCNV reserves the right to cancel any portion of the Contractor's performance of this Contract which is not performed within the Performance Milestones. In the event of such cancellation, the CRCNV shall pay the Contractor in full for any portion of the Equipment which has been accepted by the CRCNV.

15.3 Stop Work. If at any time the CRCNV should determine the Contractor's work or the Equipment to be defective, or if the Contractor fails to supply suitable materials, equipment or supplies, the CRCNV may order Contractor to stop work, or any portion thereof, until the cause of such order has been eliminated.

15.4 CRCNV's Right to Take Possession and Terminate. If the Contractor is adjudged to be bankrupt or insolvent, or makes an assignment for the benefit of its creditors, or if a trustee files a petition against the Contractor to take advantage of any debtor's act or to reorganize the Contractor under bankruptcy or similar laws; if Contractor repeatedly fails to supply suitable materials or equipment in the performance of this Contract; if Contractor fails to make prompt payments for labor, materials, or equipment; if Contractor disregards any laws, ordinances, rules, regulation or orders of any public body having jurisdiction over the Equipment or the Contractor's performance of this Contract; or, if the Contractor disregards the CRCNV's orders or Change Orders under this Contract, then the CRCNV may, without prejudice to any other right or remedy the CRCNV may have, and after giving the Contractor and his surety at least seven days' written notice, terminate this Contract and take possession of all Equipment then delivered, and obtain all additional Equipment required by this Contract from third party sources by whatever method the CRCNV may choose. In such case, the Contractor shall not be entitled to receive any further payment. If the unpaid balance of the Contract Price exceeds the CRCNV's direct and indirect costs of obtaining additional Equipment required by this Contract, including compensation of additional professional services, such excess must be paid to the Contractor. If such costs exceed such unpaid balance, the Contractor shall pay the CRCNV the difference.

16. Taxes.

The Contractor must promptly pay all taxes that are lawfully assessed against the Contractor in connection with the Work. The CRCNV is exempt from sales tax pursuant to a ruling and determination of the attorney general of the State of Nevada.

17. Unemployment Compensation.

The Contractor must at all times comply with the requirements of Nevada Revised Statutes ("NRS") chapter 612 (Unemployment Compensation).

18. Discrimination.

The Contractor shall not, during its performance of this Contract, discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, or age, including, but not limited to, the following: employment, upgrading, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor shall insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials. Any violation of such provision by the subcontractor constitutes a material breach of this Contract.

19. Disputes.

Controversies arising out of this Contract must be resolved pursuant to the jurisdiction and substantive law of the courts of competent jurisdiction of the State of Nevada.

20. Waiver of Claims.

The CRCNV's making and the Contractor's acceptance of final payment constitute a waiver of all claims by the CRCNV against the Contractor and the Contractor against the CRCNV, except claims arising from unsettled liens, from defective work appearing after final inspection, or from failure to comply with the Contract or the terms of any special guarantees specified therein. The CRCNV's making and the Contractor's acceptance of final payment does not constitute a waiver by the CRCNV of any rights in respect of the Contractor's continuing obligations under the Contract, nor a waiver of those claims previously made in writing and still unsettled.

21. Notices.

21.1 Any notice, demand, or request required or authorized by this Contract to be served, given, or made shall be deemed properly served, given or made if delivered in person or sent by electronic mail and certified mail, postage prepaid, to the persons specified below:

Colorado River Commission of Nevada
c/o Executive Director
555 E. Washington Ave., Suite 3100
Las Vegas, NV 89101-1065
Email: CRCAdmins@crc.nv.gov

Peak Substation Services, LLC
c/o National Sales Manager
801 1st Ave North
Birmingham, AL 35203
Email: jharris@peaksubstation.com

21.2 Either Party may at any time, by written notice to the other Party, designate different or additional persons or different addresses for the giving of notices, demands, or requests hereunder.

22. Submission of Claims.

Should the CRCNV or the Contractor suffer injury or damage to person or property because of any error, omission, or act of the other Party or of any of the other Party's employees or agents or others for whose acts the other Party is legally liable, claim must be made in writing to the other Party within a reasonable time of the first observance of such injury or damage. The provisions of this article shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or repose.

23. Assignment of Contract.

The Contractor shall not assign or otherwise transfer its rights or obligations under this Contract without the prior written approval of the CRCNV. This Contract inures to the benefit of and is binding upon the respective successors and assigns of the Parties to this Contract but any assignment or other transfer of this Contract does not relieve the Parties of any obligation hereunder.

24. Severability.

Should any provision of this Contract for any reason be declared invalid or unenforceable by final and applicable order of any court or regulatory body having jurisdiction, such decision shall not affect the validity of the remaining portions, and the remaining portions shall remain in effect as if this Contract had been executed without the invalid portion. In the event any provision of this Contract is declared invalid, the Parties shall promptly renegotiate to restore this Contract as near as possible to its original intent and effect.

25. Survival.

Any provision of this Contract that expressly or by implication comes into or remains in force following the termination or expiration of this Contract survives the termination or expiration of this Contract.

26. Applicable Law; Venue.

This Contract and the rights of the Parties hereto must be interpreted, governed, and construed in accordance with the laws of the State of Nevada. The Parties consent to the venue and jurisdiction of the state of and federal courts within Clark County, Nevada.

27. Article Headings.

The article headings in this Contract are included only for convenience and reference and the Parties intend that they be disregarded in interpreting this Contract.

28. Waiver.

Either of the Parties shall have the right to excuse or waive performance by the other Party of any obligation under this Contract by a written notice signed by the Party so excusing or waiving. No delay in exercising any right or remedy shall constitute a waiver thereof, and no waiver by either party of the breach of any covenant of this Contract shall be construed as a waiver of any preceding or succeeding breach of the same or any other covenant or condition of this Contract.

29. Entire Agreement; Contractor Certification.

This Contract, together with the other Contract Documents, comprises the entire agreement between the CRCNV and the Contractor for the performance of the Work. The Contractor hereby certifies that the Contractor has read and understands every provision contained in the Contract Documents. The Contractor is bound and must comply with each and every term, condition, and covenant set forth in the Contract Documents.

30. Authority to Execute.

Each individual signing this Contract represents and warrants that the Party represented has duly authorized such individual to execute this Contract with the intent that the Party be bound and obligated hereby.

IN WITNESS WHEREOF, the Contractor and the CRCNV have executed three duplicate originals of this Contract this _____ day of _____, 2024. The CRCNV will retain two counterparts and one counterpart will be delivered to the Contractor.

CONTRACTOR

By: _____
Its: PRESIDENT

ATTEST

NATIONAL SALES MANAGER

COLORADO RIVER COMMISSION OF NEVADA

By: _____
Puoy K. Premsrut
Chairwoman

ATTEST

Eric Witkoski
Executive Director

Approved as to Form:

Michelle Briggs
Special Counsel for Attorney General

**SECTION 500
PERFORMANCE BOND**

CONTRACTOR (Name and Address):

Peak Substation Services LLC.
801 1st Ave North
Birmingham, AL 35203

SURETY (Name and Principal Place of Business):

CRCNV (Name and Address):

Colorado River Commission of Nevada
555 E. Washington Avenue
Suite 3100
Las Vegas, Nevada 89101-1065

CONTRACT

Date: _____

Amount: _____

\$ _____

Description: Contract No. CRCMH-04,
Monthill Substation
Location: Clark County, Nevada

BOND

Date (Not earlier than Contract Date): _____

Modifications to this Bond Form: _____

CONTRACTOR AS PRINCIPAL (Seal below)

Company: _____

Signature: _____

Name and Title: _____

Attest: _____

Name and Title: _____

SURETY (Seal below)

Company: _____

Signature: _____

Name and Title: _____

Attest: _____

Name and Title: _____

1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the CRCNV for the performance of the Contract, which is incorporated herein by reference.
2. If the Contractor performs the Contract, the Surety and the Contractor have no obligation under this Bond, except to participate in conferences as provided in paragraph 3.1.
3. If there is no CRCNV Default, the Surety's obligation under this Bond arises after:
 - 3.1 The CRCNV has notified the Contractor and the Surety at its address described in subsection 9 below, that the CRCNV is considering declaring the Contractor in default and has requested and attempted to arrange a conference with the Contractor and Surety, to be held not later than fifteen (15) days after receipt of such notice, to discuss methods of performing the Contract. If the CRCNV, the Contractor, and the Surety agree, the Contractor must be allowed a reasonable time to perform the Contract, but such an agreement does not waive the CRCNV's right, if any, subsequently to declare a Contractor Default; and
 - 3.2 The CRCNV has declared a Contractor Default and formally terminated the Contractor's right to complete the Contract. Such Contractor Default must not be declared earlier than twenty (20) days after the Contractor and the Surety have received notice as provided in paragraph 3.1; and
 - 3.3 The CRCNV has agreed to pay the balance of the Contract Price to the Surety in accordance with the terms of the Contract or to a contractor selected to perform the Contract in accordance with the terms of the Contract with the CRCNV.
4. When the CRCNV has satisfied the conditions of subsection 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 4.1 Arrange for the Contractor, with the consent of the CRCNV, to perform and complete the Contract; or
 - 4.2 Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or
 - 4.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the CRCNV for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by the CRCNV and the contractor selected with the CRCNV's concurrence, to be secured with a performance bond executed by a qualified Surety equivalent to the bond issued on the Contract, and paid to the CRCNV the amount of damages as described in subsection 6 of the Balance of the Contract Price incurred by the CRCNV resulting from the Contractor's Default; or

- 4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:
- 4.4.1 After investigation, determine the amount for which it may be liable to the CRCNV and, as soon as practicable after the amount is determined, tender payment therefore to the CRCNV; or
- 4.4.2 Deny liability in whole or in part and notify the CRCNV citing the reasons therefore. If the Surety does not proceed as provided in subsection 4, with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen (15) days after receipt of an additional written notice from the CRCNV to the Surety demanding that the Surety perform its obligations under this Bond, and the CRCNV is entitled to enforce any remedy available to the CRCNV. If the Surety proceeds as provided in paragraph 4.4, and the CRCNV returns the payment tendered or the Surety has denied liability, in whole or in part, without further notice the CRCNV is entitled to enforce any remedy available to the CRCNV.
5. After the CRCNV has terminated the Contractor's right to complete the Contract, and if the Surety elects to act under paragraphs 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the CRCNV must not be greater than those of the Contractor under the Contract and the responsibilities of the CRCNV to the Surety must not be greater than those of the CRCNV under the Contract. To the limit of the amount of this Bond, but subject to commitment by the CRCNV of the Balance of the Contract Price to the mitigation of costs and damages on the Contract, the Surety is obligated without duplication for:
- 5.1 The responsibilities of the Contractor for correction of defective work and completion of the Contract;
- 5.2 Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the action or failure to act of the Surety under subsection 4; and
- 5.3 Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or nonperformance of the Contractor.
6. The Surety is not liable to the CRCNV or others for obligations of the Contractor that are unrelated to the Contract, and the Balance of the Contract Price must not be reduced or set off on account of any such unrelated obligations. No right of action accrues on this Bond to any person or entity other than the CRCNV or its heirs, executors, administrators, or successors.
7. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.

8. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work is performed under the Contract and must be initiated within two years after the Contractor's Default, or within two years after the Contractor ceased working, or within two years after the Surety refuses or fails to perform its obligation under this Bond, whichever occurs first. If the provisions of this subsection are void or prohibited by law, the minimum of limitation available to sureties as a defense in the jurisdiction of the court is applicable.
9. Notice to the Surety, the CRCNV, or the Contractor must be mailed or delivered to the address shown on the signature page of this performance bond.
10. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the work is performed any provision of this bond conflicting with such statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
11. Definitions.
 - 11.1 "Balance of the Contract Price" means the total amount payable by the CRCNV to the Contractor under the Contract after all proper adjustments have been made, including allowances to the Contractor of any amounts received or to be received by the CRCNV in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Contract.
 - 11.2 "Contract" means the agreement between the CRCNV and the Contractor identified on the signature page, including all the Contract documents and changes thereto.
 - 11.3 "Contractor Default" means a failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.
 - 11.4 "CRCNV Default" means a failure of the CRCNV, which has neither been remedied nor waived, to pay the Contractor or to perform in complete or comply with the other terms of this Contract.

SECTION 600 SUMMARY OF THE WORK

1. Project Description.

1.1 Monthill Substation is a 69 kV facility that will be constructed in Southern Nevada.

2. Work Under This Contract.

2.1 This Contract is to engineer, manufacture, assemble, test, ship, and provide ancillary services relating to the procurement of Gas High-Voltage Circuit Breaker (BRKR) as specified herein.

2.2 It is anticipated that no one single supplier can provide a bid for all items, thus the Contract may be awarded in parts.

3. Delivery.

3.1 Bid Item 401 shall be shipped F.O.B. by the Contractor to Monthill Substation 4095 E. Flamingo, Las Vegas, NV 89121.

3.2 The Contractor shall notify the following designated point of contact at least one (1) week in advance of any delivery date, and shall not make any shipments without prior approval.

Mr. Robert Reese
Colorado River Commission of Nevada
Telephone: (702) 856-3611
Cell Phone: (702) 682-6972
Email: breeser@crc.nv.gov

3.3 No delivery will be approved until proper Submittals pertaining to storage and installation have been received and accepted.

3.4 Any items shipped without prior notification and approval may be returned to the point of origin, or unloaded and stored at a place and in a manner determined by the CRCNV, and the Contractor will be charged with any additional expense resulting therefrom.

4. Work by the CRCNV.

4.1 The CRCNV or its construction contractor will receive, unload, move, store, place, assemble, and install the Equipment furnished under this Contract No. CRCMH-04.

4.2 The CRCNV will test Equipment supplied under this Contract No. CRCMH-04, and shall perform energization and startup of the new facilities.

5. Work Schedule.

5.1 In order to satisfy the engineering information requirements for design and to allow the construction contractor sufficient time for installation, this Contract shall adhere to the following Performance Milestones.

5.1.1 Work Schedule:

5.1.1.1 Compliance Submittals within forty-five (45) days after notice to proceed (see sections 1000 and 1100 for requirements).

5.1.1.2 Maintenance and installation instructions within sixty (60) days after notice to proceed.

5.1.1.3 Delivery beginning on or after January 06, 2026, and ending on or before February 27, 2026.

5.2 The anticipated Final Acceptance Date for all Equipment is March 31, 2026.

6. Measurement and Payment.

All Equipment indicated in the Contract Documents must be included in the unit prices for the applicable Item(s). Equipment will be paid on a per unit basis. Change orders will be paid as stated in the change order.

7. Copies Of Documents.

7.1 After execution of the Contract, the Contractor will be provided at no cost one (1) set of fully executed Contract Documents.

7.2 Additional copies of above documents will be supplied upon request at the cost of printing and delivery.

SECTION 700 SUBMITTALS

1. General Information.

1.1 Submittals to be provided by the Contractor for the Equipment to be furnished are identified in this section 700 of the Contract Documents.

1.2 Submittal Types:

1.2.1 Compliance Submittals are shop drawings, product data, and samples that are prepared by the Contractor and submitted by the Contractor to the CRCNV as a basis for approval. The Contractor must not proceed with the Work affected by or related to a Compliance Submittal until the CRCNV has approved such submittal.

