COLORADO RIVER COMMISSION OF NEVADA
AGENDA ITEM G
FOR MEETING OF APRIL 8, 2025

SUBJECT: *For Possible Action:* Approve Contract No. LS-25-LND, between LND Technical Services and the Colorado River Commission of Nevada, based on Bid Solicitation No. 69CRC-S3056 for maintenance and testing labor support for a term ending June 30, 2028, not to exceed $1,200,000.
RELATED TO AGENDA ITEM: None.
RECOMMENDATION OR RECOMMENDED MOTION: Staff recommend the Commission approve the contract and authorize the Executive Director to sign the contract on behalf of the Commission.
FISCAL IMPACT: Contract not to exceed $1,200,000.

STAFF COMMENTS AND BACKGROUND:

A. Power Delivery Group's Six Year Project Plan

The Colorado River Commission of Nevada's (Commission) Power Delivery Group (PDG) operates an electrical system that delivers power to the Southern Nevada Water Authority, including major cities in Southern Nevada for water pumping and waste-water treatment. The system provides the energy to move the water across a large part of the Las Vegas Valley.

The PDG started building an electrical system to provide service to SNWA in the late 1990s and the system has continued to grow over the past twenty-five plus years. Further, the system includes 27 high voltage substations, with three more expected to be completed in the next two years. The system also comprises various underground and overhead transmission lines, including 32 miles of existing transmission lines, with an additional ten miles planned for completion by the end of 2025. Furthermore, the system is exposed to increasing summer temperatures in the Las Vegas Valley, which place additional stress on infrastructure.

To manage capital and maintenance projects, the PDG has developed a Project Plan covering the years 2022 through 2031, outlining key initiatives. The plan is attached.

B. Industry Practice and Purpose for Contracts

In the utility industry, it is common to contract with external firms for maintenance and testing support, particularly for specialized or labor-intensive tasks. The PDG is looking to expand its list of available contractors to increase competition and open opportunities for additional firms that provide quality, specialized services. Staff proposes awarding two contracts focused on electrical system testing and two contracts for construction and repair. By contracting with multiple vendors, the PDG will expand its contractor pool, increasing competition and flexibility to meet schedules during maintenance seasons.

C. Proposed Contract

The proposed contract with LND Technical Services will focus on maintenance and testing labor support, with a term ending June 30, 2028, and a total not-to-exceed amount of $1,200,000. This contract is an enabling contract to allow necessary work to be requested and performed under purchase orders that outline the specific scope of work and negotiated cost.

D. Staff's Recommendation

Staff recommend the Commission approve Contract No. LS-25-LND and authorize the Executive Director to sign the contract.

CONTRACT FOR SERVICES OF INDEPENDENT CONTRACTOR

A Contract Between the State of Nevada
Acting by and Through its

Agency Name:	**COLORADO RIVER COMMISSION OF NEVADA**
Address:	**100 N. CITY PARKWAY, SUITE 1100**
City, State, Zip Code:	**LAS VEGAS, NEVADA 89106**
Contact:	**SHAE PELKOWSKI**
Phone:	**702-376-9997**
Email:	**SPELKOWSKI@CRC.NV.GOV**

Contractor Name:	**LND TECHNICAL SERVICES, LLC**
Address:	**9337 KATY FWY, SUITE B-5104**
City, State, Zip Code:	**HOUSTON, TEXAS 77024**
Contact:	**NAM LE**
Phone:	**919-449-4168**
Email:	**NAM.LE@LNDTS.COM**

WHEREAS, NRS 333.700(8)(b) authorizes state departments and agencies to contract for any work of construction or major repairs of state buildings without approval from the Board of Examiners if the contracting process is controlled by the rules of competitive bidding;

WHEREAS, the Colorado River Commission of Nevada, pursuant to NRS 538.161, represents and acts for the State of Nevada in negotiation and execution of contracts for the use, planning, development or ownership of any facilities for the generation or transmission of electricity for the greatest possible benefit to this State; and

WHEREAS, it is deemed that the service of Contractor is both necessary and in the best interests of the State of Nevada.

NOW, THEREFORE, in consideration of the aforesaid premises, the parties mutually agree as follows:

1. **DEFINITIONS**.

A. "State" – means the State of Nevada and any State agency identified herein, its officers, employees and immune contractors as defined in NRS 41.0307.

B. "Contracting Agency" – means the State agency identified above.

C. "Contractor" – means the person or entity identified above that performs services and/or provides goods for the State under the terms and conditions set forth in this Contract.

D. "Fiscal Year" – means the period beginning July 1st and ending June 30th of the following year.

E. "Contract" – Unless the context otherwise requires, "Contract" means this document entitled Contract for Services of Independent Contractor and all Attachments or Incorporated Documents.

F. "Contract for Independent Contractor" – means this document entitled Contract for Services of Independent Contractor exclusive of any Attachments or Incorporated Documents.

2. **CONTRACT TERM.** This Contract shall be effective as noted below, unless sooner terminated by either party as specified in *Section 9, Contract Termination*. Contract is not subject to Board of Examiners' approval.

Effective from:	04/08/25	To:	06/30/28

3. **NOTICE**. All communications, including notices, required or permitted to be given under this Contract shall be in writing and directed to the parties at the addresses stated above. Notices may be given: (i) by delivery in person; (ii) by a nationally recognized next day courier service, return receipt requested; or (iii) by certified mail, return receipt requested. If specifically requested by the party to be notified, valid notice may be given by electronic mail to the address(es) stated above.

4. **INCORPORATED DOCUMENTS**. The parties agree that this Contract, inclusive of the following attachments, specifically describes the scope of work. This Contract incorporates the following attachments in descending order of constructive precedence:

ATTACHMENT AA:	SCOPE OF WORK
ATTACHMENT BB:	INSURANCE SCHEDULE
ATTACHMENT CC:	STATE SOLICITATION # 69CRC-S3056
ATTACHMENT DD:	VENDOR PROPOSAL

Any provision, term or condition of an Attachment that contradicts the terms of this Contract for Independent Contractor, or that would change the obligations of the State under this Contract for Independent Contractor, shall be void and unenforceable.

5. **CONSIDERATION**. The parties agree that Contractor will provide the services specified in *Section 4, Incorporated Documents* at a cost as noted below:

$ Variable	per	Purchase Order

Total Contract or installments payable at:	Purchase Order Determined

Total Contract Not to Exceed:	$1,200,000

The State does not agree to reimburse Contractor for expenses unless otherwise specified in the incorporated attachments. Any intervening end to a biennial appropriation period shall be deemed an automatic renewal (not changing the overall Contract term) or a termination as the result of legislative appropriation may require.

6. **ASSENT**. The parties agree that the terms and conditions listed on incorporated attachments of this Contract are also specifically a part of this Contract and are limited only by their respective order of precedence and any limitations specified.

7. **BILLING SUBMISSION: TIMELINESS**. The parties agree that timeliness of billing is of the essence to the Contract and recognize that the State is on a Fiscal Year. All billings for dates of service prior to July 1 must be submitted to the state no later than the first Friday in August of the same calendar year. A billing submitted after the first Friday in August, which forces the State to process the billing as a stale claim pursuant to NRS 353.097, will subject Contractor to an administrative fee not to exceed one hundred dollars ($100.00). The parties hereby agree this is a reasonable estimate of the additional costs to the state of processing the billing as a stale claim and that this amount will be deducted from the stale claim payment due to Contractor.

8. **INSPECTION & AUDIT**.

A. Books and Records. Contractor agrees to keep and maintain under generally accepted accounting principles (GAAP) full, true and complete records, contracts, books, and documents as are necessary to fully disclose to the State or United States Government, or their authorized representatives, upon audits or reviews, sufficient information to determine compliance with all State and federal regulations and statutes.

B. Inspection & Audit. Contractor agrees that the relevant books, records (written, electronic, computer related or otherwise), including, without limitation, relevant accounting procedures and practices of Contractor or its subcontractors, financial statements and supporting documentation, and documentation related to the work product shall be subject, at any reasonable time, to inspection, examination, review, audit, and copying at any office or location of Contractor where such records may be found, with or without notice by the State Auditor, the relevant State agency or its contracted examiners, the department of Administration, Budget Division, the Nevada State Attorney General's Office or its Fraud Control Units, the state Legislative Auditor, and with regard to any federal funding, the relevant federal agency, the Comptroller General, the General Accounting Office, the Office of the Inspector General, or any of their authorized representatives. All subcontracts shall reflect requirements of this Section.

C. Period of Retention. All books, records, reports, and statements relevant to this Contract must be retained a minimum three (3) years, and for five (5) years if any federal funds are used pursuant to the Contract. The retention period runs from the date of payment for the relevant goods or services by the state, or from the date of termination of the Contract, whichever is later. Retention time shall be extended when an audit is scheduled or in progress for a period reasonably necessary to complete an audit and/or to complete any administrative and judicial litigation which may ensue.

9. **CONTRACT TERMINATION**.

A. Termination Without Cause. Regardless of any terms to the contrary, this Contract may be terminated upon written notice by mutual consent of both parties. The State unilaterally may terminate this contract without cause by giving not less than thirty (30) days' notice in the manner specified in *Section 3, Notice*. If this Contract is unilaterally terminated by the State, Contractor shall use its best efforts to minimize cost to the State and Contractor will not be paid for any cost that Contractor could have avoided.

B. State Termination for Non-Appropriation. The continuation of this Contract beyond the current biennium is subject to and contingent upon sufficient funds being appropriated, budgeted, and otherwise made available by the State Legislature and/or federal sources. The State may terminate this Contract, and Contractor waives any and all claims(s) for damages, effective immediately upon receipt of written notice (or any date specified therein) if for any reason the contracting Agency's funding from State and/or federal sources is not appropriated or is withdrawn, limited, or impaired.

C. Termination with Cause for Breach. A breach may be declared with or without termination. A notice of breach and termination shall specify the date of termination of the Contract, which shall not be sooner than the expiration of the Time to Correct, if applicable, allowed under subsection 9D. This Contract may be terminated by either party upon written notice of breach to the other party on the following grounds:

1) If Contractor fails to provide or satisfactorily perform any of the conditions, work, deliverables, goods, or services called for by this Contract within the time requirements specified in this Contract or within any granted extension of those time requirements; or

2) If any state, county, city, or federal license, authorization, waiver, permit, qualification or certification required by statute, ordinance, law, or regulation to be held by Contractor to provide the goods or services required by this Contract is for any reason denied, revoked, debarred, excluded, terminated, suspended, lapsed, or not renewed; or

3) If Contractor becomes insolvent, subject to receivership, or becomes voluntarily or involuntarily subject to the jurisdiction of the Bankruptcy Court; or

4) If the State materially breaches any material duty under this Contract and any such breach impairs Contractor's ability to perform; or

5) If it is found by the State that any quid pro quo or gratuities in the form of money, services, entertainment, gifts, or otherwise were offered or given by Contractor, or any agent or representative of Contractor, to any officer or employee of the State of Nevada with a view toward securing a contract or securing favorable treatment with respect to awarding, extending, amending, or making any determination with respect to the performing of such contract; or

6) If it is found by the State that Contractor has failed to disclose any material conflict of interest relative to the performance of this Contract.

D. Time to Correct. Unless the breach is not curable, or unless circumstances do not permit an opportunity to cure, termination upon declared breach may be exercised only after service of formal written notice as specified in *Section 3, Notice*, and the subsequent failure of the breaching party within fifteen (15) calendar days of receipt of that notice to provide evidence, satisfactory to the aggrieved party, showing that the declared breach has been corrected. Upon a notice of breach, the time to correct and the time for termination of the contract upon breach under subsection 9C, above, shall run concurrently, unless the notice expressly states otherwise.

E. Winding Up Affairs Upon Termination. In the event of termination of this Contract for any reason, the parties agree that the provisions of this Section survive termination:

1) The parties shall account for and properly present to each other all claims for fees and expenses and pay those which are undisputed and otherwise not subject to set off under this Contract. Neither party may withhold performance of winding up provisions solely based on nonpayment of fees or expenses accrued up to the time of termination;

2) Contractor shall satisfactorily complete work in progress at the agreed rate (or a pro rata basis if necessary) if so requested by the Contracting Agency;

3) Contractor shall execute any documents and take any actions necessary to effectuate an assignment of this Contract if so requested by the Contracting Agency;

4) Contractor shall preserve, protect and promptly deliver into State possession all proprietary information in accordance with *Section 20, State Ownership of Proprietary Information*.

10. **REMEDIES**. Except as otherwise provided for by law or this Contract, the rights and remedies of the parties shall not be exclusive and are in addition to any other rights and remedies provided by law or equity, including, without limitation, actual damages, and to a prevailing party reasonable attorneys' fees and costs. For purposes of an award of attorneys' fees to either party, the parties stipulate and agree that a reasonable hourly rate of attorneys' fees shall be one hundred and fifty dollars ($150.00) per hour. The State may set off consideration against any unpaid obligation of Contractor to any State agency in accordance with NRS 353C.190. In the event that Contractor voluntarily or involuntarily becomes subject to the jurisdiction of the Bankruptcy Court, the State may set off consideration against any unpaid obligation of Contractor to the State or its agencies, to the extent allowed by bankruptcy law, without regard to whether the procedures of NRS 353C.190 have been utilized.

11. **LIMITED LIABILITY**. The State will not waive and intends to assert available NRS Chapter 41 liability limitations in all cases. Contract liability of both parties shall not be subject to punitive damages. Damages for any State breach shall never exceed the amount of funds appropriated for payment under this Contract, but not yet paid to Contractor, for the Fiscal Year budget in existence at the time of the breach. Contractor's tort liability shall not be limited.

12. **FORCE MAJEURE**. Neither party shall be deemed to be in violation of this Contract if it is prevented from performing any of its obligations hereunder due to strikes, failure of public transportation, civil or military authority, act of public enemy, accidents, fires, explosions, or acts of God, including without limitation, earthquakes, floods, winds, or storms. In such an event the intervening cause must not be through the fault of the party asserting such an excuse, and the excused party is obligated to promptly perform in accordance with the terms of the Contract after the intervening cause ceases.

13. **INDEMNIFICATION AND DEFENSE**. To the fullest extent permitted by law, Contractor shall indemnify, hold harmless and defend, not excluding the State's right to participate, the State from and against all liability, claims, actions, damages, losses, and expenses, including, without limitation, reasonable attorneys' fees and costs, arising out of any breach of the obligations of Contractor under this contract, or any alleged negligent or willful acts or omissions of Contractor, its officers, employees and agents. Contractor's obligation to indemnify the State shall apply in all cases except for claims arising solely from the State's own negligence or willful misconduct. Contractor waives any rights of subrogation against the State. Contractor's duty to defend begins when the State requests defense of any claim arising from this Contract.

14. **REPRESENTATIONS REGARDING INDEPENDENT CONTRACTOR STATUS**. Contractor represents that it is an independent contractor, as defined in NRS 333.700(2) and 616A.255, warrants that it will perform all work under this contract as an independent contractor, and warrants that the State of Nevada will not incur any employment liability by reason of this Contract or the work to be performed under this Contract. To the extent the State incurs any employment liability for the work under this Contract; Contractor will reimburse the State for that liability.

15. **INSURANCE SCHEDULE.** Unless expressly waived in writing by the State, Contractor must carry policies of insurance and pay all taxes and fees incident hereunto. Policies shall meet the terms and conditions as specified within this Contract along with the additional limits and provisions as described in *Attachment BB*, incorporated hereto by attachment. The State shall have no liability except as specifically provided in the Contract.

    Contractor shall not commence work before Contractor has provided the required evidence of insurance to the Contracting Agency. The State's approval of any changes to insurance coverage during the course of performance shall constitute an ongoing condition subsequent to this Contract. Any failure of the State to timely approve shall not constitute a waiver of the condition.

    A. Insurance Coverage. Contractor shall, at Contractor's sole expense, procure, maintain and keep in force for the duration of the Contract insurance conforming to the minimum limits as specified in *Attachment BB*, incorporated hereto by attachment. Unless specifically stated herein or otherwise agreed to by the State, the required insurance shall be in effect prior to the commencement of work by Contractor and shall continue in force as appropriate until:

        1) Final acceptance by the State of the completion of this Contract; or
        2) Such time as the insurance is no longer required by the State under the terms of this Contract; whichever occurs later.

        Any insurance or self-insurance available to the State shall be in excess of and non-contributing with, any insurance required from Contractor. Contractor's insurance policies shall apply on a primary basis. Until such time as the insurance is no longer required by the State, Contractor shall provide the State with renewal or replacement evidence of insurance no less than thirty (30) days before the expiration or replacement of the required insurance. If at any time during the period when insurance is required by the Contract, an insurer or surety shall fail to comply with the requirements of this Contract, as soon as Contractor has knowledge of any such failure, Contractor shall immediately notify the State and immediately replace such insurance or bond with an insurer meeting the requirements.

    B. General Requirements.

        1) Additional Insured: By endorsement to the general liability insurance policy, the State of Nevada, its officers, employees and immune contractors as defined in NRS 41.0307 shall be named as additional insureds for all liability arising from the Contract.

        2) Waiver of Subrogation: Each insurance policy shall provide for a waiver of subrogation against the State of Nevada, its officers, employees and immune contractors as defined in NRS 41.0307 for losses arising from work/materials/equipment performed or provided by or on behalf of Contractor.

        3) Cross Liability: All required liability policies shall provide cross-liability coverage as would be achieved under the standard ISO separation of insureds clause.