1.2.1.1 Shop drawings include custom-prepared data of all types including drawings, diagrams, performance curves, material schedules, templates, installation and maintenance instructions, and similar information applicable to the Equipment.

1.2.1.2 Product data includes standard printed information on materials, products and systems; not custom-prepared for this Project, other than the designation of selections from available choices.

1.2.1.3 Samples include both fabricated and unfabricated physical examples of materials, and products; both as complete units and as smaller portions of units of testing and analysis.

1.2.2 Procedure Submittals are narrative descriptions and/or drawings provided by the Contractor describing the methods, techniques, Equipment and processes to be used to complete all or some portion of the work. The CRCNV must review Procedure Submittals, but such review does not relieve the Contractor of its responsibility to determine its own means and methods for the Work.

1.3 Submittals must be of the quality for legibility and reproduction purposes. Every line, character and letter must be clearly legible. Drawings such as reproducible's must be useable for further reproduction to yield legible hard copies.

1.4 All words and dimensional units must be in the English language.

1.5 Submittals must be complete with respect to dimensions, design criteria, materials of construction, and other information specified to enable the CRCNV to review the information effectively.

1.6 The CRCNV may copy and use for internal operations and staff training purposes any and all submittals required by this Contract and approved for final distribution, whether or not such documents are copyrighted, at no additional cost to the CRCNV. If permission to copy any such submittal for the purposes stated is unreasonably withheld from the CRCNV by the Contractor or any Subcontractor, manufacturer, or Supplier, the Contractor shall provide fifty (50) copies plus the number of copies required in the following subsection to be submitted for approval.

2. Compliance Submittals.

2.1 When Compliance Submittals are required for a Bid Item they shall include but not be limited to, the following:

2.1.1 Manufacturer's specifications.

2.1.2 Catalog cut sheets, or parts thereof, of manufactured Equipment.

2.1.3 Shop fabrication and erection drawings.

2.1.4 General outline drawings of Equipment showing overall dimensions, location of major components, weights, and center of gravity, and location of required building openings and floor plates.

2.1.5 Detailed Equipment installation drawings, showing foundation details, anchor bolt sizes and locations, base plate sizes, location of CRCNV's connections, and all clearances required for erection, operation, and disassembly for maintenance.

2.1.6 Schematic diagrams for electrical items, showing external connections, terminal block numbers, internal wiring diagrams, and one-line diagrams.

2.1.7 Bills of material and spare parts lists.

2.1.8 Instruction books and operating manuals.

2.1.9 Material lists or schedules.

2.1.10 Performance tests on equipment by manufacturers.

2.1.11 Samples and color charts.

2.1.12 All drawings, catalogs, or parts thereof, manufacturer's specifications and data, samples, instructions, and other information specified or necessary:

2.1.12.1 For CRCNV to determine that the Equipment conforms to the design concept and comply with the intent of the Contract Documents.

2.1.12.2 For the proper erection, installation, operation and maintenance of the Equipment which CRCNV will review for general content but not for substance.

2.1.12.3 For CRCNV to determine what supports, anchorages, structural details, connections, and services are required for the Equipment, and the effects on contiguous or related structures, equipment, and materials.

2.2 At the time of each Compliance Submittal submission, call to the attention of CRCNV in the letter of transmittal any deviations from the requirements of the Contract Documents.

2.3 Make all modifications noted or indicated by CRCNV and return revised prints, copies, or samples until accepted. Direct specific attention in writing on revised Submittals, to changes other than the modifications called for by CRCNV on previous Submittals. After Submittals have been accepted, submit copies thereof for final distribution. Prints of accepted drawings transmitted for final distribution will not be further reviewed and are not to be revised. If errors are discovered during manufacture or fabrication, correct the Submittal and resubmit for review.

2.4 Equipment requiring a Compliance Submittal shall not be shipped until the Submittal has been stamped "Submittal Accepted" by CRCNV.

2.5 Except as otherwise specified, transmit all Compliance Submittals in the quantity as follows:

2.5.1 Initial Submittal – Four (4) copies to the CRCNV. One (1) copy will be returned to the Contractor.

2.5.2 Resubmittals – Four (4) copies to CRCNV. One (1) copy will be returned to the Contractor.

2.5.3 Samples must be of sufficient size and quantity to clearly illustrate the functional characteristics of the product and its full range of color, texture, and pattern.

2.6 The CRCNV will review and return Compliance Submittals with appropriate notations. The CRCNV's review action stamp will appear on all Compliance Submittals of the Contractor when returned by the CRCNV. The CRCNV's acceptance of Compliance Submittals will not relieve the Contractor from his responsibility as stated in the Contract.

2.7 Compliance Submittal Action Stamp. CRCNV's review action stamp, will appear on all Compliance Submittals of Contractor when returned by CRCNV. Review status designations listed on CRCNV's action stamp are defined as follows:

2.7.1 SUBMITTAL ACCEPTED Signifies Equipment represented by the submittal conforms to the design concept and complies with the intent of the Contract Documents. Copies of the Submittal are to be transmitted to CRCNV for final distribution.

2.7.2 SUBMITTAL ACCEPTABLE AS NOTED (REVISE & RESUBMIT) Signifies Equipment represented by the Submittal as noted conforms to the design concept and complies with the intent of the Contract Documents. Contractor is to proceed with fabrication or procurement of the items and with related work in accordance with CRCNV's notations and is to submit a revised Submittal responsive to notations marked on the returned Submittal or written in the letter of transmittal.

2.7.3 SUBMITTAL NOT ACCEPTED AS NOTED (REVISE & RESUBMIT) Signifies Equipment represented by the Submittal appears to conform with the design concept and comply with the intent of the Contract Documents but information is either insufficient in detail or contains discrepancies which prevent CRCNV from completing his review. Contractor is to resubmit revised information responsive to CRCNV's annotations on the returned Submittal or written in the letter of transmittal. Fabrication or procurement of items represented by the Submittal and related Work is not to proceed until the Submittal is acceptable.

2.7.4 SUBMITTAL NOT ACCEPTABLE (SUBMIT ANEW) Signifies Equipment represented by the Submittal does not conform to the design concept or comply with the intent of the Contract Documents and is disapproved. Contractor is to submit Compliance Submittals responsive to the Contract Documents.

3. Procedure Submittals.

3.1 When required, transmit all Procedure Submittals in the quantity as follows:

3.2.1 Initial Submittal: Four (4) copies to the CRCNV. One (1) copy will be returned to the Contractor.

3.2.2 Resubmittals: Four (4) copies to the CRCNV. One (1) copy will be returned to the Contractor.

SECTION 800 EQUIPMENT

1. Quality Assurance.

1.1 Conform to applicable specifications, codes, standards, and requirements of regulatory agencies.

1.2 Provide equipment or material that comply with the requirements of the Contract Documents, undamaged, and, unless otherwise indicated, new and unused at the time of installation. Provide equipment or material that are complete with all accessories, trim, finish, safety guards, and other devices and details needed for a complete installation and for the intended use and effect.

1.2.1 Where they are available and if they comply with the Contract Documents, provide Equipment of types that have been produced and used successfully in similar situations on other projects.

1.2.2 Where, because of the nature of its application, CRCNV is likely to need replacement parts or additional amounts of the Equipment at a later date, either for maintenance and repair or replacement, provide standard products for which the manufacturer has published assurances that the Equipment and its parts are likely to be available to the CRCNV at a later date.

1.3 Comply with size, make, type, and quality specified, or as specifically approved in writing by the CRCNV.

1.4 If the Equipment is manufactured or fabricated:

1.4.1 Design, fabricate and assemble in accordance with the best engineering and shop practices.

1.4.2 Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.

1.4.3 Two or more items of the same kind and by the same manufacturer must be identical.

1.4.4 Equipment must be suitable for the service conditions intended.

1.4.5 Capacities, sizes and dimensions shown or specified must be adhered to unless variations are specifically approved in writing.

2. Transportation and Handling.

2.1 The Contractor shall prepare Equipment for shipment in a manner to facilitate unloading and handling, and to protect against damage or unnecessary exposure in transit and storage. Provisions for protection must include the following:

2.1.1 Crates or other suitable packaging materials.

2.1.2 Covers and other means to prevent corrosion, moisture damage, mechanical injury, and accumulation of dirt in motors, electrical equipment, and machinery.

2.1.3 Suitable rust-preventative compound on exposed machined surfaces and unpainted iron and steel.

2.1.4 Grease packing or oil lubrication in all bearings and similar items.

2.1.5 Moisture absorbing media in cabinets and electrical enclosures.

2.2 Tag or mark each item of Equipment with the Contract Number and Bid Item number as identified in the Contract Documents or on Compliance Submittals. Include complete packing lists and bills of material with each shipment. Each piece of every item need not be marked separately provided that all pieces of each item are packed or bundled together and the packages or bundles are properly tagged or marked.

2.3 The Contractor shall mail bills of material to the CRCNV prior to delivery of each shipment and shall include bills of material with each shipment.

2.4 Furnish the CRCNV with all requirements for unloading and handling of Equipment upon delivery sufficiently in advance to allow the CRCNV sufficient preparation time. Include type and capacity of unloading equipment required as applicable.

2.5 Deliver all Equipment by truck.

2.6 Deliver Equipment in an undamaged condition, in original containers or packaging, with identifying labels intact and legible.

2.7 Mark partial deliveries of component parts to identify the Equipment, to permit easy accumulation of parts, and to facilitate assembly.

2.8 The CRCNV shall receive, check, unload, inventory, accept and store all Equipment delivered to the specified location in accordance with proper notice.

3. Storage and Protection.

3.1 Furnish the CRCNV with all requirements for storage and protection of all Equipment sufficiently in advance of delivery to allow sufficient preparation time.

3.2 The CRCNV will furnish all facilities needed for storage of Equipment at the project site.

3.3 After delivery and acceptance, the CRCNV will assume responsibility for and protect all Equipment in accordance with the Contractor's recommendations.

SECTION 900 MANUFACTURER'S FIELD SERVICE

1. Services Required.

1.1 The requirement to provide a manufacturer's representative on-site during installation and startup of the Equipment is identified in those sections of this Contract providing the specifications for the Equipment. If the requirement to provide a manufacturer's representative is not identified, such service is optional by the Contractor.

1.2 If a manufacturer's representative is specified and required for the Equipment furnished:

1.2.1 Furnish the services of qualified, competent field representative and necessary assistants for the Equipment. The field representative must be certified by the manufacturer of the specified product or system as having the necessary knowledge and experience to perform the required functions.

1.2.2 The manufacturer's field personnel shall perform the following:

1.2.2.1 Observe the erection, installation, start-up, and testing of Equipment.

1.2.2.2 Instruct and guide the CRCNV in proper procedures.

1.2.2.3 Supervise the initial start-up, operational check, and any required adjustments of the Equipment.

1.2.2.4 Instruct CRCNV's designated personnel in proper operation and maintenance of all Equipment.

1.2.3 The field representative shall report to the site at times designated by CRCNV.

1.2.4 The field representative must be acceptable to the CRCNV and must not be changed during the installation operations without the CRCNV's consent unless the field representative proves unsatisfactory to the Contractor.

SECTION 1000
33 75 19
Gas High-Voltage Circuit Breaker

Specification No. 33 75 19

Gas High-Voltage Circuit Breaker

Southern Nevada Water Authority

69-12.47 kV Monthill Substation
Las Vegas, NV

Exhibit A



3010 W Charleston Blvd Suite 100,
Las Vegas, NV 89102-1969

Project No. 3636S (181301299)



Revision Chart

Rev.	Reason for Change	Author	Review	Issue Date
A	Released for Client Review	KJL	CAL	01/13/2023
B	Comment Revisions	KJL	MR	05/03/2023
C	SNWA Backcheck Comment Revisions	KJL	LH	08/04/2023
D	Commitment Number Revisions	KJL	LH	08/18/2023
E	Final Backcheck	KJL	MR	08/21/2023

Abbreviations and Acronyms

A	Amperes, measure of electrical current
AC	alternating current
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWS	American Welding Society
BCT	Bushing Current Transformer
BRKR	Group-Operated High-Voltage Circuit Breaker
Contractor	The Construction Contractor responsible for installation
DAP	Delivered-at-Place, Destination
DC	direct current
DOT	Department of Transportation
DWG	AutoCAD proprietary drawing format
DXF	Data Exchange File
FOB	Free on Board, Destination
GFCI	ground-fault circuit interrupter
Hz	Hertz, measure of electrical frequency
I/O	Input/Output
IEEE	Institute of Electrical and Electronics Engineers
kV	kilovolts (1000's of Volts)
LED	light emitting diode

Abbreviations and Acronyms – continued

MR	Multi-Ratio, refers to CT secondary winding with taps
MSDS	Material Safety Data Sheets
NA	Not Applicable
NEMA	National Electrical Manufacturers Association
NESC	National Electric Safety Code
OE	Owner's Engineer
PD	Partial Discharge
PDF	Portable Document Format
pF	Picofarads, measure of electrical capacitance
ppm	parts per million
PSD	Project Specific Data Sheets (Appendix A)
Purchasing Authority	The originator of the purchase order
QA/QC	Quality Assurance/Quality Control
QSR	Quality Surveillance Representative
RFP	request for proposal
rms	Root mean square, measure of electrical voltage
SF ₆	Sulfur Hexafluoride
SQL	Seismic Qualification Level
SR	Single-Ratio, refers to CT secondary winding without taps
Stantec	Stantec Consulting Services Inc.
TRV	Transient Recovery Voltage
V	Volts, measure of electrical voltage or potential
VA	Volt-Amperes, measure of electrical power

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PART 1 - GENERAL

1.1 SUMMARY

- A. Southern Nevada Water Authority ("Owner") is the owner of this project and will be acting as the Purchasing Authority for the project's substation major material items. Construction responsibilities and additional minor material procurement responsibilities have been contracted to a construction management at-risk (CMAR) Contractor (hereinafter referred to as the "Contractor").
- B. Reference to the Supplier within this specification is intended to mean the equipment manufacturers, their authorized sales representatives, their authorized distributor and/or their subcontractor.
- C. This specification is for 69 kV dead-tank circuit breaker, with three group-operated interrupting contacts contained in separate tanks, internally insulated with SF₆ gas, constituting a pole or phase of the three-phase, three-pole, breaker. Breaker poles are to be mounted on a common frame, with polymer housed bushings, and a common stored energy operating drive mechanism. The BRKR shall be manufactured and tested in accordance with the specific technical parameters stipulated herein and summarized in the PSD. A separate Supplier's Data Sheets document containing much of the same data will accompany the technical specification, which also serves as the bid form document which the Supplier will fill out and return with their proposal. The Supplier shall furnish BRKR(s) for the Project's 69-12.47 kV Monthill Substation in the quantity identified in the PSD.
- D. The proposal will be quoted with Delivery Duty Paid (DDP), if shipped from an international supplier. The BRKR will be shipped under Free on Board (FOB) Destination freight terms to the Project Site (per INCOTERMS® 2020), if shipped from a domestic supplier. High-voltage circuit breakers shall be furnished in the quantity specified and to the Project Site. Delivery will include transference from the transport trailer to the Contractor's laydown yard at the Project Site. Transference by the Contractor shall not occur until after the BRKR(s) have been visually inspected for damage which may have occurred during transit, and any damage noted for repair by the Supplier has been accepted by the Purchasing Authority's Receiving Agent and the OE. The preferred transference method is by a suspended lift between transport and temporary cribbing. Foundation anchorage is to be performed by the Contractor.
- E. The Supplier will separately list in separate line items in the proposal the (i) cost of the goods (ii) cost associated with shipping, transport from factory to the Project Site (iii) field assembly, if required (iv) filling with SF₆ by a factory representative (v) commissioning and field testing by a factory representative, and (vi) relevant duties and taxes included in the proposal.
- F. Unless altered by written directions from the Purchasing Authority, the Supplier will also be responsible for field assembly, dressing, SF₆-filling, and testing the BRKR once it has been secured to the Owner's foundation. The Supplier will list the cost associated with field assembly, dressing, SF₆-filling, and testing as described above as a line items their proposal.