        4) Deductibles and Self-Insured Retentions: Any deductible or self-insured retention shall be the responsibility of Contractor.

5) Policy Cancellation: Except for ten (10) days notice for non-payment of premiums, each insurance policy shall be endorsed to state that without thirty (30) days prior written notice to the State of Nevada, c/o Contracting Agency, the policy shall not be canceled, non-renewed or coverage and/or limits reduced or materially altered, and shall provide that notices required by this Section shall be sent by certified mail to the address shown on page one (1) of this contract.

6) Approved Insurer: Each insurance policy shall be:

a) Issued by insurance companies authorized to do business in the State of Nevada or eligible surplus lines insurers acceptable to the State and having agents in Nevada upon whom service of process may be made; and

b) Currently rated by A.M. Best as "A-VII" or better.

C. Evidence of Insurance.

Prior to the start of any work, Contractor must provide the following documents to the contracting State agency:

1) Certificate of Insurance: The Acord 25 Certificate of Insurance form or a form substantially similar must be submitted to the State to evidence the insurance policies and coverages required of Contractor. The certificate must name the State of Nevada, its officers, employees and immune contractors as defined in NRS 41.0307 as the certificate holder. The certificate should be signed by a person authorized by the insurer to bind coverage on its behalf. The State project/Contract number; description and Contract effective dates shall be noted on the certificate, and upon renewal of the policies listed, Contractor shall furnish the State with replacement certificates as described within *Section 15A, Insurance Coverage*.

Mail all required insurance documents to the State Contracting Agency identified on Page one of the Contract.

2) Additional Insured Endorsement: An Additional Insured Endorsement (CG 20 10 11 85 or CG 20 26 11 85), signed by an authorized insurance company representative, must be submitted to the State to evidence the endorsement of the State as an additional insured per *Section 15B, General Requirements.*

3) Schedule of Underlying Insurance Policies: If Umbrella or Excess policy is evidenced to comply with minimum limits, a copy of the underlying Schedule from the Umbrella or Excess insurance policy may be required.

4) Review and Approval: Documents specified above must be submitted for review and approval by the State prior to the commencement of work by Contractor. Neither approval by the State nor failure to disapprove the insurance furnished by Contractor shall relieve Contractor of Contractor's full responsibility to provide the insurance required by this Contract. Compliance with the insurance requirements of this Contract shall not limit the liability of Contractor or its subcontractors, employees or agents to the State or others, and shall be in additional to and not in lieu of any other remedy available to the State under this Contract or otherwise. The State reserves the right to request and review a copy of any required insurance policy or endorsement to assure compliance with these requirements.

16. **COMPLIANCE WITH LEGAL OBLIGATIONS.** Contractor shall procure and maintain for the duration of this Contract any state, county, city or federal license, authorization, waiver, permit qualification or certification required by statute, ordinance, law, or regulation to be held by Contractor to provide the goods or services required by this Contract. Contractor shall provide proof of its compliance upon request of the Contracting Agency. Contractor will be responsible to pay all taxes, assessments, fees, premiums, permits, and licenses required by law. Real property and personal property taxes are the responsibility of Contractor in accordance with NRS 361.157 and NRS 361.159. Contractor agrees to be responsible for payment of any such government obligations not paid by its subcontractors during performance of this Contract.

17. **WAIVER OF BREACH**. Failure to declare a breach or the actual waiver of any particular breach of the Contract or its material or nonmaterial terms by either party shall not operate as a waiver by such party of any of its rights or remedies as to any other breach.

18. **SEVERABILITY.** If any provision contained in this Contract is held to be unenforceable by a court of law or equity, this Contract shall be construed as if such provision did not exist and the non-enforceability of such provision shall not be held to render any other provision or provisions of this Contract unenforceable.

19. **ASSIGNMENT/DELEGATION.** To the extent that any assignment of any right under this Contract changes the duty of either party, increases the burden or risk involved, impairs the chances of obtaining the performance of this Contract, attempts to operate as a novation, or includes a waiver or abrogation of any defense to payment by State, such offending portion of the assignment shall be void, and shall be a breach of this Contract. Contractor shall neither assign, transfer nor delegate any rights, obligations nor duties under this Contract without the prior written consent of the State.

20. **STATE OWNERSHIP OF PROPRIETARY INFORMATION**. Any data or information provided by the State to Contractor and any documents or materials provided by the State to Contractor in the course of this Contract ("State Materials") shall be and remain the exclusive property of the State and all such State Materials shall be delivered into State possession by Contractor upon completion, termination, or cancellation of this Contract.

21. **PUBLIC RECORDS**. Pursuant to NRS 239.010, information or documents received from Contractor may be open to public inspection and copying. The State has a legal obligation to disclose such information unless a particular record is made confidential by law or a common law balancing of interests. Contractor may label specific parts of an individual document as a "trade secret" or "confidential" in accordance with NRS 333.333, provided that Contractor thereby agrees to indemnify and defend the State for honoring such a designation. The failure to so label any document that is released by the State shall constitute a complete waiver of any and all claims for damages caused by any release of the records.

22. **CONFIDENTIALITY**. Contractor shall keep confidential all information, in whatever form, produced, prepared, observed or received by Contractor to the extent that such information is confidential by law or otherwise required by this Contract.

23. **FEDERAL FUNDING**. In the event federal funds are used for payment of all or part of this Contract, Contractor agrees to comply with all applicable federal laws, regulations and executive orders, including, without limitation the following:

    A. Contractor certifies, by signing this Contract, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any federal department or agency. This certification is made pursuant to Executive Orders 12549 and 12689 and Federal Acquisition Regulation subpart 9.4, and any relevant program-specific regulations. This provision shall be required of every subcontractor receiving any payment in whole or in part from federal funds.

    B. Contractor and its subcontracts shall comply with all terms, conditions, and requirements of the Americans with Disabilities Act of 1990 (P.L. 101-136), 42 U.S.C. 12101, as amended, and regulations adopted thereunder, including 28 C.F.R. Section 35, inclusive, and any relevant program-specific regulations.

    C. Contractor and it subcontractors shall comply with the requirements of the Civil Rights Act of 1964 (P.L. 88-352), as amended, the Rehabilitation Act of 1973 (P.L. 93-112), as amended, and any relevant program-specific regulations, and shall not discriminate against any employee or offeror for employment because of race, national origin, creed, color, sex, religion, age, disability or handicap condition (including AIDS and AIDS-related conditions.)

24. **LOBBYING**. The parties agree, whether expressly prohibited by federal law, or otherwise, that no funding associated with this Contract will be used for any purpose associated with or related to lobbying or influencing or attempting to lobby or influence for any purpose the following:

    A. Any federal, state, county or local agency, legislature, commission, council or board;

    B. Any federal, state, county or local legislator, commission member, council member, board member, or other elected official; or

    C. Any officer or employee of any federal, state, county or local agency; legislature, commission, council or board.

25. **GENERAL WARRANTY**. Contractor warrants that all services, deliverables, and/or work products under this Contract shall be completed in a workmanlike manner consistent with standards in the trade, profession, or industry; shall conform to or exceed the specifications set forth in the incorporated attachments; and shall be fit for ordinary use, of good quality, with no material defects.

26. **PROPER AUTHORITY**. The parties hereto represent and warrant that the person executing this Contract on behalf of each party has full power and authority to enter into this Contract. Contractor acknowledges that as required by statute or regulation this Contract is effective only for the period of time specified in the Contract. Any services performed by Contractor before this Contract is effective or after it ceases to be effective are performed at the sole risk of Contractor.

27. **DISCLOSURES REGARDING CURRENT OR FORMER STATE EMPLOYEES**. For the purpose of State compliance with NRS 333.705, Contractor represents and warrants that if Contractor, or any employee of Contractor who will be performing services under this Contract, is a current employee of the State or was employed by the State within the preceding 24 months, Contractor has disclosed the identity of such persons, and the services that each such person will perform, to the Contracting Agency.

28. **ASSIGNMENT OF ANTITRUST CLAIMS**. Contractor irrevocably assigns to the State any claim for relief or cause of action which Contractor now has or which may accrue to Contractor in the future by reason of any violation of State of Nevada or federal antitrust laws in connection with any goods or services provided under this Contract.

29. **GOVERNING LAW: JURISDICTION**. This Contract and the rights and obligations of the parties hereto shall be governed by, and construed according to, the laws of the State of Nevada, without giving effect to any principle of conflict-of-law that would require the application of the law of any other jurisdiction. The parties consent to the exclusive jurisdiction of and venue in the District Court, Clark County, Nevada for enforcement of this Contract, and consent to personal jurisdiction in such court for any action or proceeding arising out of this Contract.

30. **ENTIRE CONTRACT AND MODIFICATION**. This Contract and its integrated attachment(s) constitute the entire agreement of the parties and as such are intended to be the complete and exclusive statement of the promises, representations, negotiations, discussions, and other agreements that may have been made in connection with the subject matter hereof. Unless an integrated attachment to this Contract specifically displays a mutual intent to amend a particular part of this Contract, general conflicts in language between any such attachment and this Contract shall be construed consistent with the terms of this Contract. Unless otherwise expressly authorized by the terms of this Contract, no modification or amendment to this Contract shall be binding upon the parties unless the same is in writing and signed by the respective parties hereto and approved by the Office of the Attorney General. This Contract, and any amendments, may be executed in counterparts.

/ / /
/ / /
/ / /

IN WITNESS WHEREOF, the parties hereto have caused this Contract to be signed and intend to be legally bound thereby.

 03/18/2025		President
Nam Le LND Technical Services LLC	Date	Title
		Executive Director
Eric Witkowski Colorado River Commission of Nevada	Date	Title

Approved as to form by:

On:

Michelle Briggs Special Counsel	Date

ATTACHMENT AA

COLORADO RIVER COMMISSION OF NEVADA

Maintenance and Testing Labor Support

SCOPE OF WORK

MARCH 2025

REVISION 1

Revisions

REVISION	DESCRIPTION	DATE
0	INITIAL ISSUE	10/28/2024
1	Maintenance and Testing Only	3/17/2025

Table of Contents

01 00 00 – GENERAL REQUIREMENTS

01 11 00 - SUMMARY OF WORK

1. **Objective**
    a. The Colorado River Commission of Nevada (CRCNV, Owner) Power Delivery Group (PDG) is looking for qualified substation and transmission line construction and testing and commissioning contractors for requesting minor construction and maintenance related support services from the Contractor on an as requested basis.
2. **Scope of Work**
    a. NRS 333.700(8)(b) authorizes state departments and agencies to contract for any work of construction or major repairs of state buildings without approval from the Board of Examiners if the contracting process is controlled by the rules of competitive bidding.
    b. The Colorado River Commission of Nevada, pursuant to NRS 538.161, negotiates and contracts for the planning, development or ownership of any facilities for the generation or transmission of electricity for the greatest possible benefit to this State.
    c. This scope of work covers the ability to use a contractor for the purpose of maintaining the Colorado River Commission of Nevada's high voltage transmission and substation public works assets.
    d. Contractor should be willing and capable of providing at a minimum the following services:
        i. Substation
            1. High Voltage Breaker Maintenance
            2. High Voltage Disconnect Switch Maintenance
            3. Transformer Maintenance
                a. Large Power Transformers
                    i. Oil Processing, Refilling
                    ii. Internal Tank, Conservator, and OLTC Maintenance

b. Station Service Transformers
c. Potential Transformers

4. Metal Clad Switchgear Maintenance
5. Relaying, Protection, and Controls Maintenance
6. Grounding System Maintenance
7. Fiber and Communications Maintenance

ii. Overhead Transmission / Distribution

1. Insulator Maintenance
2. Grounding Maintenance
3. OPGW Splicing and Maintenance

iii. Underground Transmission / Distribution

1. Conductor Maintenance
2. Splicing and Pothead Termination Maintenance

iv. Testing and Commissioning

1. Per latest NETA ATS/MTS recommendations
2. High Voltage Circuit Breakers
3. High Voltage Disconnects
4. Transformers
5. Protective Relaying

e. When maintenance related tasks are identified by the CRCNV, the CRCNV shall prepare a written Task Authorization describing the work to be performed and the time during which the Work is to be competed.
f. The Contractor shall then be requested to provide a detailed cost estimate for the Work. If the Contractor agrees to perform the Work and if the Contractor and the CRCNV agree upon the cost of the Work, the Task Authorization shall be finalized and executed by both Parties.
g. One signed by both Parties; the Contractor shall complete the Work as detailed in the Contract and Task Authorization.
h. This Scope of Work is to be used to define Contractor expectations. All items noted in this Scope of Work shall be addressed in the Contractor's proposal. Any items not specifically noted as "by Owner" shall be assumed to be by Contractor.

i. There is no guarantee by the CRCNV regarding the amount of Work that the Contractor will be requested to perform during the term of this Contract.

3. Required Deliverables

i. Varies by Task Authorization and work, the below is a list of documents that would be needed in given scopes of work and is not intended to be all inclusive.
ii. Weekly Job Reports summarizing activities occurring within the week
iii. Installation progress reports
iv. Reports as detailed in specifications included in Task Authorization
v. Detailed Test Reports of tested equipment

4. Work by Owner

a. The CRCNV will perform all switching at substation facilities in support of the Work by the Contractor.
b. The CRCNV will provide reasonable access to the transmission and distribution facilities, 7:00 a.m. to 5:00 p.m., Monday through Friday during periods which work has been scheduled.
c. The CRCNV may provide 120/240-volt station service power when indicated in a written Task Authorization.
d. The CRCNV, subject to availability, may provide a designated area for Contractor's use to store tools, equipment and materials as indicated in a written Task Authorization.
e. The CRCNV will provide drawings and technical data related to its transmission and distribution system to the Contractor as necessary in order for the Contractor to perform the Work Copies of documents obtained pursuant to this Contract shall be returned to the CRCNV upon termination of this Contract.

ATTACHMENT BB

INSURANCE REQUIREMENTS:

Contractor and subcontractors shall procure and maintain until all of their obligations have been discharged, including any warranty periods under this Contract are satisfied, insurance against claims for injury to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors.

The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract.

The State in no way warrants that the minimum limits contained herein are sufficient to protect the Contractor from liabilities that might arise out of the performance of the work under this Contract by the Contractor, his agents, representatives, employees, or subcontractors. Contractor is free to purchase such additional insurance as may be determined necessary.

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	$10,000,000
• Products – Completed Operations Aggregate	$ 5,000,000
• Personal and Advertising Injury	$ 5,000,000
• Each Occurrence	$ 5,000,000

a. The policy shall be endorsed to include the following additional insured language: "The State 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)	$ 5,000,000

a. The policy shall be endorsed to include the following additional insured language: “The State 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 NRS, and when such contractor or subcontractor executes the appropriate sole proprietor waiver form.

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

1. On insurance policies where the State of Nevada, Colorado River Commission of Nevada, is named as an additional insured, the State of Nevada 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 (Gina Goodman at 100 N. City Pkwy, Ste 1100, Las Vegas, NV 89106). 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.

All certificates and any required endorsements are to be received and approved by the State before work commences. Each insurance policy required by this Contract must be in effect at or prior to commencement of work under this Contract and remain in effect for the duration of the project. Failure to maintain the insurance policies as required by this Contract or to provide evidence of renewal is a material breach of contract.

All certificates required by this Contract shall be sent directly to (Gina Goodman at 100 N. City Pkwy, Ste 1100, Las Vegas, NV 89106). The State project/contract number and project description shall be noted on the certificate of insurance. The State reserves the right to require complete, certified copies of all insurance policies required by this Contract at any time.

F. SUBCONTRACTORS: Contractors' certificate(s) shall include all subcontractors as additional insureds under its policies or subcontractors shall maintain separate insurance as determined by the Contractor, however, subcontractor's limits of liability shall not be less than $5,000,000 per occurrence / $10,000,000 aggregate.

G. APPROVAL: Any modification or variation from the insurance requirements in this Contract shall be made by the State Risk Management Division or the Attorney General's Office, whose decision shall be final. Such action will not require a formal Contract amendment, but may be made by administrative action.

ATTACHMENT CC

STATE OF NEVADA
Colorado River Commission of Nevada
100 N. City Parkway, Suite 1100 │ Las Vegas, NV 89106Phone: 775-684-0170 │ Fax: 775-684-0188

Solicitation: **69CRC-S3056**
For
Maintenance and Testing Labor Support Agreement

Release Date: **10/30/2024**
Deadline for Submission and Opening Date and Time: **12/12/2024 @ 2:00 pm**

Single point of contact for the solicitation:
David Rodriguez, Power Systems Engineering Manager
Phone, 702-373-9403
Email Address, drodriguez@crc.nv.gov

(TTY for Deaf and Hard of Hearing, 800-326-6868
Ask the relay agent to dial, 1-775-515-5173/V.)

TABLE OF CONTENTS

1. APPLICABLE REGULATIONS GOVERNING PROCUREMENT

1.1. All applicable Nevada Revised Statutes (NRS) and Nevada Administrative Code (NAC) documentation can be found at: www.leg.state.nv.us/law1.cfm.

1.2. Prospective vendors are advised to review Nevada's ethical standards requirements, including but not limited to NRS 281A, NRS 333.800, and NAC 333.155.

2. PROJECT OVERVIEW

2.1. The State of Nevada, Colorado River Commission of Nevada is seeking proposals from qualified vendors to provide Maintenance and Testing Labor Support Agreement services as described in the scope of work and attachments.