1.2 REFERENCES

- A. The publications listed below shall be used in conjunction with this material specification and form a part of this material specification to the extent specified herein. When a referenced publication is superseded by an approved revision, the current revision at the time of contract award shall apply. Referenced industry publications are listed below.
- B. Applicable industry documents may include, but shall not necessarily be limited to, those listed below. The Supplier will determine if any local jurisdictional requirements apply based upon the Project location identified in the PSD and notify the OE who will be responsible for their inclusion in the technical specifications.

American Institute of Steel Construction	
AISC Manual	Steel Construction Manual (15 th Addition)
	Seismic Design Manual (3 rd Addition)
American National Standards Institute	
ANSI CGA V-1 - 2021	Standard for Compressed Gas Cylinder Valve Outlet and Inlet Connections (15 th Edition)
American Society of Mechanical Engineers - International	
BPV-2021	Boiler and Pressure Vessel Code Section VIII, Division 1
American Society for Testing and Materials – International	
ASTM D2029-1997	Test Methods for Water Vapor Content of Electrical Insulating Gases by Measurement of Dew Point
ASTM D2685-2019	Test Method for Air and Carbon Tetrafluoride in Sulfur Hexafluoride by Gas Chromatography
ASTM D2472-2016	Standard Specification for Sulfur Hexafluoride
American Welding Society	
AWS-D1.1/D1.1M-2020 (ANSI)	Structural Welding Code - Steel
Society of Protective Coatings	
SSPC-SP1	Solvent Cleaning
SSPC-SP2	Hand Tool Cleaning
SSPC-SP3	Power Tool Cleaning
SSPC-SP5	White Metal Blast Cleaning
SSPC-SP6	Commercial Blast Cleaning
SSPC-SP7	Brush-Off Blast Cleaning
SSPC-SP10	Near-White Blast Cleaning

Institute of Electrical and Electronics Engineers	
IEEE C2-2023	National Electric Safety Code
IEEE C37.04-2018	Standard for Ratings and Requirements for AC High-Voltage Circuit Breakers with Rated Maximum Voltage Above 1000 V
IEEE C37.06.1-2017	Recommended Practice for Preferred Ratings for High-Voltage (>1000 volts) AC Circuit Breakers Designated Definite Purpose for Fast Transient Recovery Voltage Rise Times
IEEE C37.09-2018	Test Procedure for AC High-Voltage Circuit Breakers Rated on Symmetrical Current Basis
IEEE C37.11-2014	Requirements for Electrical Control for AC High-Voltage (>1000 V) Circuit Breakers
IEEE C37.012-2022	Guide for the Application of Capacitance Current Switching for AC High-Voltage Circuit Breakers Above 1000 V
IEEE C37.100.1-2018	Common Requirements for High Voltage Power Switchgear Rated Above 1000 V
IEEE C57.13-2016	Standard Requirements for Instrument Transformers
IEEE C57.19.00-2004	Standard General Requirements and Test Procedures for Power Apparatus Bushings
IEEE 693-2018	Recommended Practice for Seismic Design of Substations
Insulated Cable Engineers Association	
ICEA S-73-532-2014	ICEA S-73-532
National Electrical Manufacturers Association	
NEMA SG 4-2009	Alternating-Current High Voltage Circuit Breaker
NEMA SG 6-2000	Power Switching Equipment
NEMA WC 57-2014	Control Standard for Control, Thermocouple Extension, and Instrumentation Cables
NEMA WC 70-2021	Non-Shielded Power Cables Rated 2000 V or Less for the Distribution of Electrical Energy (ICEA S-95-658)
National Fire Protection Association	
NFPA 70-2023	National Electric Code
United States Department of Labor - Occupational Safety and Hazard Association	
OSHA 3075-2002	Controlling Electrical Hazards
Underwriters Laboratories	
UL 3173-2021 (SIS/XXHW-2)	Single Conductor with Extruded Insulation
UL 44	Thermoset insulated Wires and Cables (19 th Addition)
UL 1581-2001 (VW-1)	Reference Standard for Electrical Wires, Cables, and Flexible Cords

1.3 CERTIFICATIONS

- A. Materials and equipment shall be suitable for the use intended and labeled and/or listed or certified as acceptable to the approving authority and/or agency having jurisdiction at the Project Site.

1.4 PRACTICES

- A. It is the Supplier's responsibility to be knowledgeable and employ designs and manufacturing practices that incorporate the latest revisions of these standards where and when applicable.
- B. The Supplier of the assembly shall be the manufacturer of the major components within the finished product. The Supplier shall have manufactured similar electrical equipment within their specified manufacturing facility for a minimum of five (5) years prior to submitting their proposal and shall provide a list of projects and references as an attachment to their proposal.

1.5 COMMUNICATIONS

- A. In all cases, communications and correspondence with the Supplier shall be conducted through the Purchasing Authority, with copy to the OE. The Owner, Contractor, and the OE will not accept responsibility for any costs and/or delays resulting from the Supplier's communication through, or correspondence with, persons other than the Purchasing Authority.
- B. The Supplier shall provide a single designated representative for all communication and correspondence with the Purchasing Authority.

1.6 MATERIAL SPECIFICATION COMPLIANCE

- A. No substitutions for, or deviations from, the specific requirements of this specification will be permitted, without first obtaining written approval from the Purchasing Authority. Statements of clarification, exception, or deviation made by the Supplier within the Supplier's proposal will not be considered binding without confirmation and acceptance by the Purchasing Authority. Any such statements within the Supplier's proposal may result in the proposal being deemed as "Nonresponsive." Nonresponsive proposals may not be given further consideration.

1.7 GENERAL TESTING REQUIREMENTS

- A. Factory tests shall include all tests identified as "Production" in IEEE C37.09. Additionally, any special or specific tests identified within this specification shall be performed by the Supplier. The Supplier will submit an Inspection and Test Procedure Outline to the Purchasing Authority for acceptance at least three weeks prior to the commencement of testing.
- B. All test results, measurements, and calculated values shall be recorded on the Supplier's Certified Test Report. All data within the Certified Test Report shall be reviewed and accepted by the Purchasing Authority and OE before the circuit breaker is shipped. All production and special factory tests may be witnessed by the Purchasing Authority or OE.

- C. In addition to these factory tests, the Purchasing Authority or OE may also elect to inspect the interrupter at one or more production "hold" points prior to final testing. The hold points may include the following:
 - 1. Interrupter contacts and arc-extinction nozzles prior to tanking
 - 2. Operating mechanism prior to breaker assembly
- D. The Supplier shall notify the Purchasing Authority at least two weeks prior to each of the scheduled hold point dates
- E. Any test results that are deemed to be "Not Acceptable" or a "Failure" will require a detailed investigation prior to the performance of any remedial actions and/or retest.

1.8 TESTING PROCEDURE

- A. The order of tests performed will generally be in accordance with IEEE C37.09, and as agreed to in the Inspection and Test Procedure Outline document. The order may be modified as special circumstances present themselves during testing. The tests listed below are not intended to be all inclusive, or in the same order in which they may be performed.
- B. Construction and Dimensional Checking: Measurements are to be made by the Supplier's Quality Control personnel of the construction (paint and weld conditions) and dimensional characteristics, noting any significant deviations from the OE's approved outline drawings.
- C. Control Wiring: Where applicable, control wiring and contacts shall be tested with 60-hertz voltage of 1000 V applied for 60-seconds. Test jigs may be used to apply test voltage to multiple terminals at the same time. "Touch testing" for periods less than 60-seconds is not acceptable.
- D. Timing Checks: Breaker primary interrupting contacts and auxiliary contacts timing.

1.9 SUBMITTAL APPROVAL DOCUMENTS

- A. Provide drawings in both AutoCAD® Data Exchange File (DXF) and Portable Document Format (PDF) softcopy formats. Softcopy drawings are to be provided as a set in the approval drawings submittal package. Electronic copies may be sent via eBuilder to expedite approval as required. Submitted drawings and documents will be returned to the Supplier bearing the Responsible Engineer's Document Review Stamp, with instructions pertaining to the document's disposition in Section 700 - Submittals.
- B. All documents issued "For Approval" and "Final" shall clearly identify the specific purchasing document number, the facility or project name, and Owner's name in or near the title block. Copies of all required documentation shall be distributed as directed by the Purchasing Authority. All drawings and other documents furnished by the Supplier shall have the text written in English.

1.10 SUBMITTALS

- A. The Supplier shall provide the following drawings:

1. Assembled circuit breaker outline plan and elevations drawing, including pole-to-pole dimensions for centerline-to-centerline and metal-to-metal, height to line parts, height to ungrounded parts, height to centerline of pole tank, clearance required to remove the interrupter, and centers of gravity referenced to top of concrete and center of support frame.
2. Circuit breaker outline drawing, including structural details of base support frame, foundation anchorage locations and reactions, anchor bolt detail, conduit access locations, line and grounding terminal details, and foundation loading tables for the pole support frame and common control compartment (if applicable).
3. Nameplate drawing, including separate plates, if applicable, to include electrical ratings related to the breaker's interrupter capability, bushing current transformers, and operating mechanism. The nameplate(s) shall include the Supplier's model type, serial number, bill of material reference, and date of manufacture.
4. Bushing outline drawing, including electrical and mechanical ratings, weight, strike distance, and mounting and line terminal connection details.
5. Control panel assembly drawing, showing scaled locations for components and their accompanying bill of material item numbers.
6. A bill of materials for the control panel assembly drawing(s), including a nameplate schedule. Where applicable, include the original equipment manufacturer's name and part number in addition to the Supplier's designations.
7. Schematic and wiring diagrams showing complete pole and common control compartment wiring (including customer connection points); number, size, and power requirements of motors, compartment heaters, tank heaters; breaker close and trip control schemes; alarm and relay connections; terminal block assignments, and current transformer connections.
8. Bushing current transformer nameplate drawings (or this information may be shown on the main circuit breaker nameplate drawing); CT resistance per winding turn, and resistance of each lead; CT relaying accuracy classes; and CT characteristic curves showing ratio correction and secondary excitation for relaying accuracy CT's.
9. Local Annunciator device connection diagram, including the fiber optic interface.
10. Auxiliary switch(es) and alarm contact schematic and connection diagrams.
11. Instruction manual, covering receiving, handling, installation, operation, and maintenance manual of the BRKR and all accessories. The instruction manual shall also include the following:
 - a. Maximum and normal values of BRKR contact resistance.
 - b. Complete lists of renewal parts for the BRKR and all accessories, including identification of each part by name and part number. The parts lists and drawings shall relate specifically to the equipment covered by this specification; typical lists and drawings will not be acceptable.
 - c. Normal values of BRKR opening and closing times, with associated tolerances, and travel recorder chart.
 - d. Recommended intervals between scheduled maintenance and testing.
12. Manufacturer's Data: Furnish complete manufacturer's data for circuit breaker.

1.11 CERTIFIED TEST REPORTS

- A. Supplier's Certification: Indicate circuit breaker pressure vessels comply with ASME BPV (UG-120) requirements.
- B. Supplier's Certification: Certify that Products meet or exceed specified requirements.
- C. Operation and Maintenance Data: Provide Supplier's instructions covering the receiving, handling, installation, operation, and maintenance of the circuit breaker and all auxiliary equipment. All operation and maintenance manuals shall be written in English.
- D. Safety Data Sheets (SDS) for any chemical compounds that will be delivered in or with the circuit breaker including SF₆.
- E. Manufacturer's Data: Furnish complete manufacturer's data for circuit breaker.

1.12 RENEWAL PARTS

- A. Furnish a complete list of recommended renewal parts for the BRKR and all auxiliary equipment, including identification of each part by name and part number. Parts lists and drawings shall relate specifically to the equipment covered by this specification; typical drawings will not be acceptable.

1.13 FACTORY ACCEPTANCE TEST PLAN AND PROCEDURE

- A. The Supplier will perform routine production and design tests for the equipment specified herein in accordance with applicable industry standards and those identified in the Supplier's proposal.
- B. The Supplier will submit a copy of the Inspection & Test Plan (ITP) document prior to the start of testing associated with any testing performed under the directions of this specification to the Purchasing Authority and OE for approval and acceptance by the Purchasing Authority and OE. A schedule of when the planned activities are to be performed shall be submitted with the Test Plan document to the Purchasing Authority at least two weeks prior to the scheduled testing.
- C. The Supplier will provide specific details of the expected results which they deem to be "passing" or "acceptable" as part of the Inspection and Test Procedure.

1.14 PROPOSAL REQUIREMENTS

- A. The Supplier shall provide the following information with the proposal:
 - 1. A completed Proposal Summary Sheet furnished by the Purchasing Authority as part of the request for proposal (RFP).
 - 2. A reference list for equivalently sized units supplied to the North American Utility market within the past 5-years.
 - 3. Method of shipment.
 - 4. A preliminary outline with overall dimensions including the base mounting details.
 - 5. Approximate shipping weights of the assembled equipment.
 - 6. The Supplier shall identify the factory location where equipment is to be assembled and tested.

7. Major components and accessories Bill of Material, including names of the original equipment manufacturer or sub supplier, and material types and models as appropriate.
- B. The Supplier shall furnish the Quality Assurance/Quality Control Procedures requested in Quality Assurance/Quality Control Procedures QA/QC section of this specification.
- C. The Supplier shall state all the exceptions taken to this specification. If no exceptions are taken, the Supplier shall so state.

1.15 SPECIFICATION COMPLIANCE

- A. No substitutions for, or deviations from, the specific requirements of this specification will be permitted, without first obtaining written approval from the Purchasing Authority. Statements of clarification, exception, or deviation made by the Supplier within the Supplier's proposal is not considered binding without confirmation and acceptance by the Purchasing Authority. Any such statements within the Supplier's proposal may result in the proposal being deemed as "Nonresponsive." Nonresponsive proposals may not be given further consideration.

1.16 BID EVALUATION

- A. The Purchasing Authority's and the OE will evaluate the Supplier's proposed pricing as part of the bid evaluation process, prior to award of a contract. The bid evaluation process will compare the qualified suppliers' total cost including shipment costs, lead time, experience in North American equivalent circuit breakers market, warranty terms, exceptions and clarification to the specification, engineering, and field assembly cost components.