2.2. The State intends to award multiple contract(s) in conjunction with this Request for Proposals (RFP), as determined in the best interests of the State. Colorado River Commission of Nevada shall administer contract(s) resulting from this solicitation. The resulting contract(s) are expected to be for a contract term of four years, subject to Board of Examiners approval.

2.3. AGENCY BACKGROUND

2.3.1. The Colorado River Commission of Nevada (CRCNV) owns and operates high-voltage transmission and distribution system consisting of two 230/69-kV substations, three 230/14.4-kV substations, four 69/13.8-kV substations, seven 69/4.16-kV substation, 32 miles of 230-kV transmission lines, 5 miles 69-kV overhead transmission lines, eleven miles of 69-kV underground transmission lines and other related facilities in Clark County, Nevada. In addition, the Commission is responsible for the operation and maintenance of ten additional substations owned by the Southern Nevada Water Authority and three owned by the Clark County Water Reclamation District.

2.4. GOALS AND OBJECTIVES

2.4.1. The goal of this solicitation is to obtain a qualified contractor able to assist the CRCNV in performing critical infrastructure maintenance and improvements to the CRCNV electrical system.

3. SCOPE OF WORK

3.1. See Attachments 4.1.1.

4. ATTACHMENTS

4.1. ATTACHMENTS INCORPORATED BY REFERENCE. To be read and not returned.

4.1.1. Attachment A - Scope of Work
4.1.2. Attachment B - Terms and Conditions for Services

4.2. ATTACHMENTS FOR REVIEW. To be read and not returned (unless redlining).

4.2.1. Attachment C – Standard Form Contract
4.2.2. Attachment D - Insurance Schedule

4.3. PROPOSAL ATTACHMENTS. To be completed and returned in proposal.

4.3.1. Attachment E - Cost Schedule
4.3.2. Attachment F - Proposed Staff Resume
4.3.3. Attachment G - Reference Questionnaire
4.3.4. Attachment H - Vendor Information Response – **Must Be Signed**
   A. Vendor Contact Information
   B. Vendor Information
   C. Payment Authorization for use of Procurement Card
   D. Name of Individual Authorized to Bind the Organization
   E. Vendor Certifications

F. Confidentiality and Certification of Indemnification
G. Certification Regarding Lobbying

5. TIMELINE

5.1. QUESTIONS. All questions regarding this solicitation shall be submitted using the Bid Q&A feature in NevadaEPro.

5.2. TIMELINE. The following represents the proposed timeline for this project.

5.2.1. All times stated are Pacific Time (PT).
5.2.2. These dates represent a tentative schedule of events.
5.2.3. The State reserves the right to modify these dates at any time.

A. Deadline for Questions .....No later than 5:00 pm on 11/12/2024
B. Answers Posted..... On or about 11/19/2024
C. Deadline for References.....No later than 5:00 pm on 12/09/2024
D. Deadline Proposal Submission and Opening .....No later than 2:00 pm on 12/12/2024
E. Evaluation Period (estimated)..... 12/12/2024 - 12/24/2025
F. Selection of a Vendor (estimated)..... On or about 01/07/2025
G. BOE Approval (estimated) 04/08/2025
H. Contract start date (estimated) 04/14/2025

6. EVALUATION

6.1. Evaluation and scoring are conducted in accordance with NRS 333.335 and NAC 333.160-333.165.

6.1.1. Proposals shall be kept confidential until a contract is awarded.
6.1.2. In the event the solicitation is withdrawn prior to award, proposals remain confidential.
6.1.3. The evaluation committee is an independent committee established to evaluate and score proposals submitted in response to the solicitation.
6.1.4. Financial stability shall be scored on a pass/fail basis.
6.1.5. Proposals shall be consistently evaluated and scored based upon the following factors and relative weights.

A. Addressed all Scope of Work items.....50
B. Provided examples of Contractor's industry experience on all Scope of Work items.....40
C. Cost Factor.....8
D. No redlines of State contract.....2

6.1.6. Cost proposals will be evaluated based on the following formula.

A. Cost Factor Weight x (Lowest Cost Submitted by a Vendor / Proposer Total Cost) = Cost Score

6.1.7. Presentations

A. Following evaluation and scoring specified above, the State may require vendors to make a presentation of their proposal to the evaluation committee or other State staff, as applicable.
B. The State, at its option, may limit participation in vendor presentations to vendors above a natural break in relative scores from technical and cost scores.
C. Following presentations, the combined technical, cost, and presentation scores will become the final score for a proposal.
D. The State reserves the right to add additional criteria or presentations.
E. The State reserves the right to forego vendor presentations and select vendor(s) based on the written proposals submitted.

6.2. NEVADA-BASED BUSINESS PREFERENCE

6.2.1. The State awards a five percent (5%) preference to Nevada-based businesses pursuant to NRS 333.3351 to 333.3356, inclusive.
6.2.2. Nevada-based business is defined in NRS 333.3352(1).

6.2.3. The term 'principal place of business' has the meaning outlined by the United States Supreme Court in Hertz Corp v. Friend, 559 U.S. 77 (2010), typically meaning a business's corporate headquarters.
6.2.4. To claim this preference a vendor must indicate it on their vendor account and submitted Quote in NevadaEPro.
6.2.5. This preference cannot be combined with any other preference, granted for the award of a contract using federal funds, or granted for the award of a contract procured on a multi-state basis.

6.3. INVERSE PREFERENCE

6.3.1. The State applies an inverse preference to vendors that have a principal place of business in a state other than Nevada and that state applies an in-state preference not afforded to Nevada based vendors, pursuant to AB28 passed in the 81st session of the Nevada Legislature.
6.3.2. The amount of the inverse preference is correlated to the amount of preference applied in the other state.
6.3.3. Vendors who meet this criterion must indicated it on their submitted Quote in NevadaEPro.
6.3.4. This preference cannot be combined with any other preference, granted for the award of a contract using federal funds, or granted for the award of a contract procured on a multi-state basis.

7. MANDATORY MINIMUM REQUIREMENTS

7.1. Pursuant to NRS 333.311 a contact cannot be awarded to a proposal that does not comply with the requirements listed in this section. Proposal shall include confirmation of compliance with all mandatory minimum requirements.

7.2. NEVADA LAW AND STATE INDEMNITY. Pursuant to NRS 333.339, any contract that is entered into may not: (1) Require the filing of any action or the arbitration of any dispute that arises from the contract to be instituted or heard in another state or nation; or (2) Require the State to indemnify another party against liability for damages.

7.3. NO BOYCOTT OF ISRAEL. Pursuant to NRS 333.338, the State of Nevada cannot enter a contract with a company unless that company agrees for the duration of the contract not to engage in a boycott of Israel. By submitting a proposal or bid, vendor agrees that if it is awarded a contract, it will not engage in a boycott of Israel as defined in NRS 333.338(3)(a).

7.4. INDEMNIFICATION. Required contract terms on Indemnification: "To the fullest extent permitted by law, Contractor shall indemnify, hold harmless and defend, not excluding the State's right to participate, the State from and against all liability, claims, actions, damages, losses, and expenses, including, without limitation, reasonable attorneys' fees and costs, arising out of any breach of the obligations of Contractor under this contract, or any alleged negligent or willful acts or omissions of Contractor, its officers, employees and agents. Contractor's obligation to indemnify the State shall apply in all cases except for claims arising solely from the State's own negligence or willful misconduct. Contractor waives any rights of subrogation against the State. Contractor's duty to defend begins when the State requests defense of any claim arising from this Contract."

7.5. LIMITED LIABILITY. Required contract terms on Limited Liability: "The State will not waive and intends to assert available NRS Chapter 41 liability limitations in all cases. Contract liability of both parties shall not be subject to punitive damages. Damages for any State breach shall never exceed the amount of funds appropriated for payment under this Contract, but not yet paid to Contractor, for the Fiscal Year budget in existence at the time of the breach. Contractor's tort liability shall not be limited."

7.6. CONTRACT RESPONSIBILITY. Awarded vendor shall be the sole point of contract responsibility. The State shall look solely to the awarded vendor for the performance of all contractual obligations which may result from an award based on this solicitation, and the awarded vendor shall not be relieved for the non-performance of any or all subcontractors.

7.7. DATA ENCRYPTION. State IT requires that data be encrypted in transit and in rest.

7.8. STATESIDE DATA. State IT requires that State data assets must be maintained in the United States and data will not be held offshore.

7.9. NEVADA BUSINESS LICENSE. Pursuant to NRS 353.007, prior to contract execution awarded vendor must hold a state business license pursuant to NRS chapter 76 unless exempted by NRS 76.100(7)(b).

7.10. DISCLOSURE. Each vendor shall include in its proposal a complete disclosure of any alleged significant prior or ongoing contract failures, contract breaches, any civil or criminal litigation or investigations pending which involves

the vendor or in which the vendor has been judged guilty or liable.

8. CRITICAL ITEMS

8.1. In addition to the *Scope of Work* and *Attachments*, the items listed in this section are critical to the success of the project. These items will be used in evaluating and scoring the proposal. Vendor proposal should address items in this section in enough detail to provide evaluators an accurate understanding of vendor capabilities. Proposals that fail to sufficiently respond to these items may be considered non-responsive.

8.2. CONTRACT FORM. The State strongly prefers vendors agree to the terms of the attached *Contract Form* as is. Ability to agree to contract terms is a high priority to the State. Vendors who cannot agree to the contract as is must include a redlined Word version of the attached *Contract Form* with their proposal response. To the extent a vendor has prior contractual dealings with the State, no assumption should be made that terms outside those provided herein have any influence on this project.

8.3. INSURANCE SCHEDULE

8.3.1. The State strongly prefers vendors agree to the terms of the attached *Insurance Schedule* as is. Vendors who cannot agree must explain which areas are causing non-compliance and attach a red line if necessary.
8.3.2. Awarded vendor shall maintain, for the duration of the contract, insurance coverages as set forth in the fully executed contract.
8.3.3. Work on the contract shall not begin until after the awarded vendor has submitted acceptable evidence of the required insurance coverages.
8.3.4. Failure to maintain any required insurance coverage or acceptable alternative method of insurance shall be deemed a breach of contract.

8.4. VENDOR BACKGROUND

8.4.1. Company background/history and why vendor is qualified to provide the services described in this solicitation.
8.4.2. Provide a brief description of the length of time vendor has been providing services described in this solicitation to the public and/or private sector.

8.5. VENDOR STAFF RESUMES

8.5.1. A resume shall be included for each proposed key personnel, see *Proposed Staff Resume.*
8.5.2. A resume shall also be included for any proposed key subcontractor personnel.

8.6. SUBCONTRACTORS

8.6.1. Subcontractors are defined as a third party, not directly employed by the contractor, who shall provide services identified in this solicitation. This does not include third parties who provide support or incidental services to the contractor.
8.6.2. Proposal should include a completed *Vendor Information Response* form for each subcontractor.
8.6.3. Vendor shall not allow any subcontractor to commence work until all insurance required of the subcontractor is provided to the vendor.
8.6.4. Vendor proposal shall identify specific requirements of the project for which each subcontractor shall perform services.

A. How the work of any subcontractor(s) shall be supervised
B. How channels of communication shall be maintained
C. How compliance with contracts terms and conditions will be assured
D. Previous experience with subcontractor(s)

8.7. VENDOR FINANCIAL INFORMATION

8.7.1. The information requested in this section is designated as confidential business information by the Administrator pursuant to NRS 333.020(5)(b) and is not public information pursuant to NRS 333.333.
8.7.2. This information should be submitted as a separate attachment, flagged as confidential in NevadaEPro.
8.7.3. Proposing vendor shall provide the following financial information and documentation:

A. Dun and Bradstreet Number
B. Federal Tax Identification Number

C. The last two (2) full years and current year interim:

1. Profit and Loss Statements
2. Balance Statements

8.8. BUSINESS REFERENCES

8.8.1. The information requested in this section is designated as confidential business information by the Administrator pursuant to NRS 333.020(5)(b) and is not public information pursuant to NRS 333.333.
8.8.2. Vendors shall provide a minimum of three (3) business references from similar projects performed for private and/or public sector clients within the last five (5) years, see *Reference Questionnaire*.
8.8.3. The purpose of these references is to document relevant experience and aid in the evaluation process.
8.8.4. Business references should return *Reference Questionnaire* directly to Single Point of Contact via email.
8.8.5. Business references will not be accepted directly from proposing vendor.
8.8.6. The State will not disclose submitted references, but will confirm if a reference has been received.
8.8.7. The State reserves the right to contact references during evaluation.

9. SUBMISSION CHECKLIST

9.1. This section identifies documents that shall be submitted to be considered responsive. Vendors are encouraged to review all requirements to ensure all requested information is included in their response.

9.1.1. Proposals must be submitted as a Quote through NevadaEPro, https://NevadaEPro.com.
9.1.2. Vendors are encouraged to submit a single file attachment per proposal section if possible.
9.1.3. Technical proposal information and Cost proposal information shall not be included in the same attachment.
9.1.4. Cost proposal attachment shall not be flagged as confidential in NevadaEPro.
9.1.5. Additional attachments may be included, but are discouraged and should be kept to a minimum.

9.2. TECHNICAL PROPOSAL

A. Title Page
B. Table of Contents
C. Response to Mandatory Minimum Requirements
D. Response to Critical Items
E. Response to Scope of Work
F. Proposed Staff Resumes
G. Other Informational Material

9.3. PROPRIETARY INFORMATION. If necessary. Attachment should be flagged confidential in NevadaEPro.

A. Title Page
B. Table of Contents
C. Trade Secret information, cross referenced to the technical proposal

9.4. COST PROPOSAL

9.5. VENDOR FINANCIAL INFORMATION. Attachment should be flagged confidential in NevadaEPro.

9.6. SIGNED ATTACHMENTS

A. Vendor Information Response
B. Vendor Certifications
C. Confidentiality and Certification of Indemnification
D. Certification Regarding Lobbying

9.7. OTHER ATTACHMENTS. If necessary, not recommended.

9.8. REFERENCE QUESTIONNAIRES. Not submitted directly by vendor.

ATTACHMENT DD

LND Technical Services®

LND-CRC-20241212
DEC 12, 2024

The Solicitation 69CRC-S3056:
Maintenance and Testing Labor Support Agreement

Table of Contents

I. COVER LETTER

http://LNDTS.com +1 858-609-9837 9337 Katy Fwy, STE B-5104 Houston, TX 77024

LND-CRC-20241212
DEC 12, 2024

LND Technical Services
9337 Katy Fwy, Ste B-5104 Houston, TX 77024
P: +1 919-449-4168
Nam.le@lndts.com
Lndts.com

STATE OF NEVADA
Colorado River Commission of Nevada (CRCNV)

Attn: David Rodriguez.

Dear David Rodriguez,

RE: #RFP**69CRC-S3056 For Maintenance and Testing Labor Support Agreement**

LND Technical Services would like to thank CRCNV for the opportunity to provide this proposal. LND Technical Services was established in May 2020 as a Minority and Women Owned Business, we possess the required skills and knowledge to fulfill the needs of CRCNV in this Request for Proposal, and the subsequent contract. The services listed in this solicitation are services that our company employees have been performing for years. We have no doubts that our qualifications meet or exceed those expected by CRCNV.

We trust our skills meet with your needs and expectations and look forward to hearing from you.

We hereby enclose our Contract Administration Data for your reference:

FIRM NAME:	LND Technical Services
ESTABLISH YEAR, STATE	2020, DELAWARE
HEAD QUARTER:	9337 Katy Fwy, STE B-5104, Houston, TX 77024
BRANCH OFFICE:	Bronx, NY (Regional)
	Albany, NY (Satellite)
	Denver, CO (Regional)
	Columbus, OH (Satellite)
POINT OF CONTACT/TITLE:	Nam Le / PRESIDENT
PHONE NUMBER:	919-449-4168
E-MAIL ADDRESS:	Nam.le@lndts.com
SAM UEI NO:	ZPJCWBNXLGT3
CAGE CODE:	8ZUG3
FEID NO:	**85-1332835**

Please do not hesitate to contact us with any questions.

Warm regards,

Nam Le, PMP, GWCPM
PRESIDENT

MBE, WBE, WOSB

II. TECHNICAL APPROACH

http://LNDTS.com +1 858-609-9837 9337 Katy Fwy, STE B-5104 Houston, TX 77024

LND Technical Services is NETA company. We have highly trained technicians and field personnel backed up by an engineering team with over 500 years' combined experience. Our team has provided and demonstrated high competencies in the maintenance, repair, testing and commissioning of all types of electrical equipment including switchgear, transformers, circuit breakers, and panels, ranging in voltage from 120V to 500kV. Our teams are well trained, and safety is our top priority. LND stands ready to demonstrate our knowledge and capabilities to engineers, troubleshoot and find innovative solutions should equipment failures or obstacles arise. Our teams are experienced working in a variety of industries which include oil & gas extraction and refining, wastewater treatment plants, high voltage substations, conventional and renewable power generation, data centers, hospitals, and commercial property. We also have experience with many projects that services need to be performed while the Electrical Power Distribution System is energized like Infra-scanned, Online Partial Discharge whereas our engineers are equipped with PPE and fully follow safety standards.

LND has been providing its customers with the best service practices throughout the years and has had successful projects like this project which makes this a good opportunity for LND to prove and show the experience and quality we can provide for CRCNV. Our employees have multiple years of experience testing and inspecting electrical equipment while following NETA's and manufacturers' standards and requirements. We are certain that we can meet any CRCNV projects objectives while maintaining the highest quality possible and maintaining an efficient work schedule that meets CRCNV requirements. We also have a well-versed Project Management team that help and assist customers at any given time to facilitate communication throughout the project. We understand the importance of these projects and that answering questions in a timely matter is a priority for our customers to maintain an efficient project schedule.