1.17 SHIPPING REQUIREMENTS

- A. The method of preparation for shipment will be such as to protect the equipment, including loose parts removed for shipping and auxiliary devices or accessories against corrosion, dampness, breakage, or vibration damage that might be encountered in transportation and handling. The manner of packaging will be such as to prevent tampering or pilfering and be acceptable to transportation companies.
- B. Shipment is not to be made until factory quality assurance tests have been completed and approved by the Purchasing Authority and OE. Any discrepancies have been resolved with the Purchasing Authority and OE.
- C. The BRKR will be shipped with each three-pole assembly assembled with its bushings whenever possible. If it is not feasible to ship assembled poles, the bushings shall be crated separately, and the poles shall be attached to the base support frame. All accessory items, small parts, and unit components to be separately boxed or bundled to prevent galling due to rubbing of one part against the other.
- D. All accessory items, small parts, and components are to be shipped with the main equipment and labeled for coordinated identification.

- E. A complete itemized bill of lading which clearly identifies and inventories each assembly, subassembly, carton, box, package, envelope, or container will be furnished and enclosed with each item or items shipped at the time of shipment.
- F. The assembled circuit breakers and accessories shall be delivered on a flatbed open trailer to facilitate offloading.

1.18 SULFUR HEXAFLUORIDE (SF₆)

- A. The SF₆ shall be shipped in steel cylinders as a liquefied gas. The net weight of contents shall be clearly identified for each cylinder. Limit the cylinder size to 122 cubic feet. Cylinder color shall be blue or a shade thereof.
- B. Supplier shall pack all cylinders of sulfur hexafluoride provided under this agreement in accordance with commercial standards as to protect them from damage in transit.
- C. Each shipping unit shall be marked plainly with the name of the consignee, shipping destination, purchase order number, markings required by law, and such other marking as requested by the company. A complete packing list shall be securely attached to the outside of each shipping unit.
- D. The Supplier shall obtain insurance on the value of all cylinders and product shipped.
- E. The Supplier's quoted prices shall include charges for the shipment of the cylinders of sulfur hexafluoride to the Purchasing Authority's specified destination.
- F. Title to the product shall not pass to the Purchasing Authority from the Supplier until acknowledgement by the Purchasing Authority and OE to the Supplier that the cylinders of sulfur hexafluoride were delivered to the site without loss or damage.

1.19 DIMENSIONS AND WEIGHT

- A. The Supplier shall be responsible for checking the shipping dimensions and weight of the proposed design for suitability for the method of shipment specified in the procurement documents.

1.20 NOTIFICATION OF SHIPMENT

- A. The Supplier will provide notification to the Purchasing Authority indicating the projected date of shipment, and then notify the Purchasing Authority a minimum of 48-hours prior to delivery of the equipment to ensure provisions for unloading. Contact information for the Purchasing Authority's Receiving Agent will be provided to the Supplier upon notice of shipment.

PART 2 - PRODUCTS

2.1 GENERAL TECHNICAL SPECIFICATION

- A. The BRKR will be an outdoor type, Class S2, with weatherproof operator components. The bushings and pole orientation shall maintain sufficient

separation between energized and de-energized components to maintain its rated BIL for service conditions up to an elevation of 3,300-feet above sea level. IEEE correction factors shall apply for operation above 3300-feet. The maximum ambient air temperature shall be 40°C, and the minimum shall be minus 30°C for "usual" service conditions. Site-specific elevation and ambient temperature range are listed in the Project Information appendix to these specifications. Site-specific conditions outside of the "usual" temperature range shall be dealt with as an "unusual" service condition under the guidelines of IEEE C37.04, Section 4.

2.2 GENERAL DESIGN REQUIREMENTS

- A. The BRKR shall be a sulfur hexafluoride (SF₆) three-pole, gas-insulated, IEEE Class S2 outdoor type, with single-break puffer or self-blast-puffer interrupters, 60 hertz, classified as a dead tank, with a common supporting frame. The BRKR shall have a common operating mechanism for all three poles. Provide a common SF₆ gas system for all three poles, including a gas density monitoring device, pressure gauge, and fill valve. No other gas shall be mixed with the SF₆. The rated interrupting time shall be three (3) cycles (49.2-milliseconds) or less.
- B. Provide a support base frame design that elevates the exposed energized bushing terminals to a height above the breaker's foundation which meets the vertical clearance requirements contained in the NESC. Energized current carrying components associated with each phase (pole) shall be contained within an SF₆ gas-insulated pressurized tank (one pole per tank), with separate SF₆-to-air bushings on each side of the interrupting contacts. Suppliers may quote alternate three-pole breakers, with a common support frame, with independent pole operating mechanisms should an independent pole operated type breaker with enhanced operating features (refer to Table A-1 and A-2 in the PSD) be required. Suppliers are requested to quote composite polymer bushing housings as their base proposal. Suppliers may also propose a vacuum interrupter in a dry-air containment as an alternate to SF₆ insulated interrupters.
- C. Breaker bushings are to be equipped with bushing current transformers protected in a corrosion resistant housing at the base of each bushing flange interface with the breaker's interrupter tank. Refer to the PSD for the BCT ratings and configuration associated with each BRKR.
- D. The BRKR shall be nameplated for continuous operation at the maximum voltage rating specified in the PSD. Supply the BRKR continuous current and interrupting current rating specified in the PSD.
- E. Provide a method for filling, testing, and monitoring the insulating medium. The monitoring system shall be compensated for temperature and include a time delayed alarm to account for fluctuations in gas pressure due to solar radiation heating.
- F. The insulating column's weather shed finish color shall be ANSI #70 light gray, or the Supplier's standard equivalent finish color. The interrupter tank, control cabinet, and any other compartment(s) shall also have a finish color of ANSI #70 light gray, or the Supplier's standard equivalent finish color. Exterior surfaces may be left in their natural finish if galvanized, or constructed of either marine grade aluminum, cast aluminum, or stainless steel. The interrupter tank interior shall have a white finish color.

- G. The BRKR shall be comprised of three (3) separate interrupter chambers (tanks), each qualified to meet the requirements of ASME Boiler & Pressure Vessel Code Section VIII, Division 1. Single-piece tank designs are required. Tanks may be constructed of either cast aluminum or mild steel. When applicable, Suppliers are requested to provide data with their proposal regarding the percentage of cast aluminum tanks which are rejected due to porosity issues. The chamber must have a registered ASME clover leaf stamp Pressure Vessel nameplate, which can be added either at the factory or in the field when specifically required within the PSD appendix of this specification. Aluminum tanks are to be left in their natural finish (unpainted).
- H. Primary terminals shall be a straight flat pad with NEMA standard 4-hole or 6-hole drilling. The width and thickness of the terminal pad shall be appropriate for the continuous current rating of the circuit breaker. Circuit breakers rated 2,000 A through 2,999 A continuous current shall have a 4-inch by 4-inch pad width. Circuit breakers rated 3,000 A continuous current and greater which employ an aluminum pad material shall have a minimum 6-inch by 4-inch pad width, with NEMA 6-hole drilling. Tinned copper terminal pads may be 4-inch pad width, with NEMA 4-hole drilling, may also be used in 3,000 A continuous current applications. Although aluminum primary terminals are preferred, they may be either tin plated bronze, or aluminum; the minimum plating thickness shall be 0.0002-inch applied through a hot tin dipping process. If the bushings are supplied with threaded copper studs, then the studs shall be silver plated, and supplied with plated bronze stud-to-flat straight pad terminal connectors. Provide appropriate corona protection rings for the breaker's BIL at the line connection terminals of the bushings.
- I. Circuit breaker support frame grounding terminals shall either be an integral part of the support frame and be drilled and tapped for a 2-hole NEMA connection, or a drilled 2-hole pad. Provide separate ground terminals on two (2) opposite support legs, no lower than 18 inches above the top of the frame base plate. If the support frame is removed for shipping, provide a ground terminal on both sides of the joining flange to accommodate a visible ground jumper across the frame joints.
- J. The BRKR shall be qualified according to the requirements of IEEE Standard 693. The assembled electrical equipment specified herein shall meet the requirements associated with the acceleration specified in the PSD. Frequency modifying devices shall not be allowed.
- K. Provide lifting gussets with eyes to accommodate handling and installation.
- L. If shunt capacitance is required for ANSI 90 percent short-line faults, the Supplier shall so state in their proposal.

2.3 OPERATING MECHANISM

- A. Operating Mechanism
 - 1. The BRKR shall be furnished with a common operating mechanism for all three poles.
- B. Type of Operating Mechanism
 - 1. The operating mechanism shall be one of the following stored-energy types: spring-spring (equivalent to the General Electric DT1-145, Hitachi/ABB FSA1, or Siemens 3AP) or spring-hydraulic (equivalent to the Hitachi/ABB type HMB-2 operator or Siemens 3AT operator). The

mechanism shall be equipped with control logic and mechanical linkages where necessary to provide the anti-pumping feature. The mechanism shall be capable of driving interrupters to interrupt the level of fault current specified in the PSD.

2. In all cases, the operating drive mechanism will charge a stored energy device upon the completion of a closing operation, which will not require additional application of the drive mechanism to perform an opening operation.
3. Operating mechanisms are to be mechanically charged by an electrical motor rated for operation with either a preferred 120/240 V AC primary source or an alternate DC power input (refer to the PSD for the available DC voltage). Provide separate isolation and overcurrent protection for the operating mechanism's charging (drive) motor power circuit. Additionally, provide a separate undervoltage alarm relay for the preferred AC source (Device Number 27-1), with a Form-B output contact from each providing alarm inputs to the local annunciator (Device Number 30, IN2) to change state when conditions are abnormal.
4. Provide an automatic transfer scheme (Device Number 83M) to transfer to the Alternate DC supply input upon the loss of preferred AC power, and automatically revert upon AC power restoration.
5. The mechanism's charging motor shall be equipped with an excess run-time monitor (Device Number 84M) and thermal overload detection (Device Number 49M) which will alarm an "abnormal" condition. Provide a Form-B contact from each device in series as alarm inputs to the local annunciator (Device 30, IN5 and IN65).
6. The Supplier shall include, in the approval drawings, a listing of the inrush current required to charge the closing spring(s) at 120/240 V AC and the specified DC voltage.

C. Operating Mechanism Enclosure

1. The group-operated BRKR is to be equipped with a common stored energy operating mechanism housed in either the common control compartment, with interior barriers to protect operating personnel from the moving parts of the mechanism, or in a separate compartment. The mechanism shall be accessible for maintenance by either opening latched compartment door(s) or removable panels. If applicable, the Supplier shall furnish all electrical connections between the operating mechanism compartment and the main control compartment. Access to the compartment style operator shall be through hinged and gasketed door(s), with a single rotating handle and multiple-point latching system. Drive mechanism cabinets or housings which are separate from the main control compartment shall be formed from non-corrosive materials.

2.4 BREAKER CONTROL COMPARTMENT

A. Compartment

1. Provide a NEMA 3R control compartment (may be combined with operating drive mechanism compartment where applicable) with door gaskets, screened and filtered vents to inhibit the accumulation of blowing dust and snow within the compartment, and appropriate climate conditioning to house the control and operating components associated with each single-pole circuit breaker assembly. A NEMA 3R compartment may be used so long as the compartment can be made resistant to blowing dust and insects

- with the addition of interior filters over the screened louvers. Provide a means of escape for accumulated interior moisture.
2. The compartment is to house the interface terminal blocks for terminating all electrical wiring. The Contractor will bring all external wiring in conduit or feed-through wireway to the breaker control compartment. The compartment shall be furnished with an interior mounted removable bottom (gland) plate for drilling, punching, or cutting to accommodate conduit/wireway field assembly. Access to the gland plate shall not be blocked by cross-bracing or other support frame features.
 3. The compartment doors shall be vertically hinged, removable, and operated by a single handle through a multiple-point latching system for each door. Each door shall be equipped with wind-stop hardware to secure the door while open. Door hardware shall be stainless steel.
 4. The control components, terminal blocks, and any other devices which may require access by operations and maintenance personnel shall be mounted in the compartment at a height less than 78-inches above foundation level. The bottom of the compartment shall be not less than 2-feet above foundation level. The compartment shall be furnished with two (2) space heaters and two (2) redundant space heaters. Each heater shall be supplied by a separate circuit isolation and overcurrent protection device. One of the heater circuits will operate continuously unless disconnected manually by the isolation and overcurrent protection device. The remaining heater circuits shall be controlled by a thermostat. The thermostats shall be adjustable, and the adjustment provisions shall include clear indication of at least three specific temperatures on the adjustment range. Heating elements shall be rated for an input voltage of 240 V AC; however, they are to be connected for operation at 120 V AC (one-quarter the rated wattage).
 5. The control compartment shall be furnished with one (1) 120 V AC, 20 A, duplex GFCI convenience receptacle, and an LED compartment light located in the top of the compartment adjacent to each door. Each light shall be controlled by a door-activated switch operated by its adjacent door.
 6. Provide a copper ground bus within the control compartment(s) interior, with a visible bonded connection to an external connection point to receive the Owner's grounding pigtailed. Provide a removable conduit access plate centered in the floor of the compartment. The plate shall be mounted within the interior of the compartment to facilitate removal during conduit or wireway installation.

B. Auxiliary Power, Alarm, and Control Wiring

1. Auxiliary internal power and control wiring shall consist of stranded copper wire, 600-Volt class, with insulation (or outer covering over the insulation) that is flame-retardant, heat-resistant, oil-resistant, and moisture-resistant. Insulation shall be a thermoset material, and UL classified as either SIS for wiring within a control panel, or XHHW-2 for wiring within a conduit or wireway.
2. Wiring runs outside of weatherproof compartments shall be in continuous corrugated armored cable. All wire terminations associated with inter-pole and Contractor furnished wiring shall be made on suitable molded, one-piece terminal blocks, with washer-less head binding screws. No wires shall be spliced. Both ends of all wires and all terminal block points shall be clearly marked with the designation shown on the Supplier's wiring diagrams. Terminal blocks shall be rated 600 Volts AC, 30 A, equipped with #10–32 binding screws, and suitable for wire sizes #18 through #10 AWG. All wires terminated on these blocks shall have non-insulated ring-type

terminals. Terminal blocks associated with the Contractor's AC and DC station service wiring terminations (refer to Table 4, TB4) at the common control compartment shall be suitable for wire sizes up to and including #6 AWG.

3. Alarm and status circuits between relay outputs and the local annunciator (Device 30) via the TB2 terminal blocks shall be wired using #16 AWG single conductor SIS 600-Volt cable with a dark blue insulation color.
4. Control circuits between the relay output contacts of the local annunciator (Device 30) and the Control Terminal Blocks (TB1) shall be wired using #14 AWG single conductor SIS 600-Volt cable with a white or gray insulation color. Wiring connections between the TB1 terminal blocks and the operating devices shall be wired using #14 AWG single conductor SIS 600-Volt cable with a white or gray insulation color.
5. Should the Supplier have a different insulation color standard than the insulation colors identified above, they are to provide a legend within their diagram of connections drawing(s) which identifies insulation colors by their function.