Our company owns test equipment sufficient to complete the scope of work, and we have access to rental test equipment as well, to supplement the equipment that we own, should it be required.

LND has many NETA-accredited testing teams equipped with the knowledge, training, skills and equipment to execute work under this contract at multiple locations. We have developed strong and proficient relations with subcontractors to complete any work that we would not do in-house.

LND follows the project management approach as shown below. The following methodology allows us to execute projects successfully and maintain our clients' satisfaction.

Following the award of the contract, a kick-off meeting will be held to involve all project stakeholders. The schedule will be discussed and confirmed with CRCNV.

LND's project management, technical and safety oversight for the project will be performed by our Director of Operations, Kevin Halma. Kevin has extensive experience with LV, MV, and HV electrical equipment and has been performing both maintenance and commissioning services for over 10 years. He holds his BS in Electrical Engineering and is certified NETA IV, NICET III, NFPA 70E. Kevin has completed many large-scale projects including industrial facility outages, substation outages of similar and also larger size and complexity. He managed electrical maintenance projects requiring up to 30 engineers/technicians for up to 30 days. This has all been done with a clean safety record, and a high focus on quality and customer satisfaction. A detailed list of Kevin's work experience, qualifications, and certifications is shown in the resume included in section Appendix VIII.5 Resumes Qualifications.

Matthew Miller, Alexjandro Reyes and Shannon Culbertson will be our site team leaders and will be responsible for the day-to-day project activities. They have performed similar projects in their extensive experience of Engineering and Management Experience, hold NETA, BSEE, NFPA 70E certificates. The team that reports to them will all have at least 5 years of experience in performing electrical testing and maintenance. A detailed list of their work experience, qualifications, and certifications is shown in the resume included in Appendix VIII.5 Resumes Qualifications.

LND will use subcontractors to complete transmission line work and any repairs including installation and oil processing. Prior to engaging any new subcontractor, CRCNV will be notified. LND has various subcontractor relations in place for such projects, and all of LND subcontractors will be required to follow all contractual terms and conditions.

LND has reviewed the project documents, and therefore fully understands the scope of work. We have no doubts that our experience and expertise will exceed that of what is required by CRCNV.

II. UNDERSTANDING SCOPE of WORK

We, LND Technical Services, fully understand the scope of works which are outlined hereunder:

1. **Substation Testing and Maintenance**

   - **High Voltage Breaker Testing and Maintenance**
     - Perform comprehensive testing of high voltage circuit breakers as per NETA ATS (Acceptance Testing Specifications) and MTS (Maintenance Testing Specifications).
     - Include functional, dielectric, and mechanical tests to ensure reliability.
   - **Transformer Testing**
     - Conduct full diagnostic testing on large power transformers, including oil quality analysis, dissolved gas analysis (DGA), and thermographic scans.
     - Perform electrical testing such as turns ratio, power factor, and insulation resistance tests.
   - **Other Equipment including but not limited to**
     - Motor Operated / Manually operated disconnect switches
     - Instrument transformers (CT, VT, CVT, CCVT)
     - Capacitor Banks
     - Station service equipment including panels, ATS, and battery/UPS systems

2. **Relaying and Protection Systems**

   - Test and verify protective relaying systems to confirm proper coordination and fault-clearing capabilities.
   - Validate relay calibration and conduct trip timing analysis to ensure system protection integrity.

3. **Transmission and Distribution Line Maintenance**

   - **Overhead Systems**
     - Perform NETA-compliant testing on overhead lines, including grounding system verification, and physical / mechanical / infrared inspections.
   - **Underground Systems**
     - Conduct cable insulation tests using Very Low Frequency (VLF) testing methods, partial discharge tests, and time-domain reflectometry to locate faults and assess cable health.

4. **Testing and Commissioning**

   - Adhere to NETA ATS requirements for commissioning new equipment, including:
     - Verification of proper installation and functionality of high voltage disconnect switches, breakers, transformers, and other substation components.
     - Conduct performance validation under simulated load conditions.

5. **Grounding System Verification**

   - Perform fall-of-potential and point to point testing to assess grounding system integrity as per NETA guidelines.
   - Address discrepancies to ensure low impedance paths for fault current dissipation.

6. **Fiber and Communication Systems**

- Conduct fiber optic continuity tests, attenuation tests, and splice loss measurements to verify installation integrity and compliance with NETA recommendations.

7. **Deliverables to Meet NETA Standards**

- Provide detailed reports documenting test procedures, results, and compliance with NETA specifications.
- Include recommendations for corrective actions when deficiencies are identified.

Servicing Methodology for multiple sites:

Our team is capable of executing multiple projects during the same time period in different locations. This is supported by:

- A comprehensive Preventive Maintenance Program: where we discussed carefully with customer the contact point at each site to ensure the schedule is aligned with our resource allocation to provide the shortest downtime for every service at the expected level.
- Access to test equipment: which is frequently calibrated and ready for any service trip. Our test equipment fleet is managed by Intellirent, who is a premium service provider. Whenever our fleet is low on equipment, Intellirent is able to provide us rental equipment within 24hrs or less.
- Technology Integration: where we implement Centric Management System to track asset history and conditions and MDM (Mobile Device Management) to foster Security, Compliance. It is one of the mainstream and secured IoT services to keep customer's data safe.
- Post-Maintenance Performance Evaluation: which is applied to measure the consistent performance and to update technical documentation and maintenance reports, as well as track all equipment which will require additional repairs in the future.

Organizational Capability

Our team is composed of certified technicians and engineers trained in executing all tasks in strict adherence to NETA standards. Our testing equipment is calibrated and maintained to meet the precision and accuracy requirements specified by NETA guidelines.
By combining our NETA certification, technical expertise, and dedication to quality, we ensure that all work performed under this contract will meet or exceed the expectations set by the Colorado River Commission of Nevada.

III. RESPONSE to MINIMUM REQUIREMENTS

http://LNDTS.com +1 858-609-9837 9337 Katy Fwy, STE B-5104 Houston, TX 77024

LND technical Services acknowledge and confirm compliance with the mandatory minimum requirements as outlined under NRS 333.311.

7.1. Nevada Law and State Indemnity

LND technical Services agree that any contract entered into will adhere to NRS 333.339 by not:

- Requiring the filing of any action or arbitration outside of the State of Nevada.
- Requiring the State to indemnify any party against liability for damages.

7.2. No Boycott of Israel

In compliance with NRS 333.338, LND technical Services confirm that, if awarded the contract, LND technical Services will not engage in a boycott of Israel as defined in NRS 333.338(3)(a).

7.3. Indemnification

LND technical Services agree to the required terms of indemnification, ensuring that LND technical Services will indemnify, hold harmless, and defend the State against all liability, claims, actions, damages, losses, and expenses arising from this contract, except in cases solely involving the State's negligence or willful misconduct.

7.4. Limited Liability

LND technical Services acknowledge and accept the limited liability terms, including the assertion of NRS Chapter 41 liability limitations and the exclusion of punitive damages. Contract liability will be subject to the specified fiscal year budget constraints, and our tort liability will not be limited.

7.5. Contract Responsibility

If awarded the contract, LND technical Services will act as the sole point of responsibility for all contractual obligations, including subcontractor performance.

7.6. Data Encryption

LND technical Services commit to ensuring that all data is encrypted both in transit and at rest, per State IT requirements.

7.7. Stateside Data

LND technical Services confirm that all State data assets will be stored and managed within the United States and will not be held offshore.

7.8. Nevada Business License

LND technical Services agree to obtain a valid Nevada business license pursuant to NRS Chapter 76 before contract execution, unless exempted under NRS 76.100(7)(b).

7.9. Disclosure

LND technical Services have provided a comprehensive disclosure of any prior or ongoing contract failures, breaches, or legal matters involving our organization, as required.

By submitting this proposal, LND technical Services affirm our compliance with the specified requirements and our understanding of all outlined terms and conditions.

IV. RESPONSE to CRITICATL ITEMS

8.2: Contract Form

We acknowledge the State's preference for vendors to agree to the terms of the provided Contract Form as is. We confirm our agreement to the terms of the attached Contract Form without modification. We understand that the ability to agree to the contract terms is a high priority to the State and is a significant factor in evaluating our proposal. Should any modifications be necessary, we will provide a redlined Word version of the Contract Form, highlighting any proposed changes for the State's review, in accordance with the instructions provided. We further acknowledge that prior contractual dealings with the State have no bearing on the terms of this project unless expressly included within the provided Contract Form.

8.3: Insurance Schedule

We acknowledge and confirm our understanding of the insurance requirements as outlined in the attached Insurance Schedule. We agree to the terms of the attached Insurance Schedule as is and confirm our compliance with all specified requirements. If, for any reason, modifications are necessary, we will provide a red-lined version and explain the areas of non-compliance, should that be the case.

8.3.2. Maintenance of Insurance Coverage

We will maintain the required insurance coverage throughout the duration of the contract, as outlined in the fully executed contract.

8.3.3. Submission of Insurance Evidence

We understand that work on the contract will not begin until we have submitted acceptable evidence of the required insurance coverages to the State. Refer Section VIII.APPENDIX 1. Sample of Insurance. Refer to section VIII.APPENDIX 5. Sample of Insurance.

8.3.4. Insurance Compliance

We acknowledge that failure to maintain the required insurance coverage or an acceptable alternative method of insurance will be considered a breach of contract.

We affirm our commitment to comply with the insurance requirements and provide all necessary documentation to ensure compliance throughout the contract term.

8.4 Vendor Background:

Refer to the Attachment file-LNDTS_STATEMENT OF QUALIFICATIONS.pdf to be uploaded on website.

8.5 Vendor Staff Resume:

Refer to section VIII. APPENDIX 5. Resumes Qualification.

8.6 Subcontractors:

It is our intention to perform the entirety of the scope of work listed under this RFP without the use of subcontractors. If, for any reason, there is a repair that requires an outside sub-contractor, CRCNV will be notified of this prior to proceeding.

8.7. VENDOR FINANCIAL INFORMATION:

Refer to the Attachment file to be uploaded on website:

- Dun and Bradstreet
- LND Technical Services, LLC - Financial Statements
- Profit and Loss Statements
- Balance Statements

8.8. BUSINESS REFERENCES:

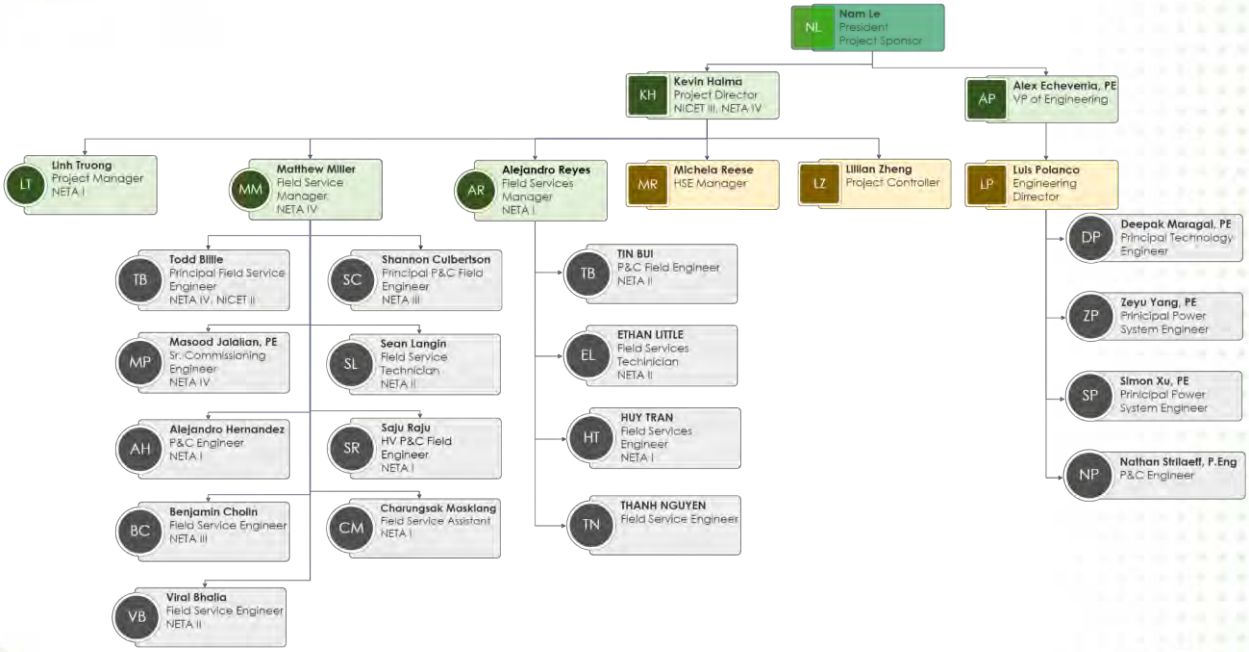
Refer to section :

- VII. CONTRACTOR'S INDUSTRY EXPERIENCE
- VIII. APPENDIX 1. PAST PERFORMANCE QUALIFICATION and 2. PROJECT REFERENCES LIST

http://LNDTS.com +1 858-609-9837 9337 Katy Fwy, STE B-5104 Houston, TX 77024

V. PROJECT ORGANIZATION CHART and KEY PERSONNELS

http://LNDTS.com +1 858-609-9837 9337 Katy Fwy, STE B-5104 Houston, TX 77024



Name	Title	Certifications	Years of Experience
Nam Le, PMP, GWCPM	President	NICET I, OSHA 30, PMP	20+ years Engineering And Management Experience
Kevin Halma	VP of Operations	NETA IV, NICET III, OSHA 30, NFPA 70E, P.Eng	15+ years Power System Experience
Alex Echeverria, PE	VP of Engineering	NYISO, NPCC, NERC, CEATI, EPRI, NY PE	30+ years P&C Experience
Luis Polanco	Engineering Director	NERC, WAPC	20+ years Engineering and Management Experience
Linh Truong	Project Manager	NETA I	+19 years Project Management Experience
Matthew Miller	Field Service Manager	NETA IV, BSEE, OSHA 30, NFPA 70E	20+ years Engineering and Management Experience
Alejandro Reyes	Field Service Manager	NETA I, NICET I, OSHA 30, NFPA 70E	10+ years Engineering and Field Service Experience
Zeyu Zang, PE	PE, Principal Power System Engineer	APEC, IEEE	30+ years in Power System P&C Experience
Simon Xu, PE	Principal Power System Engineer	PE, PLC, NEC, SEL, EPIC, ETAP	20+ years in Power System P&C Experience
Deepak Maragal, PE	Principal Technology Engineer	PE, SEL, IEEE	20+ years in Power System and P&C Experience
Masood Jalalian, PE	Sr. Commissioning Engineer	NETA IV, PE, PLC, IEC OSHA 30, NFPA 70E	20+ years in P&C Experience
Nathan Strilaeff, P.Eng	P&C Engineer	NETA IV, NERC, OSHA 30	7+ years Engineering and Field Service Experience

Todd Billie	Principal Field Service Engineer	NETA IV, NICET II, OSHA 30, NFPA 70E	15+ years Field Service Experience
Sharon Kenner	Principal Field Service Engineer	NETA IV, AVO I, PdMA II, OSHA 30, NFPA70E	15+ years Field Service Experience
Shannon Culbertson	Principal P&C Field Engineer	NETA III, OSHA 30, NFPA 70E	20 + years of Field Service Experience
Benjamin Cholin	Sr. Field Service Engineer	NETA III, NICET I, OSHA 30, NFPA 70E	10+ years Field Service Experience
Viral Bhalia	Sr. Field Service Engineer	NETA II, OSHA 10, NFPA 70E	10+ years Field Service Experience
Tin Bui	Sr. P&C Field Engineer	NETA II, OSHA 30, NFPA 70E	10+ years of Field Service Experience
Huy Tran	Field Service Engineer	NETA I, OSHA 30, NFPA 70E	1+ years of Field Service Experience
Alejandro Hernandez	P&C Engineer	NETA I, NFPA 70E	4+ years in P&C Field Service Experience
Benjamin Santiago	P&C Engineer	NETA I, NFPA 70E	3+ years in P&C Field Service Experience
Saju Raju	HV P&C Field Engineer	NETA I	17+ years in P&C Field Service Experience
Ethan Little	Field Service Technologist	NETA II, NICET I, NFPA 70E	5+ years of Field Service Experience
Oscar Calzada	Field Service Technician	NETA II, OSHA 30, NFPA70E Journeyman	10+ years of Field Service Experience

VI. CONTRACTOR'S INDUSTRY EXPERIENCE

http://LNDTS.com +1 858-609-9837 9337 Katy Fwy, STE B-5104 Houston, TX 77024

1 Capital Power – Maintenance for Multiple Substations

Utility
Capital Power Corporation

Location
Various – ND, KS, NM, IL, NC, TX

Customer
Capital Power Corporation

Point of Contact
Michal Stasiak
O&M Manager, US Renewables
Phone: 780-392-5361
Email: mstasiak@capitalpower.com

At Capital Power, we're working to create a brighter world powered by responsible energy. Together, our flexible generation and renewable assets represent approximately 9,300 MW of capacity that is well-positioned to support a low-carbon energy system.

The global energy system is expanding, shifting towards electrification, digitalization, and a future with lower emissions. This transition is one of the most significant changes of our time. At Capital Power, we are focused on delivering the reliable and affordable power we need today as we build the clean power system we want tomorrow.