C. Auxiliary Switch

1. Provide a minimum of two (2) 10-stage auxiliary switches (Device Numbers 52-1 and 52-2) with each operating mechanism to satisfy the operational control requirements associated with a complete BRKR. Each 10-stage switch shall have either convertible contacts which may be configured as either a normally-open (Form-A) contact or a normally-closed (Form-B) contact, or half Form-A and half Form-B. Auxiliary switch operation shall be mechanically linked to the operational position of the breaker's primary interrupting contacts. If the BRKR is closed into a fault and trips open, the Form-B contacts shall remain open for a minimum of 0.025 seconds. Auxiliary switch contacts shall be rated for 600 V and a minimum of 10 Amps continuous current. In addition to those contacts required for operational control, and those identified for the Contractor's use in Table 1, a minimum of 10 percent of the number of utilized contacts shall be wired to terminal blocks as "Spares".

D. BRKR Control Switch

1. Furnish a rotary type, spring-return to normal, manually-operated breaker control switch (Device Number 52-CS) in the common control compartment, providing local control of three-pole operation, and which is intended to be used for emergency, maintenance, or commissioning purposes only.
2. Trip and close cycles shall be completed for momentary operation of the control switch. Form-A contacts associated with the "Local" position of Device 43L/R will enable Device Number 52-CS to locally open and close the BRKR.

E. Breaker Position Indicating Lights

1. This control switch shall also be furnished with red and green indicating lights. The lights may be mounted directly above the control switch or be integral to the control switch (equivalent to the Electroschwitch Series 24P lighted nameplate control switch). Indicating lights mounted separately shall employ GE type ET-16 Bases. Either method shall employ LED indicating lamps.
2. Provide two (2) red lights, each wired in series with one of the two independent trip coils and a separate Form-A breaker auxiliary contact from

Device Number 52-1. The red indicating lights shall illuminate when the BRKR's main contacts are in the "Closed" position and their associated trip coils are operational.

3. One green light wired in series with a Form-B breaker auxiliary contact from Device Number 52-1. The green indicating light shall illuminate when the BRKR's main contacts are in the "Open" position.
4. Provide a nameplate directly above the indicating lights, with the device number and a brief description of its function or purpose.

F. Local Annunciator

1. Provide a panel-mounted local annunciator within the common control compartment adjacent to the BRKR Control Switch. The local annunciator (Device Number 30) shall be Schweitzer Engineering Laboratories, Inc., Model SEL-2533 Annunciator (P/N 2533012130XA3X0) or an approved equivalent, providing fourteen (14) digital inputs, fifteen (15) digital outputs, and local display of up to ten (10) alarm conditions. Power supply and I/O voltage for Device 30 will be 48 V DC, unless otherwise noted in the PSD. Device 30 is to be equipped with two (2) EIA-232 rear communication ports, and one (1) EIA-232 front panel communication port. Includes IRIG-B SER time-stamping.
2. Control contacts associated with features within the BRKR shall be connected as outputs from the annunciator rear panel connector via intermediate terminal block TB1. Alarm contacts associated with features within the BRKR shall be connected as inputs to the annunciator rear panel connector via intermediate terminal block TB2.
3. Provide a fiber optic transceiver affixed to a rear EIA-232 communication port to convert to multimode fiber through ST connectors. The transceiver shall be equivalent to Schweitzer Engineering Laboratories, Inc., Model SEL-2812, P/N 2812MRX0, or approved equivalent.

G. Auxiliary Power, Alarm, and Control Voltages

1. The breaker primary and secondary trip circuits, close circuit, and the alarm circuits shall be DC powered. The operating mechanism's charging motor and control compartment heaters shall be AC powered. If applicable, pole tank heater circuits shall be rated for and operated at 240 V AC. The BRKR shall be equipped for operation with the AC or DC power supply voltages specified in the PSD. The Contractor will provide AC and DC power sources to the BRKR at the control compartment via Terminal Block TB4.
2. Furnish and install separate molded case circuit breakers, providing isolation and overcurrent protection, for each of the following systems: operating mechanism charging motor primary circuit; operating mechanism charging motor back-up circuit; convenience receptacle and compartment lighting; tank heaters, if applicable; and compartment heater circuits.
3. Additionally, furnish two (2) non-fused, 30 A minimum, 250 V DC, double-pole, single-throw, knife blade-type, gang-operated disconnect switches which are to be used for independently isolating the primary and secondary DC control power circuits from the control power source during maintenance. These switches must provide a means of preventing the electrical operation of the BRKR by any local or remote trip or close control input. Additionally, provide a separate undervoltage alarm relay for each of the primary (Device Number 27-2) and secondary (Device Number 27-3) control circuits, with two (2) independent Form-C output contact sets, one contact providing an alarm input to the local annunciator (Device 30, IN3 and IN4) when conditions are abnormal.

- H. Included Equipment
1. The operating mechanism including mechanical linkages shall be factory installed as completely as possible. The Supplier shall furnish all materials for the assembly of an operational circuit breaker that are to be installed in the field. Components which are removed from a factory operational BRKR for shipment, such as bushings or control compartments, are to be reinstalled at the jobsite by the Supplier, or their subcontracted representatives.
- I. Dual Trip Coils
1. Each operating mechanism shall be furnished with two separate and electrically independent DC trip coils. The two coils shall be arranged so that energization of either coil, or both coils simultaneously, and/or energization of either coil with the other coil shorted, will produce proper tripping. The primary trip coil and the close circuit shall be included in one DC control circuit. The secondary trip coil shall be included in a separate DC control circuit. The BRKR local control switch shall only operate the primary trip coil for manual "Open" operations.
 2. Trip coils shall be rated at 48 V DC and shall operate correctly for a range of 30-55 V DC, unless specified otherwise in PSD.
 3. Provide trip coil monitoring circuits to the local annunciator. (Device Number 30, IN11 and IN12 are set aside for monitoring the primary and secondary trip coils.) Additionally, connect the local red indicating lights, one for each trip coil, in series with each coil. The trip coil monitoring relay will be connected directly to the trip coil without a 52-a contact in-between, being energized so long as the trip coil does not fail to an open circuit. A normally open (52/a) contact from the breaker's auxiliary switch shall be connected as a status input to the local annunciator (Device Number 30, IN13). The station's programmable logic controller (not a part of this contract) will monitor the trip coil circuits and the breaker status contact remotely to determine if there has been a trip coil failure.
- J. Closing Relay
1. The BRKR control circuitry shall include a closing relay (Device 52X) which is to be used to seal in the anti-pump relay (Device 52Y) and initiate the breaker closing operation.
- K. Trip and Close Initiation
1. A protective relaying TRIP contact (from TB1, Positions 31 and 32) will be hard-wired as a common input to the breaker's primary trip coil. A separate protective relaying TRIP contact (from TB1, Positions 33 and 34) will be hard-wired as a common input to the breaker's secondary trip coil. A protective relaying CLOSE contact (from TB1, Positions 35 and 36) will be hard-wired as a common input to the breaker's close coil.
- L. SF₆ Gas Monitoring System
1. Provide a temperature compensated SF₆ gas density monitoring system (Device Number 63GD) having a minimum of three (3) alarm conditions, equivalent to the WIKA Model GDM-100. Provide a common system for all three (3) breaker poles. Mount the monitor in a location which avoids direct sunlight contact as much as possible, particularly when the sun is at a low angle to the horizon.
 2. The Device Number 63DG shall be furnished with normally closed contacts, with each contact connected to a separate auxiliary relay (Device

Numbers 63GDX-1, -2, and -3). Each Device Number 63GDX relay shall be fitted with a minimum of two (2) electrically separate Form-C relay output contacts. The monitoring system shall also provide visual indication of gas pressure in terms of pounds per square inch and in kPa.

3. Provide alarm indication associated with a LOW (abnormal) gas pressure condition. Provide an adjustable (0-30 minutes) time delay within the Device 63GDX-1 pick-up circuit for the LOW alarm condition to compensate for initial solar heating on the monitoring system. Connect a Form-A contact from the 63GDX-1 auxiliary relay as an input to the local annunciator (Device Number 30, IN9). Connect the second alarm relay output as a Form-C contact to Terminal Block TB1, Positions 19, 20, and 21, for the Owner's use. The breaker is to be fully functional and safe to operate when the insulation system pressure has dropped to the LOW gas pressure condition.
4. Provide alarm indication associated with a LOW-LOW (abnormal) gas pressure condition. Connect a Form-A contact from the 63GDX-2 auxiliary relay as an input to the local annunciator (Device Number 30, IN10). The Supplier shall indicate the breaker's functional capability in this alarm condition in their proposal and as a note on the schematic drawing. The Owner may elect to block closing when the breaker is in a LOW-LOW condition. Connect a Form-A contact from the 63GDX-2 auxiliary relay in series with the breaker's CLOSE circuit via Terminal Block TB1, Positions 25 and 26.
5. Provide a third alarm indication associated with a CRITICAL-LOW gas pressure condition. Connect a Form-A contact from the 63GDX-3 auxiliary relay as part of the Primary Trip circuit via Terminal Block TB1, Positions 27 and 28. Connect the second alarm relay output as a Form-C contact to Terminal Block TB1, Positions 22, 23, and 24, for the Owner's use. The intended use for this contact will be an input to the protective relaying scheme, which will in turn send an additional trip signal to the breaker and pick-up a lockout relay indicating a breaker failure condition.
6. Suppliers shall submit recommended maintenance intervals, materials, methods and qualifications necessary for completing service intervals. Provide volume and pressure of SF₆ tanks and anticipated number of operations per tank.
7. Provide an on-line hygrometer/moisture sensor (Device Number 45DP) to monitor the dew point of the SF₆ gas space. The hygrometer shall employ either a chilled mirror or aluminum oxide moisture sensor. The monitor shall indicate both dew point and ambient temperature of the gas mixture referenced in degrees Celsius. Additionally, the monitor shall transmit a 4 – 20 mA analog output as an input to the local annunciator.

M. Local/Remote Switch

1. Provide a 2-position, manually operated, rotary type control switch (Device Number 43L/R) in the common control compartment for locally enabling and disabling tripping and closing circuits. In the "Local" position, the switch will allow closing and tripping of the breaker via the local 52-CS switch while disabling remote close and trip capability. In the "Remote" position, the switch will allow remote closing and tripping of the breaker but will block local closing and tripping via the 52-CS switch. In addition, a normally open contact of the 43L/R switch will be wired into the local annunciator (Device Number 30, IN1) to provide indication that the 43L/R switch is in the "Local" position.

N. Interface Terminal Blocks

1. The Contractor's control and alarm cables shall terminate on independent, 12-position terminal blocks. These terminal blocks shall be furnished by the Supplier in the common control compartment for the exclusive use of the Contractor. The purpose or function of each connection shall be identified. The control, alarm, and auxiliary terminal blocks shall be wired per Tables 1, 2, and 3. Where more than 12-positions are associated with a Terminal Block Number identified in Tables 1, 2, and 3, multiple 12-position terminal blocks are to be provided, with the first block containing positions 1 through 12, and the second block containing positions 13 through 24, and so on. Terminal Block TB4 is intended to terminate larger cables associated with station service AC and DC circuits.
2. Terminal block positions identified as a "Test Point" are intended to aid troubleshooting and are to be inserted into the control schematic at designated points.

O. Fiber Optic Cable Management

1. The Supplier shall furnish and install a fiber optic cable management system within the BRKR control compartment, including a splice and connector housing, and multimode patch cords between the connector housing and each of the auxiliary devices equipped for digital communication. The splice and connector housing shall include provisions for up to twelve (12) multimode fiber connections using ST type connectors, and a splice tray for up to twelve (12) splices. The splice and connector housing shall be Corning Number SPH-01P, with connector panel, Corning Number CCH-CP-G5, or an approved equivalent. Provide and install a patch cord between the connector panel and the Device 30 fiber optic connections. The patch cord shall have ST type connectors and offer OM1 performance.

P. Auxiliary Device Software

1. A record of the installed software, license data, and support information must be documented. The programming of any HMI, logic, control, database settings, etc., must be provided in the original equipment manufacturer's format. Additional licenses must be included to allow the Owner to access and review the data. All manufacturer default accounts and passwords shall be deleted from the HMI prior to acceptance.

Q. Terminal Block Assignments

1. The Supplier shall provide control schematics with references to the following terminal block assignments.

Table 1 – Control Terminal Block TB1 BRKR - Group-Operated			
Terminal Position	Designation	Device 30 Output Number	Explanation and Requirements
1	Primary DC Power Positive		Primary +48 V DC station battery
2	Primary DC Power Negative		Primary –48 V DC station battery
3 and 4	52-1 Form-A Contact		Auxiliary Switch Form-A (52-1/a) contact wired between Terminals 3 and 4 – For Owner's use
5 and 6	52-2 Form-A Contact		Auxiliary Switch Form-A (52-2/a) contact wired between Terminals 5 and 6 – For Owner's use

Table 1 – Control Terminal Block TB1 BRKR - Group-Operated			
Terminal Position	Designation	Device 30 Output Number	Explanation and Requirements
7 and 8	52-1 Form-B Contact		Auxiliary Switch Form-B (52-1/b) contact wired between Terminals 7 and 8 – For Owner's use
9 and 10	52-2 Form-B Contact		Auxiliary Switch Form-B (52-2/b) contact wired between Terminals 9 and 10 – For Owner's use
11 and 12	Remote Open Control		Hard-wired Form-A (52-RS-1/a) from the remote control room's breaker control switch (Device Number 52-RS)
13 and 14	Primary Relay Protection Trip	OUT1	Remote contact closure connected in series with Device 43L/R "Remote" contact to Trip Coil #1
15 and 16	Back-up Relay Protection Trip	OUT2	Remote contact closure connected in series with Device 43L/R "Remote" contact to Trip Coil #2
17 and 18	Remote Close Control	OUT3	Remote contact closure connected in series with Device 43L/R "Remote" contact to Close Coil
19, 20, and 21	Remotely Enable Close	OUT4	Enable both local and remote close (in series with Close Coil)
22, 23, and 24	LOW SF ₆		LOW SF ₆ Pressure Alarm (Device Number 63GDX-1, Form-C contact) – For Owner's use
25 and 26	CRITICAL-LOW SF ₆		CRITICAL-LOW SF ₆ Pressure Alarm (Device Number 63GDX-1, Form-C contact) – For Owner's use
27 and 28	LOW-LOW SF ₆		Block Close when LOW-LOW SF ₆ Pressure Alarms (Device Number 63GSX-2, Form-B contact) – Supply with jumper, Owner removal if desired
29 and 30	CRITICAL-LOW SF ₆		Initiate Trip when CRITICAL-LOW SF ₆ Pressure Alarms (Device Number 63GDX-3, Form-A contact)
31 and 32	Relay Trip		Protective relay trip signal to Primary Breaker Trip circuit (Trip Coil #1)
33 and 34	Relay Trip		Protective relay trip signal to Secondary Breaker Trip circuit (Trip Coil #2)
35 and 36	Relay Close		Protective relay close signal to Breaker Close circuit (Close Coil)

Table 2 – Alarm Terminal Block TB2 BRKR - Group-Operated			
Terminal Position	Designation	Device 30 Input Number	Explanation and Requirements
1	Alarm Positive		Device 30 positive with one side of all alarm contacts wired in common
2	Alarm Negative		Device 30 negative with one side of all alarm inputs wired in common
3 and 4	Annunciator Window 1	IN1	Local/Remote Control Switch (Device 43L/R) in “Local” position
5 and 6	Annunciator Window 2	IN2	Loss of AC Supply to the charging motor circuit (Device Number 27-1)
7 and 8	Annunciator Window 3	IN3	Loss of DC Supply to the primary control circuit (Device Number 27-2)
9 and 10	Annunciator Window 4	IN4	Loss of DC Supply to the secondary control circuit (Device Number 27-3)
11 and 12	Annunciator Window 5	IN5	Excess charging motor run time alarm (Device Number 84 M)
13 and 14	Annunciator Window 6	IN6	Charging motor thermal overload alarm (Device Number 49M)
15 and 16	Annunciator Window 7	IN7	For the Supplier's use.
17 and 18	Annunciator Window 8	IN8	For the Supplier's use.
19 and 20	Annunciator Window 9	IN9	63GD LOW SF ₆ gas alarm
21 and 22	Annunciator Window 10	IN10	63GD LOW-LOW SF ₆ gas alarm
23 and 24	Input Only	IN11	Trip Coil Monitor - Trip Coil #1
25 and 26	Input Only	IN12	Trip Coil Monitor - Trip Coil #2
27 and 28	Input Only	IN13	Auxiliary Switch Form-A (52-1/a) contact for breaker status
29 and 30	Input Only	IN14	Moisture detected
31 and 32	Input Only	IN15	Spare
33 and 34	Input Only	IN16	Spare
35 and 36	Input Only	IN17	Spare

Table 3 – Auxiliary Output Contacts Terminal Block (TB3) BRKR - Group-Operated		
1 and 2	52-1 Form-A	Auxiliary Switch Form-A (52-1/a) contact wired between Terminals 1 and 2
3 and 4	52-2 Form-A	Auxiliary Switch Form-A (52-2/a) contact wired between Terminals 3 and 4
5 and 6	52-1 Form-B	Auxiliary Switch Form-B (52-1/b) contact wired between Terminals 5 and 6
7 and 8	52-2 Form-B	Auxiliary Switch Form-B (52-2/b) contact wired between Terminals 7 and 8
9 and 10	52-1 Form-B	Auxiliary Switch Form-B (52-1/b) contact wired between Terminals 9 and 10
11 and 12	52-2 Form-B	Auxiliary Switch Form-B (52-2/b) contact wired between Terminals 11 and 12

Table 4 – Station Service (TB4) BRKR - Group-Operated Station Service (TB4)		
1	L1	240 V AC (from the Contractor)
2	L2	240 V AC (from the Contractor)
3	N	Neutral to establish 120 V AC (from the Contractor)
4	G	Ground (from the Contractor)
5	Supply Positive	Back-up DC Power for Operating Mechanism Charging Motor (from the Contractor)
6	Supply Negative	Back-up DC Power for Operating Mechanism Charging Motor (from the Contractor)

2.5 BUSHINGS AND CURRENT TRANSFORMERS

A. Bushing Type and Color

1. Bushing housings shall be ANSI 70 light gray polymer. Porcelain bushings may be acceptable as an alternate and should be proposed as an alternate only after proposing polymer bushings.
2. Bushings shall have a minimum strike distance and a minimum leakage (creep) distance as specified in the PSD. The bushing BIL rating shall meet or exceed the breaker's BIL rating.
3. Polymer bushings with a BIL rating above 900 kV shall be supplied with line end voltage grading rings.

B. Bushing Current Transformers

1. BCT's designated for protective relaying functions shall be typically 5-tap, multi-ratio, with full-winding ratios and accuracy as specified in the PSD. Each multi-ratio BCT with a primary current rating of 2000 Amps and higher shall be a Class 1 Instrument Transformer as defined by IEEE C57.13 with an accuracy class of C800, unless noted otherwise in the PSD. Each multi-ratio BCT with a primary current rating of less than 2000 Amps shall be a Class 1 Instrument Transformer as defined by IEEE C57.13 with an accuracy class of C800, unless noted otherwise in the PSD.
2. As noted in the PSD, a three-phase set of single-ratio BCT's may be required for metering functions. In which case the BCT shall have a minimum Accuracy Class as defined by IEEE C57.13 of 0.15%. The metering BCT shall also have a minimum Burden Rating of B0.9 (22.5 VA @ 5 Amps secondary current). Refer to the PSD for the Accuracy Class and Burden Rating required for this project.

3. All BCT secondary leads associated with each pole shall be wired to 6-point short-circuiting type terminal blocks in the common control compartment. A separate terminal block, complete with shorting screws, shall be furnished for each BCT. BCT secondary leads shall be #10 AWG single conductor cables. BCT secondary leads shall not contain splices between the CT core/winding assembly and the shorting terminal blocks.
4. All BCT's shall have a minimum thermal rating factor of 2.0.

2.6 ACCESSORIES

- A. Operation Counter and Mechanical Position Indicator
 1. Each operating mechanism shall have an operations counter arranged to count each opening operation.
 2. Each operating mechanism shall have a visual mechanical position indicator effectively connected to the operating mechanism. Green shall indicate open, and red shall indicate closed.
- B. Bushing Line-End Grading Rings
 1. Provide appropriate grading rings at the line terminal to control coronal discharge. The Supplier shall account for these rings when determining the height of the support frame, to maintain the required vertical clearance to ground level for personnel safety (per the NESC requirements for the breaker's nameplated BIL).
- C. Latch Check Switch
 1. Where applicable, each operating mechanism shall have a latch check switch or hydraulic latch valve. If a latch check switch is not applicable, so state it in the Supplier's proposal.
- D. Travel Recorder
 1. Where applicable, each BRKR pole shall be furnished with provisions for installation of a linear motion travel recorder, with #10-32 threaded connection, or an equivalent transducer such as the Doble 3190. If a travel recorder is not applicable, so state it in the Supplier's proposal.
- E. Maintenance Closing Device and Tools
 1. Where applicable, the BRKR shall be equipped with a manually-operated maintenance closing device, and any special tools required for installation and maintenance. If a manually-operated maintenance closing device is not applicable, so state it in the Supplier's proposal.
- F. SF₆ Gas Installation Tools
 1. SF₆ gas required for field installation shall be furnished by the Supplier in bottles using standard US fittings and shall comply with the requirements as listed below. Gas sampling and filling connections on the BRKR shall be furnished with standard "AN" fittings, male, with 37-degree flare. A SF₆ fill hose and regulator shall be supplied for each shipping destination. The valves fitted to the cylinders shall conform to ANSI B57.1 Part I or IS:3224. Connections shall comply with ANSI CGA V—2021 (Standard for Compressed Gas Cylinder Valve Outlet and Inlet Connections, 15th Edition).
- G. Field Installation of Gas

1. The material supplied under this specification shall be a high-purity, low-moisture grade sulfur hexafluoride. Water Content: Moisture content shall not exceed limits established by the BRKR Supplier and approved by the Purchasing Authority and OE, and in no case, be greater than 5 parts per million (ppm) by volume.
 - a. Other Impurity Limits
 - 1) Hydrolysable Fluorides: Hydrolysable fluorides, expressed as HF acidity, shall not exceed 0.3 ppm.
 - 2) Molecular Nitrogen: Air, expressed as N₂ or molecular nitrogen, shall not exceed 250 ppm per volume.
 - 3) Carbon Tetrafluoride: Carbon tetrafluoride shall not exceed 100 ppm by volume.
 - 4) Assay: Total SF₆ assay shall not be less than 99.95% by weight.
 - 5) Toxicity: The Supplier shall certify that the material supplied is at least as non-toxic as those substances in Underwriters Laboratories toxicity classification Group VI. SF₆ gas is not inherently toxic and shall present no dangers other than suffocation or high pressurization.

2.7 PAINT AND FINISH

- A. Control Compartment Exterior Finish and Bushing Color
 1. The control compartment exterior paint finish, and bushing housings shall be Munsell 5.0 BG 7.0/0.4 light gray. Supplier shall furnish one quart of touch-up paint per BRKR. Cast aluminum, aluminum, and stainless steel components shall be left in their natural finish.
- B. Control Compartment Interior Finish
 1. The control compartment interior shall be painted the ANSI 61 Standard.
- C. Surface Preparation
 1. The following referenced surface preparation specifications of the Society of Protective Coatings (SSPC) shall form a part of this specification:
 - a. Solvent cleaning (SSPC-SP1): Removal of oil, grease, soil, salts, and other soluble contaminants by cleaning with solvent, vapor, alkali, emulsion, or steam.
 - b. Hand tool cleaning (SSPC-SP2): Removal of loose rust, loose mill scale, loose paint, and other loose detrimental foreign matter, by hand chipping, scraping, sanding, and wire brushing.
 - c. Power tool cleaning (SSPC-SP3): Removal of loose rust, loose mill scale, loose paint, and other loose detrimental foreign matter, by power tool chipping, descaling, sanding, wire brushing, and grinding.
 - d. White metal blast cleaning (SSPC-SP5): Removal of all visible rust, oil, grease, soil, dust, mill scale, paint, oxides, corrosion products and foreign matter by blast cleaning.
 - e. Commercial blast cleaning (SSPC SP6): Removal of all visible oil, grease, soil, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter, except that staining shall be limited to no more than 33 percent of each square inch of surface area.
 - f. Brush-off blast cleaning (SSPC-SP7): Removal of all visible oil, grease, soil, dust, loose mill scale, loose rust, and loose paint.

- g. Near-white blast cleaning (SSPC-SP10): Removal of all visible oil, grease, soil, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter, except that staining shall be limited to no more than 5 percent of each square inch of surface area.
 - h. Marginally prepared surfaces (maintenance): Remove visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter in accordance with manufacturer's instructions.
- 2. All surfaces of the control compartment, covers, panels, etc., shall be thoroughly cleaned by degreasing and abrasive blasting to remove scale, rust, and corrosion (SSPC-SP2, -SP3, -SP5, -SP6, SP7, and -SP10). Oil and grease shall be removed chemically or with steam, and in accordance with the manufacturer's criteria (SSPC-SP1). Steel surface and fabrication defects shall be corrected. Weld splatter and slag shall be removed. Welded seams, undercuts, recesses, porous surfaces, weld flux, and sharp edges are to be finish to smooth and rounded surfaces. All surfaces shall be dry and then be given at least one primer coat within eight hours to prevent the formation of rust. Vinyl, zinc-pigmented, or chlorinated rubber primers are unacceptable.
 - 3. Prepare steel surfaces in accordance with manufacturer's criteria. Cast aluminum and stainless steel components shall be left in their natural finish.
 - 4. After preparing the primed surfaces, all exterior surfaces shall be given two field coats in accordance with the manufacturer's instructions of an approved finish coating having an acceptable total dry-film finish thickness (DFT). The primer, intermediate, and finish coatings are to be compatible with one another and from the same coatings manufacturer. Electrostatically applied polyurethane powder paint is also acceptable if approved by UL for this application.

D. Preparation and Application

- 1. After preparing the primed surfaces, all exterior surfaces shall be given two field coats in accordance with the manufacturer's instructions of an approved finish coating having an acceptable total dry-film finish thickness (DFT). The primer, intermediate, and finish coatings are to be compatible with one another and from the same coatings manufacturer. Electrostatically applied polyurethane powder paint is also acceptable if approved by UL for this application.
- 2. Mix and thin coatings, including multi-component materials, in accordance with manufacturer's instructions. Keep containers closed when not in use to avoid contamination, and do not use mixed coatings beyond pot life limits. Use application equipment, tools, pressure settings, and techniques in accordance with manufacturer's instructions. Uniformly apply coatings at spreading rate required to achieve specified DFT. Apply coatings to be free of film characteristics or defects that would adversely affect performance or appearance of coating systems. Ensure that edges, corners, crevices, welds, and similar areas receive film thickness equivalent to adjacent areas.
- 3. Apply coatings in accordance with manufacturer's instructions.
- 4. The Supplier shall furnish documentation to the OE regarding their standard system, and the OE will review and accept as appropriate. The Supplier will furnish one (1) can of matching paint to accommodate field touch-up. Field coating repairs are to be made in accordance with the manufacturer's instructions.

- E. External fasteners and Hardware
 - 1. All external fasteners and hardware (such as bolts, screws, hinges, and handles) associated with the ground-potential portion of the breaker shall be stainless steel.

2.8 CLOSE/OPEN DUTY CYCLES

- A. The BRKR shall be capable of an initial OPEN-CLOSE-OPEN operation cycle without derating.
- B. Following the initial OPEN-CLOSE-OPEN operation cycle, the BRKR shall be capable of performing at least one more CLOSE-OPEN cycle, with a maximum delay of 180-seconds between cycles.
- C. Refer to the PSD for the closing and opening time requirements specific to this project.
- D. The Supplier shall confirm their ability to meet these requirements in their proposal.

2.9 CAPACITANCE CURRENT SWITCHING

- A. The BRKR shall be capable of switching capacitive currents as defined for either a Class C1 or C2 Circuit Breaker (refer to the PSD for specific requirement) as identified by ANSI C57.04. Additionally, the breaker shall be rated to switch overhead line charging current equivalent to ratings listed for either a Class C1 or C2 Circuit Breaker (refer to the PSD for specific requirement) as identified by ANSI C57.04 and corresponding to the Maximum Voltage listed in the PSD. The rated Transient Overvoltage shall correspond to the test duty indicated in the PSD for an effectively grounded system.

2.10 OUT-OF-PHASE SWITCHING

- A. The BRKR shall be suitable for switching under out-of-phase conditions with an opening angle of 180-degrees (full phase opposition) and a closing angle of 90-degrees; out-of-phase switching current rating shall be 25 percent of the rated symmetrical interrupting capability.

PART 3 - EXECUTION

3.1 QUALITY ASSURANCE (QA) / QUALITY CONTROL (QC)

- A. Suppliers shall furnish a copy of the appropriate quality assurance/quality control procedures relating to this product and the specific facilities and design services utilized in the manufacturing process to the Purchasing Authority.
- B. Each Supplier shall have a quality assurance program that meets requirements of ISO 9000. Documentation demonstrating that the Supplier has met these requirements shall be part of the bid documents.
- C. Compliance and suitability of QA/QC procedures for this product shall be evaluated by means of factory inspection trips, self-evaluations, and other methods as deemed appropriate by the Purchasing Authority.

3.2 QUALITY SURVEILLANCE

- A. A Quality Surveillance Representative (QSR) may be employed by the Purchasing Authority to be present at the Supplier's facility during the manufacturing and testing of the equipment as specified herein. If a QSR is employed, the QSR will always comply with the Supplier's safety and procedural requirements while in the Supplier's facility and the following additional guidelines shall apply.
- B. Cooperation with QSR
 - 1. The Supplier shall cooperate with the QSR and arrange a reasonable and mutually agreeable schedule for the required inspections and witnessing of tests, consistent with maintaining scheduled progress of the equipment through the Supplier's facility.
- C. Authority of QSR
 - 1. The QSR will have full authority from the Purchasing Authority to make whatever decisions are necessary to ensure that the completed equipment complies with all requirements of the Purchasing Authority's procurement documents, and to ensure that all required inspection and witness activities are carried out.
- D. Disagreements
 - 1. In the event of significant disagreement between the Supplier and the QSR concerning scheduling of inspection or witness activities or concerning interpretation of the Purchasing Authority's procurement documents, the Supplier and the QSR shall promptly and jointly contact the Purchasing Authority to resolve the matter.