Scope of Work: LND Technical Services has been working directly with Capital Power for years. The scope of services provided included annual preventative maintenance, 5-yr preventative maintenance, engineering services, and ongoing support for repairs, emergency support, and as-needed services. Annual preventative maintenance includes functional testing of equipment and basic visual inspections. 5-yr activities include full substation testing to NETA standards. Capital Power has selected LND for their maintenance programs for all renewable substations located across the USA.

Challenges Addressed: The substations are located throughout the country, and access to them can be difficult due to the proximity to LND's office locations. LND has found ways to quickly support emergencies and provide excellent service in case of any failures.

2 Cumulus Data – Commissioning of Substations interconnected with Nuclear Power Plant

Utility
Talen Energy, PPL

Location
Berwick, PA

Customer
Talen Energy, Cumulus Data, Linxon

Point of Contact
Mike Peterson
Electrical Operations Manager
Phone: 772-577-0385
Email: mike.peterson@talenenergy.com

The Cumulus data center, Cumulus Data Assets, sits on a 1,200-acre campus in Pennsylvania and is directly powered by the adjacent Susquehanna Steam Electric Station, which generates 2.5 gigawatts of power. The campus was purchased by Amazon in 2024.

Scope of Work: LND Technical Services has been working on this project since 2022 for various customers, including Talen Energy, Cumulus Data, and Linxon. LND's original scope of work was to perform testing and commissioning services for three newly built substations, some of which were directly interconnected with the Susquehanna Steam Electric Station. The campus includes 4 newly built substations with both GIS and AIS equipment; SS01 is a 230kV/69kV GIS substation, SS02 is a GIS 500kV/69kV substation. SS01 and SS02 both feed into SS03, a 69kV/34.5kV /GIS substation and SS04, another 69kV/34.5kV AIS/GIS substation. SS03 and SS04 provide various 34.5kV feeds into the data campus where voltage is further distributed to meet customer needs. The scope of service grew to include testing and commissioning of all 4 newly built substations, and we have also performed maintenance on some of these stations already.

Challenges Addressed: The project included tight schedule timelines to ensure that power could be brought to the data center to meet customer needs. SEL TiDL technology was implemented, which was a challenge for both the initial engineering and also for the testing and commissioning of the substations.

3 Beta Engineering – Various 34.5kV - 345kV Substation Commissioning Projects

Utility
Various

Location
Various – TX, LA, CA, NY, AR, AZ

Customer
Beta Engineering

Point of Contact
Logan Barton
Director of Project Management
Phone: 318-767-5675
Email: logan.barton@betaengineering.com

Projects Completed:

1. AES Westwing Solar: 34.5kV/230kV Substation, Location AZ
2. AES Baldy Mesa Solar: 34.5kV/115kV Substation, Location CA
3. REV Tumbleweed Solar: 34.5kV/230kV Substation and 230kV Switchyard, Location CA
4. Cleco Sellers Road: 230kV/138kV Substation, Location LA
5. Cleco Cole: 230kV Switchyard, Location LA
6. ORU Lovett: 345kV GIS/AIS Substation, Location NY
7. EDP Cattleman 1 and Cattleman 2: 34.5kV/345kV Substations and Switchyard, Location TX
8. EDP Riverstart Solar III: 34.5kV/345kV Substation Commissioning, Location IN
9. EDP Crooked Lake Solar: 34.5kV/230kV Substation Commissioning, Location AR
10. Denton Hickory: 115kV/15kV GIS/AIS Substation, Location TX

Scope of Work: LND Technical Services has been providing testing and commissioning for Beta engineering projects for years. Our scope of work includes full-service substation apparatus and protection and controls commissioning.

Challenges Addressed: Working with various site owners/developers, LND has been able to accommodate different testing specifications and requirements for all projects. The projects are normally on very tight schedule constraints requiring us to staff accordingly to meet aggressive deadlines.

4 New York State Office of General Services Substation Maintenance and Repair At Harriman Campus

Utility
OGS, National Grid

Location
Albany, NY

Customer
NYS Office of General Services

Point of Contact
Thomas James
Energy Conservation Technical Specialist (General Services)
Phone: 518-473-3029
Email: thomas.james@ogs.ny.gov

The 115kV Substation at the Harriman State Campus in Albany NY provides power for critical governmental operations throughout the State of NY. For continuity in government business it is imperative that the substation is maintained on a regular basis to prevent unnecessary power outages.

Scope of Work: LND Technical Services has been contracted to provide preventative maintenance service, repairs, and emergency services for the 115kV/13.8kV substation. The substation has two incoming lines from National Grid, 4 main power transformers which step down voltage from 115kV to 13.8kV, four 13.8kV Metal Clad switchgear, and a plethora of additional circuit breakers, disconnect switches, metering devices, and protection and control equipment. LND is responsible for providing regularly scheduled maintenance, as-needed/emergency repairs, and emergency response services.

Challenges Addressed: A portion of the substation was upgraded in recent years, but there is some equipment which is older and prone to failure. LND must be able to respond within 1-hr in case of any significant issue to ensure power can safely be brought back online as quickly as possible.

5 Ceilo Azul Switchyard – Ten West Link

Utility
APS, SCE

Location
Salome, AZ

Customer
Barnard Construction

Point of Contact
Ryan Englert
Project Manager
Phone: 406-586-1995
Email: ryan.englert@barnardinc.com

Ten West Link is a planned energy infrastructure project that will connect electrical substations in Tonopah, Arizona and Blythe, California. The new 500kV power line will improve transmission system efficiency and reliability while facilitating the development of new renewable energy and energy storage resources in Arizona and California. This will help both states achieve their renewable energy standards and carbon reduction goals.

Ten West Link will also bring significant economic, reliability and public policy benefits to the electric power grid serving the Desert Southwest – one of America's fastest-growing regions. The project spans 125 miles, and uses the U.S. Department of Energy's "Energy Corridor" and U.S. Bureau of Land Management's-designated utility corridors. Additionally, the project avoids the Kofa National Wildlife Refuge and all major population centers. The project is expected to be operational by the end of 2023.

Scope of Work: LND Technical Services was contracted by Barnard to perform full service testing of the newly built 500kV Azul Switchyard. The substation included 3 bays and a total of nine 500kV circuit breakers.

Challenges Addressed: The testing of this project started in June. To avoid heat stress, our team started work at approximately 4am to be able to complete by 1pm. Working outside, in the air it was not safe to work through the afternoon heat.

VII. APPENDIX

http://LNDTS.com +1 858-609-9837 9337 Katy Fwy, STE B-5104 Houston, TX 77024

1. PAST PERFORMANCE QUALIFICATION

NAVFAC/USACE PAST PERFORMANCE QUESTIONNAIRE (Form PPQ-0)

CONTRACT INFORMATION (Contractor to complete Blocks 1-4)

1. Contractor Information

Firm Name: LND Technical Services
CAGE Code: 8ZUG3
Address: 3525 Del Mar Heights Rd Unit #1837, San Diego, CA 92130
DUNs Number: 117579332
Phone Number: 919-449-4168
Email Address: nam.le@Lndts.com
Point of Contact: Nam Le
Contact Phone Number: 919-449-4168

2. Work Performed as: [X] Prime Contractor [ ] Sub Contractor [ ] Joint Venture [ ] Other (Explain)
Percent of project work performed: 100%
If subcontractor, who was the prime (Name/Phone #): N/A

3. Contract Information

Contract Number: W912QR23P0023
Delivery/Task Order Number (if applicable): CLIN 0001
Contract Type: [X] Firm Fixed Price [ ] Cost Reimbursement [ ] Other (Please specify):
Contract Title: ELECTRICAL POWER EVALUATION
Contract Location: Olmsted, IL

Award Date (mm/dd/yy): 02/08/2023
Contract Completion Date (mm/dd/yy): 03/16/2023
Actual Completion Date (mm/dd/yy): 03/16/2023
Explain Differences:

N/A

Original Contract Price (Award Amount): $14,170.00
Final Contract Price (*to include all modifications, if applicable*): $14,170.00
Explain Differences:

N/A

4. Project Description:

Complexity of Work [X] High [ ] Med [ ] Routine
How is this project relevant to project of submission? (*Please provide details such as similar equipment, requirements, conditions, etc.*)

The project involved completing an evaluation and maintenance of the Olmsted Locks and Dam electrical power delivery equipment. The scope involved maintenance and evaluation of low and medium voltage equipment.

CLIENT INFORMATION (Client to complete Blocks 5-8)

5. Client Information

Name: U. S. ARMY ENGINEER DISTRICT - Jeffrey A. Griffin
Title: Lockmaster-Olmsted Lock and Dam
Phone Number: (618)-748-6401
Email Address: Jeffrey.A.Griffin@usace.army.mil

6. Describe the client's role in the project:

To evaluate the facility's power equipment reliability and suggest corrective actions for issues that are found

7. Date Questionnaire was completed (mm/dd/yy): 06/01/2023

8. Client's Signature: Jeffrey A Griffin

NOTE: NAVFAC/USACE REQUESTS THAT THE CLIENT COMPLETES THIS QUESTIONNAIRE AND SUBMITS DIRECTLY BACK TO THE OFFEROR. THE OFFEROR WILL SUBMIT THE COMPLETED QUESTIONNAIRE TO USACE WITH THEIR PROPOSAL, AND MAY DUPLICATE THIS QUESTIONNAIRE FOR FUTURE SUBMISSION ON USACE SOLICITATIONS.

CLIENTS ARE HIGHLY ENCOURAGED TO SUBMIT QUESTIONNAIRES DIRECTLY TO THE OFFEROR. HOWEVER, QUESTIONNAIRES MAY BE SUBMITTED DIRECTLY TO USACE. PLEASE CONTACT THE OFFEROR FOR USACE POC INFORMATION. THE GOVERNMENT RESERVES THE RIGHT TO VERIFY ANY AND ALL INFORMATION ON THIS FORM.

ADJECTIVE RATINGS AND DEFINITIONS TO BE USED TO BEST REFLECT YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE

RATING	DEFINITION	NOTE
(E) Exceptional	Performance meets contractual requirements and exceeds many to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with few minor problems for which corrective actions taken by the contractor was highly effective.	An Exceptional rating is appropriate when the Contractor successfully performed multiple significant events that were of benefit to the Government/Owner. A singular benefit, however, could be of such magnitude that it alone constitutes an Exceptional rating. Also, there should have been NO significant weaknesses identified.
(VG) Very Good	Performance meets contractual requirements and exceeds some to the Government's/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with some minor problems for which corrective actions taken by the contractor were effective.	A Very Good rating is appropriate when the Contractor successfully performed a significant event that was a benefit to the Government/Owner. There should have been no significant weaknesses identified.
(S) Satisfactory	Performance meets minimum contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the contractor appear or were satisfactory.	A Satisfactory rating is appropriate when there were only minor problems, or major problems that the contractor recovered from without impact to the contract. There should have been NO significant weaknesses identified. Per DOD policy, a fundamental principle of assigning ratings is that contractors will not be assessed a rating lower than Satisfactory solely for not performing beyond the requirements of the contract.
(M) Marginal	Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions. The contractor's proposed actions appear only marginally effective or were not fully implemented.	A Marginal is appropriate when a significant event occurred that the contractor had trouble overcoming which impacted the Government/Owner.
(U) Unsatisfactory	Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains serious problem(s) for which the contractor's corrective actions appear or were ineffective.	An Unsatisfactory rating is appropriate when multiple significant events occurred that the contractor had trouble overcoming and which impacted the Government/Owner. A singular problem, however, could be of such serious magnitude that it alone constitutes an unsatisfactory rating.
(N) Not Applicable	No information or did not apply to your contract	Rating will be neither positive nor negative.

TO BE COMPLETED BY CLIENT

PLEASE CIRCLE THE ADJECTIVE RATING WHICH BEST REFLECTS YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE.

1. QUALITY:						
a) Quality of technical data/report preparation efforts	E	VG	S	M	U	N
b) Ability to meet quality standards specified for technical performance	E	VG	S	M	U	N
c) Timeliness/effectiveness of contract problem resolution without extensive customer guidance	E	VG	S	M	U	N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (without adverse effect on performance)	E	VG	S	M	U	N
2. SCHEDULE/TIMELINESS OF PERFORMANCE:						
a) Compliance with contract delivery/completion schedules including any significant intermediate milestones. *(If liquidated damages were assessed or the schedule was not met, please address below)*	E	VG	S	M	U	N
b) Rate the contractor's use of available resources to accomplish tasks identified in the contract	E	VG	S	M	U	N
3. CUSTOMER SATISFACTION:						
a) To what extent were the end users satisfied with the project?	E	VG	S	M	U	N
b) Contractor was reasonable and cooperative in dealing with your staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports, businesslike and communication)	E	VG	S	M	U	N
c) To what extent was the contractor cooperative, businesslike, and concerned with the interests of the customer?	E	VG	S	M	U	N
d) Overall customer satisfaction	E	VG	S	M	U	N
4. MANAGEMENT/ PERSONNEL/LABOR						
a) Effectiveness of on-site management, including management of subcontractors, suppliers, materials, and/or labor force?	E	VG	S	M	U	N
b) Ability to hire, apply, and retain a qualified workforce to this effort	E	VG	S	M	U	N
c) Government Property Control	E	VG	S	M	U	N
d) Knowledge/expertise demonstrated by contractor personnel	E	VG	S	M	U	N
e) Utilization of Small Business concerns	E	VG	S	M	U	N
f) Ability to simultaneously manage multiple projects with multiple disciplines	E	VG	S	M	U	N
g) Ability to assimilate and incorporate changes in requirements and/or priority, including planning, execution and response to Government changes	E	VG	S	M	U	N
h) Effectiveness of overall management (including ability to effectively lead, manage and control the program)	E	VG	S	M	U	N
5. COST/FINANCIAL MANAGEMENT						
a) Ability to meet the terms and conditions within the contractually agreed price(s)?	E	VG	S	M	U	N
b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainability or other factors that benefited the client	E	VG	S	M	U	N
c) If this is/was a Government cost type contract, please rate the Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-up documentation, monthly status reports/budget variance reports, compliance	E	VG	S	M	U	N

with established budgets and avoidance of significant and/or unexplained variances (under runs or overruns)						
d) Is the Contractor's accounting system adequate for management and tracking of costs? *If no, please explain in Remarks section.*		Yes X			No	
e) If this is/was a Government contract, has/was this contract been partially or completely terminated for default or convenience or are there any pending terminations? *Indicate if show cause or cure notices were issued, or any default action in comment section below.*		Yes			No X	
f) Have there been any indications that the contractor has had any financial problems? *If yes, please explain below.*		Yes			No X	
6. SAFETY/SECURITY						
a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, and respond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety, correction of noted deficiencies, etc.)	X	VG	S	M	U	N
b) Contractor complied with all security requirements for the project and personnel security requirements.	X	VG	S	M	U	N
7. GENERAL						
a) Ability to successfully respond to emergency and/or surge situations (including notifying COR, PM or Contracting Officer in a timely manner regarding urgent contractual issues).	X	VG	S	M	U	N
b) Compliance with contractual terms/provisions *(explain if specific issues)*	X	VG	S	M	U	N
c) Would you hire or work with this firm again? *(If no, please explain below)*		Yes X			No	
d) In summary, provide an overall rating for the work performed by this contractor.	X	VG	S	M	U	N

Please provide responses to the questions above (*if applicable*) and/or additional remarks. Furthermore, please provide a brief narrative addressing specific strengths, weaknesses, deficiencies, or other comments which may assist our office in evaluating performance risk *(please attach additional pages if necessary)*:

Project Detail Sheet

Your firm's name LND Technical Services (LNDTS)

Name of Project/Location/Square Footage: Department of Defense – Olmsted Locks and Dam, Olmsted, IL, Electrical Power Evaluation, 110' wide by 1200' long lock

General Scope of Project

The scope includes testing and evaluation of the power system equipment. The equipment included in the evaluation was rated at 15kV, 5kV, and 480V and included transformers, disconnect switches, circuit breakers, and power cables. The work was completed over a multi-day outage.

Your role (prime, joint venture, subcontractor) and work your company self-performed

LNDTS was the prime contractor for the project.

Percentage of Work completed by Prime Contractor Personal: 100 _%

Construction Cost:

At Award: $ 14,170 Reason for the cost growth: N/A

Final Cost: $ 14,170

Award Date: 02/08/2023

Schedule Completion: 03/16/2023 Reason for the time growth:

Actual Completion: 03/16/2023

Extent and type of word you subcontracted out

N/A _____

_____

_____

Owner's Point of Contact (POC) for reference (name and company and telephone number)

Jeffrey Griffin, Olmsted Lock and Dam, 618-748-6401

Brian Holcomb, Olmsted Lock and Dam, 502-315-6702

NAVFAC/USACE PAST PERFORMANCE QUESTIONNAIRE (Form PPQ-0)

CONTRACT INFORMATION (Contractor to complete Blocks 1-4)

1. Contractor Information

Firm Name: LND Technical Services — CAGE Code: 8ZUG3
Address: 3525 Del Mar Heights Rd Unit #1837, San Diego, CA 92130 — DUNs Number: 117579332
Phone Number: 919-449-4168
Email Address: nam.le@Lndts.com
Point of Contact: Nam Le — Contact Phone Number: 919-449-4168

2. Work Performed as: ☒ Prime Contractor ☐ Sub Contractor ☐ Joint Venture ☐ Other (Explain)
Percent of project work performed: 100%
If subcontractor, who was the prime (Name/Phone #): N/A

3. Contract Information

Contract Number: 697DCK-22-C-00376
Delivery/Task Order Number (if applicable): CS-22-01881
Contract Type: ☒ Firm Fixed Price ☐ Cost Reimbursement ☐ Other (Please specify):
Contract Title: Arc Flash Study for R90 after panel upgrade in Bellevue, NE
Contract Location: Bellevue, NE

Award Date (mm/dd/yy): 09/21/2022
Contract Completion Date (mm/dd/yy): 02/15/2023
Actual Completion Date (mm/dd/yy): 02/28/2023
Explain Differences:
Additional time was required to complete the study as incorrect information was provided by the facility, which meant the study needed to be re-done.