3.3 WARRANTY INSPECTION

- A. If damage is discovered by the Receiving Agent at the time of shipping receipt, the Supplier will be contacted to determine if field repairs can be made. The costs associated with the Supplier's field service representative making the necessary repairs and/or corrections are the responsibility of the Supplier.
- B. Should the nature of the repairs require the unit to be returned to the factory, or authorized service facility for resolution, the associated freight and repair costs are the sole responsibility of the Supplier. The Supplier will contact the Purchasing Authority prior to shipment to discuss the probable schedule impact for having the equipment available for installation and operation. Both parties will mutually agree upon the proposed schedule.
- C. Hidden damages which may be discovered at the time of installation and/or placing the equipment in service including during any field testing activities are to be handled per the warranty terms mutually accepted at the time of purchase order placement.

3.4 DESIGN REVIEW

- A. The Purchasing Authority reserves the right to have a technical representative visit the Suppliers facilities to conduct a formal design review. The Supplier's design personnel are to present the particulars of the circuit breaker's design to the reviewer for comment and acceptance. The reviewer's acceptance will not relieve the Supplier of their design responsibilities.

- B. The approval drawing package should be issued at least 2-weeks prior to design review meeting.

3.5 INSTALLATION

- A. When the BRKR is delivered under DAP freight terms the Supplier shall provide the services of an Installation Service Engineer to oversee the Installation by the Contractor of the BRKR at the jobsite. The Supplier shall include the cost of three (3) separate trips within their proposal.
- B. The first trip shall occur when the breakers are being transferred to the foundation, with a planned duration of two (2) 8-hour days at the jobsite. Travel related expenses are to be included within the proposed cost.
- C. A second trip shall occur when the breakers are ready for field testing and commissioning, with a planned duration of four (4) 8-hour days at the jobsite. Travel related expenses are to be included within the proposed cost.
- D. A final trip shall occur after the breakers have been energized. The purpose of this trip is to provide training to the Owner's operation and maintenance personnel, with a planned duration of two (2) 8-hour days at the jobsite.
- E. The Purchasing Authority will provide a minimum of seventy-two (72) hours' notice to the Supplier for each of the activities described above.
- F. All personnel who are to be admitted to the jobsite will be required to attend a mandatory site orientation and comply with all site safety requirements. Pre-Job Hazard Assessments are required prior to conducting work.
- G. The Contractor will furnish and install the following items which interface with the assembled circuit breaker(s):
 - 1. Station service, control, and alarm circuits which are to be terminated at the interface terminal blocks within the control compartment.
 - 2. Electrical bus connections between the breaker's bushing terminals and the substation switch and bus equipment.
 - 3. Grounding connections between the substation ground grid and the support frame grounding pads and control compartment ground bus.
 - 4. Installation of anchor bolts or welding the breaker's support frame baseplates to the foundation's embedded steel anchorage plates.
- H. Prior to final filling with SF₆ gas, the following tests will be supervised by the Supplier:
 - 1. The insulation resistance of the bushing line terminals to ground shall be measured.
- I. After final filling with SF₆ gas the following tests will be supervised by the Supplier:
 - 1. The insulation resistance of the bushing line terminals to ground shall be measured.
 - 2. Calibration of the gas density monitor and contact closure coordination.
 - 3. Resistance of each pole between assembled terminal pads, including the closed interrupting contacts.
 - 4. Resistance of each pole between assembled terminal pads, including the open interrupting contacts.
 - 5. Other tests as specified by the circuit breaker Supplier.

- J. The Supplier will submit a written test report documenting results of the field testing to the Purchasing Authority. Final acceptance of equipment will not be made until the Purchasing Authority's Technical Representative approves the field tests.
- K. Upon receipt of the OE's acceptance of the written test report results from the Purchasing Authority, the Supplier shall then provide a written certificate to the Purchasing Authority indicating that the installation terms of the warranty have been satisfied, and that the warranty is in full effect as of the date of installation completion.

Appendix A. Project Specific Data Sheets (PSD)

A.1 UNITS REQUIRED FOR THE SPECIFIC PROJECT

The Supplier shall provide the number of three-pole BRKR Group-Operated circuit breaker assemblies either with or without the special features as indicated in Tables A-1 and A-2 below.

Table A-1 - Units Required			
Device Numbers	Supply with Closing Resistors	Continuous Current Rating	Quantity
52-T1 and T2	No	1200 A	Two (2)

Table A-2 - Units Required			
Device Numbers	Synchronous Control of Closing and Opening	Condition Monitoring	External Capacitors for Short-Line fault
52-T1 and T2	No	TBD	No

A.2 SPECIFIC BUSHING CURRENT TRANSFORMER (BCT) CONFIGURATION

Bushing current transformers supplied shall be furnished as indicated in Table A-3 below.

Table A-3 – Bushing Current Transformers				
Device Numbers	Bushing	Position	Ampere Ratio	Accuracy
52-T1 and -T2	1, 3, 5	X and Y	1200:5 MR	C800
	2, 4, 6	X and Y	1200:5 MR	C800

Notes: Position “X” is the bushing current transformer position closest to the bushing’s line terminal, while Position “Y” is directly below Position “X”, and where required Position “Z” is directly below Position “Y” and closest to the interrupting contacts.

A.3 BRKR ELECTRICAL RATINGS

Each BRKR shall be rated for the electrical parameters outlined in Table A-4 below.

TABLE A-4 –BRKR Electrical Ratings	
Power Frequency	60 Hertz
Nominal System Voltage	69 kV rms
Maximum Continuous Voltage	72.5 kV rms
IEEE Application Class	S2
TRV Test Duty	T60
Power Frequency Withstand Voltage (1-minute Dry)	160 kV rms
Full Wave Lightning Impulse Withstand Voltage (BIL)	350 kV Peak
Chopped Wave Withstand Voltage (2-Microseconds)	452 kV Peak
Minimum Continuous Current Rating	1200A
Minimum Interrupting Current Rating	40 kA rms
Minimum Closing and Latching Current	130 kA peak
Rated Interrupting Time	50 milliseconds
Capacitive Current Switching Class	C1
Minimum Overhead Line Switching Current	100 A rms
Minimum Isolated Capacitive Switching Current	800 A rms
Shunt Capacitor Bank Back-to-Back Switching Current	630 A rms
DC Control Voltage	48 V DC
AC Supply Power	120/240 V AC single-phase
Charging Motor Alternate Power Source	48 V DC

A.4 BRKR PHYSICAL RATINGS

The BRKR shall provide the physical clearances and dimensions outlined in Table A-5 below.

Table A-5 – BRKR Physical Ratings	
Site elevation above 3300 feet above sea level (Yes/No)	No
Minimum height from base to energized bushing components	126-inches
Minimum height from base to bushing non-grounded flange	102-inches
Minimum phase-to-phase pole spacing at the line terminal centerline	36-inches
Minimum metal-to-metal spacing between pole line terminals	28-inches
Minimum height from base to centerline of pole tank	75-inches
Minimum height from base to bottom of common control compartment	25-inches
Maximum height from base to center of control/relay devices located in the common control compartment	78-inches
Supply with polymer bushings (Yes/No)	Yes
Minimum creepage (leakage) distance of bushing weather sheds	70-inches
Minimum strike distance over bushing weather sheds	22.5-inches
Minimum static horizontal transverse terminal load force	250-pounds-force
ASME "U-Stamp" Required (Yes/No)	Yes
Supply with interphase wiring duct (Yes/No/NA)	NA
Supply with Condition Monitoring	No
Supply with Synchronous Control of Closing and Opening	No

A.5 SEISMIC QUALIFICATION LEVEL

The assembled BRKR will be designed to meet or exceed the requirements associated with IEEE 693 for a SQL as specified in Table A-6 below:

Table A-6 - SQL
Moderate

Appendix B. Site Specific Information

Completion of “blank areas” in the tables of this Appendix will be supplied once the information is available and/or necessary.

B.1 FACILITY SUMMARY

Site Location and Direction

PROJECT NAME	STAGE II RELIABILITY UPGRADES MONTHILL POWER SUBSTATION
State	Nevada
County	Clark
Nearest City or Town	Las Vegas
Latitude (approximate substation location)	36°06'42.62" North
Longitude (approximate substation location)	115°04'58.77" West
Driving Directions from Nearest Interstate Highway	Exit 592 off Highway 93
Project Site Physical Address	4095 E. Flamingo Rd.
Specific Codes/Publications for Project Locality (if known)	

Environmental and Local Conditions

DESCRIPTIONS	DATA		SOURCE
Elevation	1840 FT	Feet above mean sea level	Google Earth Pro
Design – Extreme High Ambient Temperature	47.2	°C	Weatherbase (Las Vegas)
Design – Extreme Low Ambient Temperature	-13.2	°C	Weatherbase (Las Vegas)
Design – Highest Average Ambient Temperature within a 24-hour period	34.6	°C	Weatherbase (Las Vegas)
Average Annual Precipitation	4.2	inches	Weatherbase (Las Vegas)
Ground Acceleration: plus, or minus 0.35g (IEEE 693 Moderate Seismic Performance Level)			

B.2 ORGANIZATION AND MANAGEMENT

Owner Project Personnel

The following staff members have key responsibilities for directing the contracted services for this Project. The project team may include other individuals and support staff as necessary to support the Project.

Owner Name:	Southern Nevada Water Authority
Street Address:	4095 E. Flamingo Rd
Mailing Address (if different)	100 North City Parkway, Suite 700
City State Zip	Las Vegas, NV 89106
COMMERCIAL ISSUES - PURCHASING	Colorado River Commission
Phone	702-856-3611
e-mail	Colorado River Commission
PROJECT MANAGER	Jonathan Tull, PE
Phone	702-691-5228
e-mail	Jonathan Tull <Jonathan.Tull@lvvwd.com>
KEY PROJECT STAFF	
Engineering Manager	Ryan Pearson

Technical Application Questions

Technical questions regarding this material specification or notice of any other technical matters which arise during the proposal process or during equipment design, manufacture, or test, shall be directed to the Owner's Engineer.

Owner's Engineering Firm Name:	Stantec Consulting Services Inc.
Street Address:	601 SW Second Avenue., Suite 1400
Mailing Address (if different):	[same]
City State Zip	Portland, OR 97204-3128
Phone:	503 220-5457
Function/Description	Key Individual/Other Information
KEY PROJECT STAFF	
Owner's Engineer	Kenneth Long, PE, Principal Engineer
e-mail	ken.long@stantec.com

END OF SECTION



CLIENT: SOUTHERN NEVADA WATER AUTHORITY
PROJECT: 3636S STAGE II RELIABILITY UPGRADES
TITLE: GAS HIGH-VOLTAGE CIRCUIT BREAKER

SUPPLIER DATA SHEETS
SPECIFICATION NO. 33 75 19
EXHIBIT B

ITEM	DESCRIPTION OF SPECIFICATION	UNITS	RFP SPECIFIED PARAMETER (SHADED) SUPPLIER'S PROPOSED PARAMETER (UN-SHADED)
1.	PROJECT		3636S STAGE II RELIABILITY UPGRADES
2.	LOCATION (NEAREST TOWN)		MONTHILL AVE, LAS VEGAS, NEVADA 89121
3.	ALTITUDE (ELEVATION ABOVE SEA LEVEL)		550 METERS (1800-FEET)
4.	DESIGN AMBIENT TEMPERATURE AT LOCATION		EXTREME HIGH: 47.2°C EXTREME LOW: -13.3°C HIGHEST AVERAGE WITHIN A 24-HOUR PERIOD: 34.6°C
5.	BRKR ELECTRICAL PERFORMANCE RATINGS		
	Power Frequency	Hertz	60
	Nominal Transmission System Voltage	kV rms	69
	Maximum Transmission System Voltage (105% of nominal voltage)	kV rms	72.5
	Applicable Industry Standard	Standard	C37.04-2018 (with 2021 Corrections)
	IEEE Application Class	S1/S2	S2
	TRV Test Duty	TXX	T60
	Power Frequency Withstand Voltage (1-minute Dry)	kV rms	160
	Full Wave Lightning Impulse Withstand Voltage (BIL)	kV Peak	350
	Chopped Wave Withstand Voltage (2-Microseconds)	kV Peak	452
	Minimum Continuous Current Rating	A	1,200
	Minimum Interrupting Current Rating	kA rms	40
	Minimum Closing and Latching Current	kA peak	130
	Rated Interrupting Time	milliseconds	50
	Capacitive Current Switching Class	C1/C2	C1
	Minimum Overhead Line Switching Current	A rms	100
	Minimum Isolated Capacitive Switching Current	A rms	800
	Shunt Capacitor Bank Back-to-Back Switching Current	A rms	630
	DC Control Voltage	V DC	48
	AC Supply Power	V AC	120/240 single-phase
	Charging Motor Alternate Power Source	V DC	48
	Supply with Closing Resistors	Yes/No	No
	External Capacitors for Short-Line Fault required?	Yes/No	



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ITEM	DESCRIPTION OF SPECIFICATION	UNITS	RFP SPECIFIED PARAMETER (SHADED) SUPPLIER'S PROPOSED PARAMETER (UN-SHADED)
6.	BRKR PHYSICAL PERFORMANCE RATINGS		
	Site elevation above 3300 feet above sea level	Yes/No	No
	Minimum height from base to energized bushing components	inches	126
	Height from base to energized bushing components	inches	
	Minimum height from base to bushing non-grounded flange	Inches	102
	Height from base to bushing non-grounded flange	inches	
	Minimum phase-to-phase pole spacing at the line terminal centerline	inches	36
	Phase-to-phase pole spacing at the line terminal centerline	inches	
	Minimum metal-to-metal spacing between pole line terminals	inches	28
	Metal-to-metal spacing between pole line terminals	inches	
	Minimum height from base to centerline of pole tank	inches	75
	Height from base to centerline of pole tank	inches	
	Minimum height from base to bottom of common control compartment	inches	25
	Height from base to bottom of common control compartment	inches	
	Maximum height from base to center of control/relay devices located in the common control compartment	inches	78
	Height from base to center of control/relay devices located in the common control compartment	inches	
	Bushing Housing material (Porcelain or Polymer)	specify	Polymer
	Minimum creepage (leakage) distance of bushing weather sheds	inches	70
	Creepage (leakage) distance of bushing weather sheds	inches	
	Minimum strike distance over bushing weather sheds	inches	22.5
	Strike distance over bushing weather sheds	inches	
	Minimum static horizontal transverse terminal load force	pounds-force	250
	Static horizontal transverse terminal load force	pounds-force	
	ASME "U-Stamp" Required (Yes/No)	Yes/No	Yes
	Supply with interphase wiring duct (Yes/No/NA)	Yes/No/NA	NA
	Supply with Condition Monitoring	Yes/No	No
	Supply with Synchronous Control of Closing and Opening	Yes/No	No



CLIENT: SOUTHERN NEVADA WATER AUTHORITY
PROJECT: 3636S STAGE II RELIABILITY UPGRADES
TITLE: GAS HIGH-VOLTAGE CIRCUIT BREAKER

SUPPLIER DATA SHEETS
SPECIFICATION NO. 33 75 19
EXHIBIT B

ITEM	DESCRIPTION OF SPECIFICATION	UNITS	RFP SPECIFIED PARAMETER (SHADED) SUPPLIER'S PROPOSED PARAMETER (UN-SHADED)
7.	SEISMIC QUALIFICATION LEVEL		
	MINIMUM QUALIFICATION LEVEL	High/Moderate/Low	Moderate
	QUALIFICATION LEVEL	High/Moderate/Low	
8.	CLARIFICATION		
	A TRAVEL RECORDER WILL BE SUPPLIED WITH EACH LOT OF BREAKERS?	Yes/No/NA	
	BREAKERS ARE FURNISHED WITH A LATCH CHECK SWITCH?	Yes/No/NA	
	BREAKERS ARE FURNISHED WITH A MAINTENANCE CLOSING DEVICE AND TOOLS WITH EACH LOT?	Yes/No/NA	
	WHAT TYPE OF STORED ENERGY MECHANISM WILL BE PROVIDED?	Stipulate	
	SUPPLIER'S STANDARD COLOR FOR PAINTED COMPONENTS?	Stipulate	
9.	BUSHING CURRENT TRANSFORMER ARRANGEMENT		
	BUSHING 1/3/5 X-POSITION	Ratio/Accuracy	1200:5 MR C400
	BUSHING 1/3/5 Y-POSITION	Ratio/Accuracy	1200:5 MR C400
	BUSHING 1/3/5 Z-POSITION	Ratio/Accuracy	1200:5 MR C400
	BUSHING 2/4/6 X-POSITION	Ratio/Accuracy	1200:5 MR C400
	BUSHING 2/4/6 X-POSITION	Ratio/Accuracy	1200:5 MR C400
	BUSHING 2/4/6 X-POSITION	Ratio/Accuracy	1200:5 MR C400



CLIENT: SOUTHERN NEVADA WATER AUTHORITY
PROJECT: 3636S STAGE II RELIABILITY UPGRADES
TITLE: GAS HIGH-VOLTAGE CIRCUIT BREAKER

SUPPLIER DATA SHEETS
SPECIFICATION NO. 33 75 19
EXHIBIT B

ITEM	DESCRIPTION OF SPECIFICATION	UNITS	RFP SPECIFIED PARAMETER (SHADED) SUPPLIER'S PROPOSED PARAMETER (UN-SHADED)
10.	APPROVAL DOCUMENTATION SCHEDULE (DURATION AFTER SUPPLIER'S RECEIPT OF PURCHASE ORDER)		
	OUTLINE DRAWING (ASSEMBLED BREAKER)	WEEKS	
	OUTLINE DRAWING (FOUNDATION ANCHORAGE)	WEEKS	
	NAMEPLATE DRAWINGS	WEEKS	
	BUSHING OUTLINE DRAWING	WEEKS	
	CONTROL COMPARTMENT DRAWINGS	WEEKS	
	BCT CURVES	WEEKS	
	BILL OF MATERIALS	WEEKS	
	INSTRUCTION MANUALS	WEEKS	
	FACTORY ACCEPTANCE TESTING PLAN AND PROCEDURES	WEEKS	
	DESIGN REVIEW	WEEKS	
	TYPICAL ALLOWANCE FOR REVIEW AND RETURN	WEEKS	
11.	PRODUCTION SCHEDULE (DURATION AFTER SUPPLIER'S RECEIPT OF ACCEPTED APPROVAL DOCUMENTATION)		
	PROPOSED FACTORY LOCATION (CITY/ STATE/ COUNTRY)	SPECIFY	
	PROPOSED METHOD OF TRANSPORT (TRUCK/RAIL/OCEAN GOING VESSEL/ PORT OF ENTRY)	SPECIFY	
	INTERMEDIATE INSPECTION POINTS (IF APPLICABLE)	WEEKS	
	FACTORY ACCEPTANCE TESTING	WEEKS	
	EX-WORKS	WEEKS	
	PORT OF ENTRY (IF APPLICABLE)	WEEKS	
	JOBSITE LAYDOWN AREA	WEEKS	
	READY FOR COMMISSIONING AND START-UP (IF APPLICABLE)	WEEKS	



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EXHIBIT B

ITEM	DESCRIPTION OF SPECIFICATION	UNITS	RFP SPECIFIED PARAMETER (SHADED) SUPPLIER'S PROPOSED PARAMETER (UN-SHADED)
12.	WARRANTY PERIOD		
	SPECIFIED PERIOD (MINIMUM)	MONTHS	24 (AFTER INITIAL ENERGIZATION)
	SUPPLIERS PROPOSED PERIOD	MONTHS	
13.	COMMERCIAL		
	PROVIDE A PRELIMINARY OUTLINE DRAWING, INCLUDING OVERALL DIMENSIONS AND WEIGHTS, WITH PROPOSAL	Yes/No	
	PROVIDE A PRELIMINARY NAMEPLATE DRAWING WITH PROPOSAL	Yes/No	
	PROVIDE A QUALITY ASSURANCE PROCEDURES SUMMARY DOCUMENT WITH PROPOSAL	Yes/No	
	PROVIDE A LIST OF EXCEPTIONS, IF ANY, TO THE TECHNICAL REQUIREMENTS OUTLINED IN THE TECHNICAL SPECIFICATION	Yes/No	
	BASE PRICE FOR EACH UNIT	US\$	
	TOTAL TRANSPORTATION COST ASSOCIATED WITH THE LOT FOR DELIVERY TO THE JOBSITE LAYDOWN AREA	US\$	
	NUMBER OF UNITS REQUIRED FOR THIS PROJECT	Quantity	Two (2)
	CIRCUIT BREAKER DEVICE NUMBERS		52-T1 and -T2



CLIENT: SOUTHERN NEVADA WATER AUTHORITY
PROJECT: 3636S STAGE II RELIABILITY UPGRADES
TITLE: GAS HIGH-VOLTAGE CIRCUIT BREAKER

TRANSPORTATION
SPECIFICATION NO. 33 75 19
EXHIBIT C

1 Transportation Specification

Shipment shall be in accordance with the instructions set forth in Exhibit A, Design and Technical Specifications and the requirements of this Exhibit.

1.1 PACKING AND SHIPPING REQUIREMENTS

The Supplier shall be responsible for checking the shipping dimensions and weight of the circuit breaker for suitability for the method of shipment specified. Circuit breaker are to be shipped fully assembled except for the support frame legs, which may either be retracted to a shipping position or shipped separately as a frame assembly. SF₆ gas cylinders are to be banded to a pallet.

1.2 PRICING

Pricing shall include delivery to the jobsite at the substation site in Clark County, Nevada. Off-loading from a flatbed trailer will be provided by the Construction Contractor. All equipment furnished shall be securely crated, braced, wrapped, and covered as required to prevent damage and/or entrance of dirt or moisture during shipment, handling, and jobsite storage.

1.3 SHIPMENT

The Supplier shall notify Owner and Owner's Contractor on the day of shipment from factory and 48 hours prior to the delivery of the breaker(s) to the project site to ensure Contractor can provide clear access for unloading and servicing the breaker(s). No weekend deliveries will be accepted.

- A. All delivery personnel must check in at the onsite construction office. Personnel will be provided an escort for delivery to the substation.
- B. When applicable, Supplier's personnel conducting supervising or conducting work will be required to attend a nominal 2 hour site orientation prior to conducting any work on site.
- C. Supplier's personnel will be required to abide by all site rules for Personal Protective Equipment (PPE), site evacuation, site speed limits, and equipment operation guidelines.
- D. Material Safety Data Sheets are required for all chemicals brought on site. All material containers must be properly labeled, in English. Supplier is responsible for disposal of all chemicals or materials not consumed while installing, assembling, or commissioning the Transformer.
- E. Any injury or near miss must be immediately reported to the on-site Construction Manager.



CLIENT: SOUTHERN NEVADA WATER AUTHORITY
PROJECT: 3636S STAGE II RELIABILITY UPGRADES
TITLE: GAS HIGH-VOLTAGE CIRCUIT BREAKER

TRANSPORTATION
SPECIFICATION NO. 33 75 19
EXHIBIT C

- F. Supplier's personnel will be required to perform daily Pre-Task briefings and documented tailboards. Additional or revised tailboards are required for changes in work activities.

1.4 JOB SITE STORAGE

Job site storage is outside storage.

1.5 ACCESSORY ITEMS, SMALL PARTS, AND UNIT COMPONENTS

All accessory items, small parts and unit components shall be separately boxed or bundled to prevent galling due to rubbing of one part against the other.

1.6 ITEMIZED BILL OF LADING

A complete itemized bill of lading which clearly identifies and inventories each assembly, subassembly, carton, box, package, envelope, or container shall be furnished and enclosed with each item or items shipped at the time of shipment.

1.7 SF₆ AND ACCESSORIES SHIPMENT

The shipment of insulating materials and accessories removed and packages for shipment shall comply with the provisions set forth in Document No. 3636S-TS-03, 69 kV Group-Operated Circuit Breaker design and Technical Specifications as Exhibit A to the high-Voltage Circuit Breaker Purchase Agreement.

END OF DOCUMENT



CLIENT: SOUTHERN NEVADA WATER AUTHORITY
PROJECT: 3636S STAGE II RELIABILITY UPGRADES
TITLE: GAS HIGH-VOLTAGE CIRCUIT BREAKER

SUPPLIER'S QUALITY AND INSPECTION PLANS
SPECIFICATION NO. 33 75 19
EXHIBIT D

1 Quality and Inspection Plans

The selected high-voltage circuit breaker Supplier shall submit formal documents outlining their quality assurance program pertaining to the design, procurement, manufacturing, and testing of the breaker(s) to be supplied under the purchase agreement to which this section is attached as an exhibit.

The exhibit shall also include a typical Test Plan and Procedure document which pertains to the routine factory acceptance test sequence.

END OF DOCUMENT



CLIENT: SOUTHERN NEVADA WATER AUTHORITY
PROJECT: 3636S STAGE II RELIABILITY UPGRADES
TITLE: GAS HIGH-VOLTAGE CIRCUIT BREAKER

SUPPLIER'S MILESTONE SCHEDULE
SPECIFICATION NO. 33 75 19
EXHIBIT E

1 Milestone Schedule

The selected transformer Supplier shall submit formal documents outlining their Milestone Schedule pertaining to the design, procurement, manufacturing, and testing of the circuit breaker(s) to be supplied under the purchase agreement to which this section is attached as an exhibit.

The exhibit shall include as a minimum the milestones outlined in Table E-1 below:

Table E-1 – Milestone Events	
Milestone Event	Event Occurrence (Days after receipt of Contract)
Major material items submittal	
Design Review Meeting	
Revision A Submittal Drawing Package	
Commencement of final assembly	
Commencement of the Factory Acceptance Test Sequence	
Completion of the Factory Acceptance Test Sequence	
Ready for Shipment (Ex-Works)	
DDP at jobsite in Clark County, Nevada	
Completion of Field Assembly (if required)	
Ready for initial energization	
Certification of Warranty validity submittal	



CLIENT: SOUTHERN NEVADA WATER AUTHORITY
PROJECT: 3636S STAGE II RELIABILITY UPGRADES
TITLE: GAS HIGH-VOLTAGE CIRCUIT BREAKER

SUPPLIER'S MILESTONE SCHEDULE
SPECIFICATION NO. 33 75 19
EXHIBIT E

Attachment E-1 – Supplier's Production Schedule

END OF DOCUMENT



CLIENT: SOUTHERN NEVADA WATER AUTHORITY
PROJECT: 3636S STAGE II RELIABILITY UPGRADES
TITLE: GAS HIGH-VOLTAGE CIRCUIT BREAKER

SUPPLIER'S LIST OF DELIVERABLE
SPECIFICATION NO. 33 75 19
EXHIBIT F

1 List of Deliverable Documents

The selected transformer Supplier shall submit formal documents outlining the schedule for submittal of specific documents that will be submitted to the Owner for acceptance under the purchase agreement to which this section is attached as an exhibit.

The exhibit shall include as a minimum the submittal documents outlined in Table F-1 below:

Table F-1 – Submittal Deliverable Events	
Deliverable Event	Event Occurrence (Days after receipt of Contract)
Major material items submittal	
Design Review Meeting	
Revision A Submittal Drawing Package	
Allowance for Owner review	
Revision A Submittal Drawing Package	
Allowance for Owner review	
Revision 0 (Released to manufacturing) Submittal Drawing Package	
Certified As-Built Drawing Package	
Maintenance and Operations Manuals	
Pre-Tanking Test Plan and Procedure document	
Factory Acceptance Test Plan and Procedure document	
Field Assembly Plan and Procedure document	
Commissioning and Initial Energization Plan and Procedure document	
Final test reports, MSDS Sheets, instruction manuals and final drawings	
Certification of Warranty validity document	



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TITLE: GAS HIGH-VOLTAGE CIRCUIT BREAKER

SUPPLIER'S LIST OF DELIVERABLE
SPECIFICATION NO. 33 75 19
EXHIBIT F

Attachment F-1 – Supplier's Document Submittal Schedule

END OF DOCUMENT



CLIENT: SOUTHERN NEVADA WATER AUTHORITY
PROJECT: 3636S STAGE II RELIABILITY UPGRADES
TITLE: GAS HIGH-VOLTAGE CIRCUIT BREAKER

SUPPLIER'S RECOMMENDED SPARE PARTS
SPECIFICATION NO. 33 75 19
EXHIBIT G

1 Recommended Spare Parts

The selected transformer Supplier shall submit a list of recommended spare parts with pricing based upon their inclusion in the initial purchase agreement. The spare parts are to be specific to the circuit breaker(s) to be supplied under the purchase agreement to which this section is attached as an exhibit.

The exhibit shall include as a minimum the spare parts identified in Table G-1 below:

Table G-1 – Suggested Spare Parts List		
Item	Description of Spare Parts	Quantity
1	HV Bushing	1
2	Trip Coil	1
3	Close Coil	1
4	HV Bushing Gasket Set	1



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SUPPLIER'S RECOMMENDED SPARE PARTS
SPECIFICATION NO. 33 75 19
EXHIBIT G

Attachment G-1 – Supplier's Recommended Spare Part List with pricing

END OF DOCUMENT

SECTION 1100
Drawing List

<u>Drawing Number</u>	<u>Description</u>
ESX11	Electrical One Line Relaying Diagram
ESX12	Electrical One Line Relaying Diagram
ESX21	Electrical Three Line Diagram Metering
ESX22	Electrical Three Line Diagram HVCB 52TA
ESX23	Electrical Three Line Diagram HVCB 52TB
ESX24	Electrical Three Line Diagram Transformer TA
ESX25	Electrical Three Line Diagram Transformer TB
ESX26	Electrical Three Line Diagram MVCB 52MA, PT-MA & SSVT-TA
ESX27	Electrical Three Line Diagram MVCB 52MA, PT-MA & SSVT-TB