Original Contract Price (Award Amount): $33,900.00
Final Contract Price (*to include all modifications, if applicable*): $41,900.00
Explain Differences:
Additional time was required to complete the study as incorrect information was provided by the facility, which meant the study needed to be re-done.

4. Project Description:

Complexity of Work: ☒ High ☐ Med ☐ Routine
How is this project relevant to project of submission? (*Please provide details such as similar equipment, requirements, conditions, etc.*)
The project involved completing an arc flash study for a facility. We were required to have an engineer perform a site walk to obtain the necessary data to complete the study. This is the same scope as the NAVFAC/USACE project.

CLIENT INFORMATION (Client to complete Blocks 5-8)

5. Client Information

Name: Federal Aviation Administration - Joni Haynes
Title: Contracting Officer
Phone Number: (405) 954-7716
Email Address: joni.l.haynes@faa.gov

6. Describe the client's role in the project: Electrical Engineer contractor. Surveyed site and prepared Arc flash / short circuit Analysis

7. Date Questionnaire was completed (mm/dd/yy): 05/30/23

8. Client's Signature:  Thomas Pitters - Electrical Engineer

NOTE: NAVFAC/USACE REQUESTS THAT THE CLIENT COMPLETES THIS QUESTIONNAIRE AND SUBMITS DIRECTLY BACK TO THE OFFEROR. THE OFFEROR WILL SUBMIT THE COMPLETED QUESTIONNAIRE TO USACE WITH THEIR PROPOSAL, AND MAY DUPLICATE THIS QUESTIONNAIRE FOR FUTURE SUBMISSION ON USACE SOLICITATIONS.

CLIENTS ARE HIGHLY ENCOURAGED TO SUBMIT QUESTIONNAIRES DIRECTLY TO THE OFFEROR. HOWEVER, QUESTIONNAIRES MAY BE SUBMITTED DIRECTLY TO USACE. PLEASE CONTACT THE OFFEROR FOR USACE POC INFORMATION. THE GOVERNMENT RESERVES THE RIGHT TO VERIFY ANY AND ALL INFORMATION ON THIS FORM.

ADJECTIVE RATINGS AND DEFINITIONS TO BE USED TO BEST REFLECT YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE

RATING	DEFINITION	NOTE
(E) Exceptional	Performance meets contractual requirements and exceeds many to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with few minor problems for which corrective actions taken by the contractor was highly effective.	An Exceptional rating is appropriate when the Contractor successfully performed multiple significant events that were of benefit to the Government/Owner. A singular benefit, however, could be of such magnitude that it alone constitutes an Exceptional rating. Also, there should have been NO significant weaknesses identified.
(VG) Very Good	Performance meets contractual requirements and exceeds some to the Government's/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with some minor problems for which corrective actions taken by the contractor were effective.	A Very Good rating is appropriate when the Contractor successfully performed a significant event that was a benefit to the Government/Owner. There should have been no significant weaknesses identified.
(S) Satisfactory	Performance meets minimum contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the contractor appear or were satisfactory.	A Satisfactory rating is appropriate when there were only minor problems, or major problems that the contractor recovered from without impact to the contract. There should have been NO significant weaknesses identified. Per DOD policy, a fundamental principle of assigning ratings is that contractors will not be assessed a rating lower than Satisfactory solely for not performing beyond the requirements of the contract.
(M) Marginal	Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions. The contractor's proposed actions appear only marginally effective or were not fully implemented.	A Marginal is appropriate when a significant event occurred that the contractor had trouble overcoming which impacted the Government/Owner.
(U) Unsatisfactory	Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains serious problem(s) for which the contractor's corrective actions appear or were ineffective.	An Unsatisfactory rating is appropriate when multiple significant events occurred that the contractor had trouble overcoming and which impacted the Government/Owner. A singular problem, however, could be of such serious magnitude that it alone constitutes an unsatisfactory rating.
(N) Not Applicable	No information or did not apply to your contract	Rating will be neither positive nor negative.

TO BE COMPLETED BY CLIENT

PLEASE CIRCLE THE ADJECTIVE RATING WHICH BEST REFLECTS YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE.

1. QUALITY:						
a) Quality of technical data/report preparation efforts	(E)	VG	S	M	U	N
b) Ability to meet quality standards specified for technical performance	(E)	VG	S	M	U	N
c) Timeliness/effectiveness of contract problem resolution without extensive customer guidance	(E)	VG	S	M	U	N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (without adverse effect on performance)	(E)	VG	S	M	U	N
2. SCHEDULE/TIMELINESS OF PERFORMANCE:						
a) Compliance with contract delivery/completion schedules including any significant intermediate milestones. *(If liquidated damages were assessed or the schedule was not met, please address below)*	(E)	VG	S	M	U	N
b) Rate the contractor's use of available resources to accomplish tasks identified in the contract	(E)	VG	S	M	U	N
3. CUSTOMER SATISFACTION:						
a) To what extent were the end users satisfied with the project?	(E)	VG	S	M	U	N
b) Contractor was reasonable and cooperative in dealing with your staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports, businesslike and communication)	(E)	VG	S	M	U	N
c) To what extent was the contractor cooperative, businesslike, and concerned with the interests of the customer?	(E)	VG	S	M	U	N
d) Overall customer satisfaction	(E)	VG	S	M	U	N
4. MANAGEMENT/ PERSONNEL/LABOR						
a) Effectiveness of on-site management, including management of subcontractors, suppliers, materials, and/or labor force?	(E)	VG	S	M	U	N
b) Ability to hire, apply, and retain a qualified workforce to this effort	(E)	VG	S	M	U	N
c) Government Property Control	(E)	VG	S	M	U	N
d) Knowledge/expertise demonstrated by contractor personnel	(E)	VG	S	M	U	N
e) Utilization of Small Business concerns	(E)	VG	S	M	U	N
f) Ability to simultaneously manage multiple projects with multiple disciplines	E	VG	S	M	U	(N)
g) Ability to assimilate and incorporate changes in requirements and/or priority, including planning, execution and response to Government changes	(E)	VG	S	M	U	N
h) Effectiveness of overall management (including ability to effectively lead, manage and control the program)	(E)	VG	S	M	U	N
5. COST/FINANCIAL MANAGEMENT						
a) Ability to meet the terms and conditions within the contractually agreed price(s)?	(E)	VG	S	M	U	N
b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainability or other factors that benefited the client	(E)	VG	S	M	U	N
c) If this is/was a Government cost type contract, please rate the Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-up documentation, monthly status reports/budget variance reports, compliance	E	VG	S	M	U	(N)

with established budgets and avoidance of significant and/or unexplained variances (under runs or overruns)	
d) Is the Contractor's accounting system adequate for management and tracking of costs? *If no, please explain in Remarks section.*	(Yes) No
e) If this is/was a Government contract, has/was this contract been partially or completely terminated for default or convenience or are there any pending terminations? *Indicate if show cause or cure notices were issued, or any default action in comment section below.*	Yes (No)
f) Have there been any indications that the contractor has had any financial problems? *If yes, please explain below*	Yes (No)
6. SAFETY/SECURITY	
a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, and respond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety, correction of noted deficiencies, etc.)	(E) VG S M U N
b) Contractor complied with all security requirements for the project and personnel security requirements.	(E) VG S M U N
7. GENERAL	
a) Ability to successfully respond to emergency and/or surge situations (including notifying COR, PM or Contracting Officer in a timely manner regarding urgent contractual issues).	(E) VG S M U N
b) Compliance with contractual terms/provisions *(explain if specific issues)*	(E) VG S M U N
c) Would you hire or work with this firm again? *(If no, please explain below)*	(Yes) No
d) In summary, provide an overall rating for the work performed by this contractor.	(E) VG S M U N

Please provide responses to the questions above (*if applicable*) and/or additional remarks. Furthermore, please provide a brief narrative addressing specific strengths, weaknesses, deficiencies, or other comments which may assist our office in evaluating performance risk *(please attach additional pages if necessary)*:

Great Attention to detail, very knowledgeable and sticks to provided schedule very well.

Project Detail Sheet

Your firm's name LND Technical Services (LNDTS)

Name of Project/Location/Square Footage Federal Aviation Administration (FAA) – Tracon Project Arc Flash Study (LOC ID: R90, FAC ID: ATBM) / Bellevue, Nebraska / approximately 18,000 ft^2

General Scope of Project

The scope includes a short circuit study, protection coordination study, and arc flash study for the FAA existing Tracon facility in Nebraska. LNDTS provided detailed site survey to collect panels / breakers / fuses / cables detail for the study. Equipment short circuit rating lower than potential fault current are listed. Proper protection for cables, panels, transformers are reviewed in the study. Mis-coordination devices are listed and recommended settings are provided if applicable. Worst arc flash incident energy among multiple scenarios are provided. Equipment with Incident energy higher than 8cal/cm^2 are listed and mitigation with recommended breakers setting are provided if applicable. When recommended breakers setting are provided for AF incident energy reduction, the recommended setting cannot sacrifice protection coordination. Arc flash labels as AFF required layout are provided.

Your role (prime, joint venture, subcontractor) and work your company self-performed

LNDTS is the prime contractor for the project.

Percentage of Work completed by Prime Contractor Personal: 100 %

Construction Cost:

At Award: $ 33,900 Reason for the cost growth:

Final Cost: $ 41,900 Utility provided wrong information for the MV service transformer. Thus, the study has to be re-performed.

Award Date: 09/21/2022

Schedule Completion: 01/21/2023 Reason for the time growth:

Actual Completion: 02/17/2023 _____ Schedule for site survey was delayed due to FAA site staff availability; The MV service transformer information supplied by utility was wrong. _____

Extent and type of word you subcontracted out

N/A _____

_____

_____

Owner's Point of Contact (POC) for reference (name and company and telephone number)

Joni Haynes, FAA, 405-954-7716

Bob Morales, FAA, (682) 407-1272

Owner’s Point of Contact (POC) for reference (name and company and telephone number)

Marcus Miller, Beta Engineering, C: 337 424 1058

John Petrovic, Beta Engineering, C: 636-375-6164

Past Performance Questionnaire (PPQ)

Form PPQ -0 (9/30/11)

PAST PERFORMANCE QUESTIONNAIRE (Form PPQ-0)

CONTRACT INFORMATION

1. Contractor Information

Firm Name: LND Technical Services
CAGE Code: 8ZUG3
Address: 9337 Katy FWY. Ste B., Houston TX 77024
DUNs Number: 117579332
Phone Number: 919-449-4168
Email Address: nam.le@lndts.com
Point of Contact: Nam Le
Contact Phone Number: 919-449-4168

2. Work Performed as: ☐ Prime Contractor ☒ Sub Contractor ☐ Joint Venture ☐ Other (Explain)
Percent of project work performed: 100%
If subcontractor, who was the prime (Name/Phone #): Beta Engineering, Marcus Miller/337 424 1058

3. Contract Information

Contract Number: B657
Delivery/Task Order Number (if applicable): PO# 2642
Contract Type: ☒ Firm Fixed Price ☐ Cost Reimbursement ☐ Other (Please specify):
Contract Title: Arc Flash Study
Contract Location: Adelanto, CA

Award Date (mm/dd/yy): 11/15/21
Contract Completion Date (mm/dd/yy): NA
Actual Completion Date (mm/dd/yy): 06/30/2022
Explain Differences:

Original Contract Price (Award Amount): US$ 65,600
Final Contract Price (*to include all modifications, if applicable*): US$ 65,600
Explain Differences:

4. Project Description:

Complexity of Work ☐ High ☒ Med ☐ Routine
How is this project relevant to project of submission? (*Please provide details such as similar equipment, requirements, conditions, etc.*)

The scope provides arc flash study for the solar/BESS plant in California. The study scope includes the 138kV, and 34.5kV systems. Proper protection for cables, line, switchgears, bus, and transformers are provided in the study. Protection relay setting files are provided. Arc flash incident energy and label are provided for HV and MV bus/equipment in the solar plant.

CLIENT INFORMATION

5. Client Information

Name: John Petrovic
Title: Project Coordinator
Phone Number: 636 375 6164
Email Address: John.Petrovic@betaengineering.com

6. Describe the client's role in the project:

Beta Engineering was responsible for the 138kV/34.5kV substation including the E-room for the substation. Mr. John is the project coordinator for the project.

7. Date Questionnaire was completed (mm/dd/yy):	06/15/23
8. Client's Signature:	John Petrovic

NOTE: NAVFAC/USACE requests that the client completes this questionnaire and submits directly back to the offeror. The offeror will submit the completed questionnaire to USACE with their proposal, and may duplicate this questionnaire for future submission on USACE solicitations. Clients are highly encouraged to submit questionnaires directly to the offeror. However, questionnaires may be submitted directly to USACE. Please contact the offeror for USACE POC information. The Government reserves the right to verify any and all information on this form.

CLIENTS ARE HIGHLY ENCOURAGED TO SUBMIT QUESTIONNAIRES DIRECTLY TO THE OFFEROR. HOWEVER, QUESTIONNAIRES MAY BE SUBMITTED DIRECTLY TO USACE. PLEASE CONTACT THE OFFEROR FOR USACE POC INFORMATION. THE GOVERNMENT RESERVES THE RIGHT TO VERIFY ANY AND ALL INFORMATION ON THIS FORM.

ADJECTIVE RATINGS AND DEFINITIONS TO BE USED TO BEST REFLECT YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE

RATING	DEFINITION	NOTE
(E) Exceptional	Performance meets contractual requirements and exceeds many to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with few minor problems for which corrective actions taken by the contractor was highly effective.	An Exceptional rating is appropriate when the Contractor successfully performed multiple significant events that were of benefit to the Government/Owner. A singular benefit, however, could be of such magnitude that it alone constitutes an Exceptional rating. Also, there should have been NO significant weaknesses identified.
(VG) Very Good	Performance meets contractual requirements and exceeds some to the Government's/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with some minor problems for which corrective actions taken by the contractor were effective.	A Very Good rating is appropriate when the Contractor successfully performed a significant event that was a benefit to the Government/Owner. There should have been no significant weaknesses identified.
(S) Satisfactory	Performance meets minimum contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the contractor appear or were satisfactory.	A Satisfactory rating is appropriate when there were only minor problems, or major problems that the contractor recovered from without impact to the contract. There should have been NO significant weaknesses identified. Per DOD policy, a fundamental principle of assigning ratings is that contractors will not be assessed a rating lower than Satisfactory solely for not performing beyond the requirements of the contract.
(M) Marginal	Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions. The contractor's proposed actions appear only marginally effective or were not fully implemented.	A Marginal is appropriate when a significant event occurred that the contractor had trouble overcoming which impacted the Government/Owner.
(U) Unsatisfactory	Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains serious problem(s) for which the contractor's corrective actions appear or were ineffective.	An Unsatisfactory rating is appropriate when multiple significant events occurred that the contractor had trouble overcoming and which impacted the Government/Owner. A singular problem, however, could be of such serious magnitude that it alone constitutes an unsatisfactory rating.
(N) Not Applicable	No information or did not apply to your contract	Rating will be neither positive nor negative.

TO BE COMPLETED BY CLIENT

PLEASE CIRCLE THE ADJECTIVE RATING WHICH BEST REFLECTS YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE.

1. QUALITY:						
a) Quality of technical data/report preparation efforts	E	**VG**	S	M	U	N
b) Ability to meet quality standards specified for technical performance	**E**	VG	S	M	U	N
c) Timeliness/effectiveness of contract problem resolution without extensive customer guidance	**E**	VG	S	M	U	N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (without adverse effect on performance)	E	**VG**	S	M	U	N
2. SCHEDULE/TIMELINESS OF PERFORMANCE:						
a) Compliance with contract delivery/completion schedules including any significant intermediate milestones. *(If liquidated damages were assessed or the schedule was not met, please address below)*	E	**VG**	S	M	U	N
b) Rate the contractor's use of available resources to accomplish tasks identified in the contract	E	**VG**	S	M	U	N
3. CUSTOMER SATISFACTION:						
a) To what extent were the end users satisfied with the project?	**E**	VG	S	M	U	N
b) Contractor was reasonable and cooperative in dealing with your staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports, businesslike and communication)	E	**VG**	S	M	U	N
c) To what extent was the contractor cooperative, businesslike, and concerned with the interests of the customer?	E	**VG**	S	M	U	N
d) Overall customer satisfaction	**E**	VG	S	M	U	N
4. MANAGEMENT/ PERSONNEL/LABOR						
a) Effectiveness of on-site management, including management of subcontractors, suppliers, materials, and/or labor force?	E	**VG**	S	M	U	N
b) Ability to hire, apply, and retain a qualified workforce to this effort	E	VG	S	M	U	**N**
c) Government Property Control	E	VG	S	M	U	**N**
d) Knowledge/expertise demonstrated by contractor personnel	**E**	VG	S	M	U	N
e) Utilization of Small Business concerns	E	VG	S	M	U	**N**
f) Ability to simultaneously manage multiple projects with multiple disciplines	E	VG	S	M	U	**N**
g) Ability to assimilate and incorporate changes in requirements and/or priority, including planning, execution and response to Government changes	E	VG	S	M	U	**N**
h) Effectiveness of overall management (including ability to effectively lead, manage and control the program)	E	**VG**	S	M	U	N
5. COST/FINANCIAL MANAGEMENT						
a) Ability to meet the terms and conditions within the contractually agreed price(s)?	E	VG	**S**	M	U	N
b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainability or other factors that benefited the client	E	**VG**	S	M	U	N
c) If this is/was a Government cost type contract, please rate the Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-up documentation, monthly status reports/budget variance reports, compliance	E	VG	S	M	U	**N**

with established budgets and avoidance of significant and/or unexplained variances (under runs or overruns)						
d) Is the Contractor's accounting system adequate for management and tracking of costs? *If no, please explain in Remarks section.*		Yes			No	
e) If this is/was a Government contract, has/was this contract been partially or completely terminated for default or convenience or are there any pending terminations? *Indicate if show cause or cure notices were issued, or any default action in comment section below.*		Yes		N/A	No	
f) Have there been any indications that the contractor has had any financial problems? *If yes, please explain below.*		Yes			No	
6. SAFETY/SECURITY						
a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, and respond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety, correction of noted deficiencies, etc.)	E	VG	S	M	U	N
b) Contractor complied with all security requirements for the project and personnel security requirements.	E	VG	S	M	U	N
7. GENERAL						
a) Ability to successfully respond to emergency and/or surge situations (including notifying COR, PM or Contracting Officer in a timely manner regarding urgent contractual issues).	E	VG	S	M	U	N
b) Compliance with contractual terms/provisions *(explain if specific issues)*	E	VG	S	M	U	N
c) Would you hire or work with this firm again? *(If no, please explain below)*		Yes			No	
d) In summary, provide an overall rating for the work performed by this contractor.	E	VG	S	M	U	N

Please provide responses to the questions above (*if applicable*) and/or additional remarks. Furthermore, please provide a brief narrative addressing specific strengths, weaknesses, deficiencies, or other comments which may assist our office in evaluating performance risk *(please attach additional pages if necessary)*:

I had heard LND was a good company to have perform electrical studies for their ease to work along side. I was surprised at how much they did help, follow up, ask questions about design, and overall proactive on finding a winning solution time and time again.

After being impressed with electrical studies and working with our customer to resolve many issues, Beta had LND perform Testing and Commissioning. This department of LND was also every bit of cable of getting great results and worked with several (~7) other companies to deliver everything from SCADA to programming settings and more.

I am relatively new to the industry, but I have seen more than a couple other companies not perform the level of work LND has. LND surpassed my previous notion of them being "good" to "excellent".

Project Detail Sheet

Your firm's name LND Technical Services (LNDTS)

Name of Project/Location/Square Footage Baldy Mesa Solar / BESS Project – Arc Flash Study / Adelanto, CA / approximately 37,000 ft^2

General Scope of Project

The scope provides arc flash study for the solar/BESS plant in California. The study scope includes the 138kV, and 34.5kV systems. Proper protection for cables, line, switchgears, bus, and transformers are provided in the study. Protection relay setting files are provided. Arc flash incident energy and labels are provided for HV and MV bus/equipment in the solar plant.

Your role (prime, joint venture, subcontractor) and work your company self-performed

LNDTS is the subcontractor for the project.

Percentage of Work completed by LNDTS Personal: 100 %

Construction Cost:

At Award: $ 65,600

Final Cost: $ 65,600

Reason for the cost growth:

Award Date: 11/15/2021

Schedule Completion: NA

Actual Completion: 06/30/2022

Reason for the time growth:

Extent and type of word you subcontracted out

N/A

PAST PERFORMANCE QUESTIONNAIRE (Form PPQ-0)

CONTRACT INFORMATION

1. Contractor Information

Firm Name: LND Technical Services
CAGE Code: 8ZUG3
Address: 9337 Katy FWY. Ste B., Houston TX 77024
DUNs Number: 117579332
Phone Number: 919-449-4168
Email Address: nam.le@lndts.com
Point of Contact: Nam Le
Contact Phone Number: 919-449-4168

2. Work Performed as: ☐ Prime Contractor ■ Sub Contractor ☐ Joint Venture ☐ Other (Explain)
Percent of project work performed: 100%
If subcontractor, who was the prime (Name/Phone #): Beta Engineering , Chris Clark

3. Contract Information

Contract Number:
Delivery/Task Order Number (if applicable):
Contract Type: ■ Firm Fixed Price ☐ Cost Reimbursement ☐ Other (Please specify):
Contract Title: Short Circuit Study, Relay Protection & Control, Arc Flash Study
Contract Location: Maryland

Award Date (mm/dd/yy): 05/18/21
Contract Completion Date (mm/dd/yy): NA
Actual Completion Date (mm/dd/yy): 06/30/2022
Explain Differences:

Original Contract Price (Award Amount): US$ 25,500
Final Contract Price (*to include all modifications, if applicable*): US$ 25,500
Explain Differences: N/A

4. Project Description:

Complexity of Work ☐ High ■ Med ☐ Routine
How is this project relevant to project of submission? (*Please provide details such as similar equipment, requirements, conditions, etc.*)

The scope includes a short circuit study, protection coordination study, and arc flash study for the solar plant in Maryland. The study scope includes the 69KV and 34.5kV systems. Potential fault current for equipment are listed. Proper protection for cables, lines, switchboards, bus, and transformers are provided in the study. Arc flash incident energy and labels are provided for HV and MV bus/equipment in the solar plant.

CLIENT INFORMATION

5. Client Information

Name: Chris Clark
Title: Manager of Project Management
Phone Number: 318 446 8023
Email Address: chris.clark @betaengineering.com

6. Describe the client's role in the project: Beta Engineering was responsible for the 69kV/34.5kV substation including the E-room for the substation. Mr. Chris is the project manager for the project.
7. Date Questionnaire was completed (mm/dd/yy): 6-16-2023
8. Client's Signature: Chris Au

NOTE: NAVFAC/USACE requests that the client completes this questionnaire and submits directly back to the offeror. The offeror will submit the completed questionnaire to USACE with their proposal, and may duplicate this questionnaire for future submission on USACE solicitations. Clients are highly encouraged to submit questionnaires directly to the offeror. However, questionnaires may be submitted directly to USACE. Please contact the offeror for USACE POC information. The Government reserves the right to verify any and all information on this form.

CLIENTS ARE HIGHLY ENCOURAGED TO SUBMIT QUESTIONNAIRES DIRECTLY TO THE OFFEROR. HOWEVER, QUESTIONNAIRES MAY BE SUBMITTED DIRECTLY TO USACE. PLEASE CONTACT THE OFFEROR FOR USACE POC INFORMATION. THE GOVERNMENT RESERVES THE RIGHT TO VERIFY ANY AND ALL INFORMATION ON THIS FORM.

ADJECTIVE RATINGS AND DEFINITIONS TO BE USED TO BEST REFLECT YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE

RATING	DEFINITION	NOTE
(E) Exceptional	Performance meets contractual requirements and exceeds many to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with few minor problems for which corrective actions taken by the contractor was highly effective.	An Exceptional rating is appropriate when the Contractor successfully performed multiple significant events that were of benefit to the Government/Owner. A singular benefit, however, could be of such magnitude that it alone constitutes an Exceptional rating. Also, there should have been NO significant weaknesses identified.
(VG) Very Good	Performance meets contractual requirements and exceeds some to the Government's/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with some minor problems for which corrective actions taken by the contractor were effective.	A Very Good rating is appropriate when the Contractor successfully performed a significant event that was a benefit to the Government/Owner. There should have been no significant weaknesses identified.
(S) Satisfactory	Performance meets minimum contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the contractor appear or were satisfactory.	A Satisfactory rating is appropriate when there were only minor problems, or major problems that the contractor recovered from without impact to the contract. There should have been NO significant weaknesses identified. Per DOD policy, a fundamental principle of assigning ratings is that contractors will not be assessed a rating lower than Satisfactory solely for not performing beyond the requirements of the contract.
(Mf) Marginal	Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions. The contractor's proposed actions appear only marginally effective or were not fully implemented.	A Marginal is appropriate when a significant event occurred that the contractor had trouble overcoming which impacted the Government/Owner.
(U) Unsatisfactory	Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains serious problem(s) for which the contractor's corrective actions appear or were ineffective.	An Unsatisfactory rating is appropriate when multiple significant events occurred that the contractor had trouble overcoming and which impacted the Government/Owner. A singular problem, however, could be of such serious magnitude that it alone constitutes an unsatisfactory rating.
(N) Not Applicable	No information or did not apply to your contract	Rating will be neither positive nor negative.

TO BE COMPLETED BY CLIENT

PLEASE CIRCLE THE ADJECTIVE RATING WHICH BEST REFLECTS YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE.

1. QUALITY:						
a) Quality of technical data/report preparation efforts	E	VG	S	M	U	N
b) Ability to meet quality standards specified for technical performance	E	VG	S	M	U	N
c) Timeliness/effectiveness of contract problem resolution without extensive customer guidance	E	VG	S	M	U	N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (without adverse effect on performance)	E	VG	S	M	U	N
2. SCHEDULE/TIMELINESS OF PERFORMANCE:						
a) Compliance with contract delivery/completion schedules including any significant intermediate milestones. *(If liquidated damages were assessed or the schedule was not met, please address below)*	E	VG	S	M	U	N
b) Rate the contractor's use of available resources to accomplish tasks identified in the contract	E	VG	S	M	U	N
3. CUSTOMER SATISFACTION:						
a) To what extent were the end users satisfied with the project?	E	VG	S	M	U	N
b) Contractor was reasonable and cooperative in dealing with your staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports, businesslike and communication)	E	VG	S	M	U	N
c) To what extent was the contractor cooperative, businesslike, and concerned with the interests of the customer?	E	VG	S	M	U	N
d) Overall customer satisfaction	E	VG	S	M	U	N
4. MANAGEMENT/ PERSONNEL/LABOR						
a) Effectiveness of on-site management, including management of subcontractors, suppliers, materials, and/or labor force?	E	VG	S	M	U	N
b) Ability to hire, apply, and retain a qualified workforce to this effort	E	VG	S	M	U	N
c) Government Property Control	E	VG	S	M	U	N
d) Knowledge/expertise demonstrated by contractor personnel	E	VG	S	M	U	N
e) Utilization of Small Business concerns	E	VG	S	M	U	N
f) Ability to simultaneously manage multiple projects with multiple disciplines	E	VG	S	M	U	N
g) Ability to assimilate and incorporate changes in requirements and/or priority, including planning, execution and response to Government changes	E	VG	S	M	U	N
h) Effectiveness of overall management (including ability to effectively lead, manage and control the program)	E	VG	S	M	U	N
5. COST/FINANCIAL MANAGEMENT						
a) Ability to meet the terms and conditions within the contractually agreed price(s)?	E	VG	S	M	U	N
b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainability or other factors that benefited the client	E	VG	S	M	U	N
c) If this is/was a Government cost type contract, please rate the Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-up documentation, monthly status reports/budget variance reports, compliance	E	VG	S	M	U	N

with established budgets and avoidance of significant and/or unexplained variances (under runs or overruns)							
d) Is the Contractor's accounting system adequate for management and tracking of costs? *If no, please explain in Remarks section.*			Yes			No	
e) If this is/was a Government contract, has/was this contract been partially or completely terminated for default or convenience or are there any pending terminations? *Indicate if show cause or cure notices were issued, or any default action in comment section below.*			Yes			No	N/A
f) Have there been any indications that the contractor has had any financial problems? *If yes, please explain below.*			Yes			No	
6. SAFETY/SECURITY							
a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, and respond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety, correction of noted deficiencies, etc.)	E	VG	S	M	U	N	
b) Contractor complied with all security requirements for the project and personnel security requirements.	E	VG	S	M	U	N	
7. GENERAL							
a) Ability to successfully respond to emergency and/or surge situations (including notifying COR, PM or Contracting Officer in a timely manner regarding urgent contractual issues).	E	VG	S	M	U	N	
b) Compliance with contractual terms/provisions *(explain if specific issues)*	E	VG	S	M	U	N	
c) Would you hire or work with this firm again? *(If no, please explain below)*			Yes			No	
d) In summary, provide an overall rating for the work performed by this contractor.	E	VG	S	M	U	N	

Please provide responses to the questions above (*if applicable*) and/or additional remarks. Furthermore, please provide a brief narrative addressing specific strengths, weaknesses, deficiencies, or other comments which may assist our office in evaluating performance risk *(please attach additional pages if necessary)*:

ATTACHMENT PPQ

NIST AMD TEAM-E/BOULDER PAST PERFORMANCE QUESTIONNAIRE (Form PPQ)

CONTRACT INFORMATION (Contractor to complete Blocks 1-4)

1. Contractor Information

Firm Name: LND Technical Services
Address: 9337 Katy Fwy, Suite B-5104, Houston, TX 77024
Phone Number: 919-449-4168
Email Address: nam.le@Lndts.com
Point of Contact: Nam Le

CAGE Code: 8ZUG3
DUNS Code: 117579332
EUI Number: ZPJCWBNXLGT3

Contact Phone Number: 919-449-4168

2. Work Performed as: ☐ Prime Contractor ☒ Sub Contractor ☐ Joint Venture ☐ Other (Explain)
Percent of project work performed: 100%
If subcontractor, who was the prime (Name/Phone #):

3. Contract Information

Contract Number: B627
Delivery/Task Order Number (if applicable):
Contract Type: ☒ Firm Fixed Price ☐ Cost Reimbursement ☐ Other (Please specify):
Contract Title: MD2 Testing
Contract Location: La Plata, MD

Award Date (mm/dd/yy): December 1, 2021
Contract Completion Date (mm/dd/yy): May 12, 2022
Actual Completion Date (mm/dd/yy): October 13, 2022
Explain Differences:
Capacitor bank was not delivered per original schedule and LND had to test at a later date.

Original Contract Price (Award Amount): $55,000.00
Final Contract Price (*to include all modifications, if applicable*): $90,702.00
Explain Differences:
Remobilization and testing of capacitor bank, remobilization and additional work for revised energization date.

4. Project Description:

Complexity of Work ☒ High ☐ Med ☐ Routine
How is this project relevant to project of submission? (*Please provide details such as similar equipment, requirements, conditions, etc.*)
Project included the testing of medium voltage equipment including disconnect switches, liquid filled transformers, and circuit breakers.

CLIENT INFORMATION (Client to complete Blocks 5-8)

5. Client Information

Name: Beta Engineering - Chris Clark
Title: Manager of Project Management
Phone Number: 318-446-8023
Email Address: chris.clark@betaengineering.com

6. Describe the client's role in the project:

EPC Prime Contractor

7. Date Questionnaire was completed (mm/dd/yy): 3-3-23

8. Client's Signature:

Chris Clark

NOTE: THE CONTRACTING OFFICER REQUESTS THAT THE CLIENT COMPLETES THIS QUESTIONNAIRE AND SUBMITS DIRECTLY BACK TO THE OFFEROR. THE OFFEROR WILL SUBMIT THE COMPLETED QUESTIONNAIRE TO THE CONTRACTING OFFICER WITH THEIR PROPOSAL, AND MAY DUPLICATE THIS QUESTIONNAIRE FOR FUTURE SUBMISSION ON NIST AMD TEAM-E/BOULDER SOLICITATIONS. CLIENTS ARE HIGHLY ENCOURAGED TO SUBMIT QUESTIONNAIRES DIRECTLY TO THE OFFEROR. HOWEVER, QUESTIONNAIRES MAY BE SUBMITTED DIRECTLY TO THE NIST AMD TEAM-

ATTACHMENT PPQ

E/BOULDER CONTRACTING OFFICER. PLEASE CONTACT THE OFFEROR FOR CONTRACTING OFFICER POINT OF CONTACT INFORMATION. THE GOVERNMENT RESERVES THE RIGHT TO VERIFY ANY AND ALL INFORMATION ON THIS FORM.

ADJECTIVE RATINGS AND DEFINITIONS TO BE USED TO BEST REFLECT YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE

RATING	DEFINITION	NOTE
(E) Excellent	Performance meets contractual requirements and **exceeds many** to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with few minor problems for which corrective actions taken by the contractor was highly effective.	An Exceptional rating is appropriate when the Contractor successfully performed multiple significant events that were of benefit to the Government/Owner. A singular benefit, however, could be of such magnitude that it alone constitutes an Exceptional rating. Also, there should have been NO significant weaknesses identified.
(VG) Very Good	Performance meets contractual requirements and **exceeds some** to the Government's/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with some minor problems for which corrective actions taken by the contractor were effective.	A Very Good rating is appropriate when the Contractor successfully performed a significant event that was a benefit to the Government/Owner. There should have been no significant weaknesses identified.
(S) Satisfactory	Performance **meets minimum** contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the contractor appear or were satisfactory.	A Satisfactory rating is appropriate when there were only minor problems, or major problems that the contractor recovered from without impact to the contract. There should have been NO significant weaknesses identified. Per DOC policy, a fundamental principle of assigning ratings is that contractors will not be assessed a rating lower than Satisfactory solely for not performing beyond the requirements of the contract/order.
(M) Marginal	Performance **does not meet some** contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions. The contractor's proposed actions appear only marginally effective or were not fully implemented.	A Marginal is appropriate when a significant event occurred that the contractor had trouble overcoming which impacted the Government/Owner.
(U) Unsatisfactory	Performance **does not meet most** contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains serious problem(s) for which the contractor's corrective actions appear or were ineffective.	An Unsatisfactory rating is appropriate when multiple significant events occurred that the contractor had trouble overcoming and which impacted the Government/Owner. A singular problem, however, could be of such serious magnitude that it alone constitutes an unsatisfactory rating.
(N) Not Applicable	No information or did not apply to your contract	Rating will be neither positive nor negative.

ATTACHMENT PPQ

TO BE COMPLETED BY CLIENT

PLEASE CIRCLE THE ADJECTIVE RATING WHICH BEST REFLECTS YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE.						
1. QUALITY:						
a) Quality of technical data/report preparation efforts.	(E)	VG	S	M	U	N
b) Ability to meet quality standards specified for technical performance.	(E)	VG	S	M	U	N
c) Timeliness/effectiveness of contract problem resolution without extensive customer guidance.	(E)	VG	S	M	U	N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (without adverse effect on performance).	(E)	VG	S	M	U	N
2. SCHEDULE/TIMELINESS OF PERFORMANCE:						
a) Compliance with contract delivery/completion schedules including any significant intermediate milestones. *(If liquidated damages were assessed or the schedule was not met, please address below)*	(E)	VG	S	M	U	N
b) Rate the contractor's use of available resources to accomplish tasks identified in the contract.	(E)	VG	S	M	U	N
3. CUSTOMER SATISFACTION:						
a) To what extent were the end users satisfied with the project?	(E)	VG	S	M	U	N
b) Contractor was reasonable and cooperative in dealing with your staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports, businesslike and communication).	(E)	VG	S	M	U	N
c) To what extent was the contractor cooperative, businesslike, and concerned with the interests of the customer?	(E)	VG	S	M	U	N
d) Overall customer satisfaction.	(E)	VG	S	M	U	N
4. MANAGEMENT/ PERSONNEL/LABOR:						
a) Effectiveness of on-site management, including management of subcontractors, suppliers, materials, and/or labor force?	(E)	VG	S	M	U	N
b) Ability to hire, apply, and retain a qualified workforce to this effort.	(E)	VG	S	M	U	N
c) Government Property Control.	E	VG	S	M	U	(N)
d) Knowledge/expertise demonstrated by contractor personnel.	(E)	VG	S	M	U	N
e) Utilization of Small Business concerns (Not applicable to contracts performed in Japan).	(E)	VG	S	M	U	N
f) Ability to simultaneously manage multiple projects with multiple disciplines.	E	(VG)	S	M	U	N
g) Ability to assimilate and incorporate changes in requirements and/or priority, including planning, execution and response to Government changes.	E	(VG)	S	M	U	N
h) Effectiveness of overall management (including ability to effectively lead, manage and control the program).	(E)	VG	S	M	U	N

5. COST/FINANCIAL MANAGEMENT:

a) Ability to meet the terms and conditions within the contractually agreed price(s)?	E	(VG)	S	M	U	N
b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainability or other factors that benefited the client.	E	(VG)	S	M	U	N
c) If this is/was a Government cost type contract, please rate the Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-up documentation, monthly status reports/budget variance reports, compliance with established budgets and avoidance of significant and/or unexplained variances (under runs or overruns).	E	VG	S	M	U	(N)
d) Is the Contractor's accounting system adequate for management and tracking of costs? *If no, please explain in Remarks section.*		(Yes)			No	
e) If this is/was a Government contract, has/was this contract been partially or completely terminated for default or convenience or are there any pending terminations? *Indicate if show cause or cure notices were issued, or any default action in comment section below.*		Yes			No	N/A
f) Have there been any indications that the contractor has had any financial problems? *If yes, please explain below.*		Yes			(No)	

6. SAFETY/SECURITY:

a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, and respond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety, correction of noted deficiencies, etc.)	(E)	VG	S	M	U	N
b) Contractor complied with all security requirements for the project and personnel security requirements.	(E)	VG	S	M	U	N

7. GENERAL:

a) Ability to successfully respond to emergency and/or surge situations (including notifying COR, PM or Contracting Officer in a timely manner regarding urgent contractual issues).	(E)	VG	S	M	U	N
b) Compliance with contractual terms/provisions *(explain if specific issues).*	(E)	VG	S	M	U	N
c) Would you hire or work with this firm again? *(If no, please explain below)*		(Yes)			No	
d) In summary, provide an overall rating for the work performed by this contractor.	(E)	VG	S	M	U	N

Please provide responses to the questions above (*if applicable*) and/or additional remarks. Furthermore, please provide a brief narrative addressing specific strengths, weaknesses, deficiencies, or other comments which may assist our office in evaluating performance risk *(please attach additional pages if necessary)*:

LND is Beta's preferred vendor for testing and electrical model studies. They are timely and flexible to accomdate project needs.

Project Detail Sheet

Your firm's name LND Technical Services (LNDTS)

Name of Project/Location/Square Footage MD Solar 2 Project – Short Circuit, Protection Coordination, and Arc Flash Study / Maryland / approximately 11,000ft^2

General Scope of Project

The scope includes a short circuit study, protection coordination study, and arc flash study for the solar plant in Maryland. The study scope includes the 69KV and 34.5kV systems. Potential fault current for equipment are listed. Proper protection for cables, line, switchgears, bus, and transformers are provided in the study. Arc flash incident energy and label are provided for HV and MV bus/equipment in the solar plant.

Customer added testing and commission for the entire substation.

Your role (prime, joint venture, subcontractor) and work your company self-performed

LNDTS is subcontractor of BETA Engineering to perform these studies for the 69kV substation.

Percentage of Work completed by LNDTS Personal: 100 %

Construction Cost:

At Award: $ 25,500

Final Cost: $ 116,202

Reason for the cost growth:

Testing and Commissioning were added.

Award Date: 05/18/2021

Schedule Completion: NA

Reason for the time growth:

Actual Completion: 03/03/2023

Studies portion of this project were done on June 30, 2022. Customer added testing and commissioning and late equipment deliver, so the competition date is extended to 3-3-2023.

Extent and type of word you subcontracted out

N/A

_____

_____

Owner’s Point of Contact (POC) for reference (name and company and telephone number)

Chris Clark, Beta Engineering, C: 318 446 8023

Arsante Williams, Beta Engineering, C: 202-213-0681

2. PROJECT REFERENCES LIST

http://LNDTS.com +1 858-609-9837 9337 Katy Fwy, STE B-5104 Houston, TX 77024

Customer	Project Name	Scope of Work	Voltage Rating	Dates	Notes
BETA Engineering	Sun Ridge Solar	Arc Flash Study, Reactive Compensation Study, Short Circuit Study, Protection Coordination Study Protection Setting Including NERC, PRC COMPLIANCE, Substation Lightning Study, Substation Grounding Study, SCADA Point Map, RTAC Programming	115kV/34.5 kV	Dec-23	Completed
Dept of Defense	CES Three Micro Switches ATS Troubleshooting	Troubleshoot, identify, and restore proper operation to the Eaton ATC-600 switch and the Micro-AT Source Transfer Control switches.	240/208V	Sep-23	Completed
Capital Power	New Frontier Wind	Arc Flash study including labels and installation. Convert SKM File to Easy Power file Added LV 2AC and 2 DC panels	115kV/34.5 kV	Aug-23	Completed
Dept of Veterans Affairs	Clarksburg WV Louis A Johnson VA Medical Center	Maintenance, Inspection and testing of the Electrical Power Distribution System and all its components	15kV/480V /208V	Aug-23	Completed
BETA Engineering	Ragsdale Solar	Arc Flash Study for Substation included printing and installing Labels, Short Circuit Study, NGR Calculation, Insulation Study TOV and TRV Studies	34.5kV	May-23	Completed
BETA Engineering	Elizabeth Substation	Arc Flash study Short Circuit, insulation coordination, protection coordination, switching (TRV and TOV), Relay settings files, RTAC programming, Testing and Commissioning for all equipment, protective relay, SCADA	138kV/34.5 kV	Apr-23	Completed
Dept of Veterans Affairs	Hines and Joliet VA Medical Center	2023 Annual Maintenance IR scanning, Maintenance, Inspection, Adjustment, and Testing of the Electrical Power Distribution System	5kV/208V	Mar-23	Completed
Federal Aviation Administration	Arc Flash Study	Arc Flash study for electrical distribution system	34.5kV	Feb-23	Completed
Dept of Veterans Affairs	Lebanon PA VA MEDICAL CENTER	Triannual services of IR scanning, Maintenance, Inspection, Adjustment, and Testing of the Electrical Power Distribution System	15kV/480V /208V	Feb-23	Completed
BETA Engineering	Shakes Solar Substation	Arc Flash Study Review Short Circuit Study, Relay Protection Coordination Study, Relay Settings, NERC Compliance Reporting, Scada Points List, Modbus Mapping, RTAC Settings	138kV/34.5 kV	Jan-23	Completed

Dept of Veterans Affairs	Marion IL VA MEDICAL CENTER	Triannual services of IR scanning, Maintenance, Inspection, Adjustment, and Testing of the Electrical Power Distribution System	15kV/480V /208V	Jan-23	Completed
BETA Engineering	CLECO 230kV Cole Substation	*Perform Testing and Commissioning for all equipment, protection relays system, E2E, Power Line Carrier, and SCADA*	230kV	Jan-23	Completed
Dept of Defense	Olmsted Locks and Dam	Perform maintenance testing of 15kV, 4160V and 480 equipment including switches, ATS, transformers, cables, and breakers	15kV/4160 V/480V	Jan-23	Completed
BETA Engineering	CLECO 230kV Marthaville Substations	*Perform Testing and Commissioning for all equipment, protection relays system, E2E, Power Line Carrier, and SCADA for 3 substations.*	230kV	Dec-22	Completed
NYS DOCCS	NY Bedford Facility MVLV System	Perform yearly maintenance, emergency, and repair for MV System and Auxiliary system	15kV-480	Oct-22	Completed
BETA Engineering	ORIGIS 69/34.5kV MD2 IEP Solar Farm	Perform testing and commissioning for all equipment, protection relays system, and SCADA.	69kV	Jul-22	Completed
Hitachi Energy	Hitachi-ABB TSMC AZ 230kV/34.5kV/480V Substations Phase 1	Perform testing and commissioning for auxiliary system, protection & control system, HV Transformers verification, GIS Control Panels	230kV	Jul-22	Completed
Hitachi Energy	Hitachi-ABB TSMC AZ 230kV/34.5kV/480V Substations Phase 1	Perform testing and commission for MVLV Transformers system.	34.5kV/480 V	Jul-22	Completed
BETA Engineering	CLECO Sellers Road 230kV Substations	Perform testing and commissioning for all equipment, and repair/install/test protection & SCADA system for 3 HV Substations	230kV/138 kV//34.5kV /480V/48V DC	May-22	Completed
T&V Electric	Texas 345kV Substation	Perform annual testing, maintenance, and repair work on 345kV Substation CTs, VTs, Breakers, and Disconnection Switch	345kV	May-22	Completed
T&V Electric	Texas 230kV Substation	Performed testing, inspection, and Commissioning on 230kV Substation Equipment	230kV	Apr-22	Completed
Linxon	Talen Nuclear Power Plant Substations	Perform testing and commissioning for all equipment, protection relays system, and SCADA, E2E, and Automation for 500kV, 230kv, and 69 kV substations	500kV/230 kV/69kV	Mar-22	Completed

Hitachi Energy	Hitachi-ABB TSMC AZ 230kV/34.5kV/480V Substations Phase 1	Ratio Test, Voltage Withstand Test, Transformer Outline Inspection, Temperature Controller Function and Communication Test, and Partial Discharge Test for 480V to 230kV Substations	230kV/34.5kV/480V/48VDC	Feb-22	Completed
T&V Electric	American Jereh International	Perform annual testing, maintenance, and repair work on MV System	13.8kV	Jan-22	Completed

3. COMPANY CERTIFICATIONS


NETA

CERTIFICATE OF ACCREDITATION

is hereby granted to

LND Technical Services LLC
Houston, TX

AS RECOGNIZED BY THE
INTERNATIONAL ELECTRICAL TESTING ASSOCIATION

January 1, 2024 – January 31, 2025

Ken Bassett
Membership Chair

INTERNATIONAL ELECTRICAL TESTING ASSOCIATION
3050 OLD CENTRE ROAD – SUITE 101 – PORTAGE, MI 49024 – WWW.NETAWORLD.ORG


USPAACC

US Pan Asian American Chamber of Commerce Education Foundation
certifies

LND Technical Services LLC

as an

Asian American/Minority-owned business

Level I US Citizen

Susan Au Allen
National President & CEO

Certificate # R24_00296 Expiration Date: 09/01/2025

Industry: Architecture & Engineering

NAICS Code # 541990

USPAACC FOUNDED 1984 DISTRICT OF COLUMBIA EDUCATION FOUNDATION

WBENC
WOMEN'S BUSINESS ENTERPRISE NATIONAL COUNCIL
JOIN FORCES. SUCCEED TOGETHER.

HEREBY GRANTS
WOMAN OWNED SMALL BUSINESS (WOSB) CERTIFICATION TO

LND Technical Services LLC

The identified small business is an eligible WOSB for the WOSB Program, as set forth in 13 C.F.R. part 127 and has been certified as such by an SBA approved Third Party Certifier pursuant to the Third Party Agreement, dated June 30, 2011, and available at www.sba.gov/wosb.

The WOSB Certification expires on the date herein unless there is a change to the SBA's regulation that makes the WOSB ineligible or there is a change in the WOSB that makes the WOSB ineligible. If either occurs, this WOSB Certification is immediately invalid. The WOSB must not misrepresent its certification status to any other party, including any local or State government or contracting official or the Federal government or any of its contracting officials.

Majority Female Owner: Anh Dao
NAICS: 541330, 238210, 541380 UNSPSC: 73152108, 81101701
Certification Number: WOSB211126
Renewal Date: June 30, 2025
WOSB Regulation Extension Date: 6/30/2023

WBEA

April Day, Women's Business Enterprise Alliance President

Pamela Prince-Easton, WBENC President & CEO

LaKesha White, Sr. Vice President, Certification

SUPPLIER CLEARINGHOUSE
CERTIFICATE OF ELIGIBILITY

CERTIFICATION EXPIRATION DATE: **January 2, 2025**

The Supplier Clearinghouse for the Utility Supplier Diversity Program of the California Public Utilities Commission hereby certifies that it has audited and verified the eligibility of:

LND Technical Services CA Inc
Women Business Enterprise (WBE)

pursuant to Commission General Order 156, and the terms and conditions stipulated in the Verification Application Package. This Certificate shall be valid only with the Clearinghouse seal affixed hereto.

Eligibility must be maintained at all times, and renewed within 30 days of any changes in ownership or control. Failure to comply may result in a denial of eligibility. The Clearinghouse may reconsider certification if it is determined that such status was obtained by false, misleading or incorrect information. Decertification may occur if any verification criterion under which eligibility was awarded later becomes invalid due to Commission ruling. The Clearinghouse may request additional information or conduct on- site visits during the term of verification to verify eligibility.

This certification is valid only for the period that the above firm remains eligible as determined by the Clearinghouse. Utility companies may direct inquiries concerning this Certificate to the Clearinghouse at (800) 359-7998.

VON: 21001170 ***DETERMINATION DATE: January 2, 2022***

4. SAMPLE of INSURANCE

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

10/4/2025 | DATE (MM/DD/YYYY) 10/4/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Lockton Companies, LLC 3280 Peachtree Road NE, Suite #1000 Atlanta GA 30305 (404) 460-3600	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:
INSURED 1549456 LND Technical Services LLC 9337 Katy Fwy, Ste B-5104 Houston TX 77024	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : The Charter Oak Fire Insurance Company — 25615 INSURER B : The Travelers Indemnity Company — 25658 INSURER C : Travelers Property Casualty Company of America — 25674 INSURER D : INSURER E : INSURER F :

COVERAGES **CERTIFICATE NUMBER:** 21025970 **REVISION NUMBER:** XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY PRO-JECT LOC OTHER:	N	N	P-660-7Y460124-COF-24	10/4/2024	10/4/2025	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 300,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $
B	AUTOMOBILE LIABILITY X ANY AUTO X OWNED AUTOS ONLY X HIRED AUTOS ONLY SCHEDULED AUTOS NON-OWNED AUTOS ONLY	N	N	BA-7Y46314A-24-43-G	10/4/2024	10/4/2025	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ XXXXXXX $ XXXXXXX $ XXXXXXX $ XXXXXXX
C	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $ 10,000	N	N	CUP-7Y468251-24-43	10/4/2024	10/4/2025	EACH OCCURRENCE AGGREGATE	$ 5,000,000 $ 5,000,000 $ XXXXXXX
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	N	UB-7Y466522-24-43-G	10/4/2024	10/4/2025	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

21025970
Evidence of Coverage

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

ACORD 25 (2016/03) The ACORD name and logo are registered marks of ACORD

5. RESUMES QUALIFICATION

Nam Le, PMP, GWCPM

President
Nam.le@lndts.com

EDUCATION

George Washington University, Washington, DC - *M.S. in Project Management (GWCPM)*

Tennessee Technological University, Cookeville, TN - *B.S.in Power Systems (BSEE) (2002)*

NOTABLE PROFESSIONAL DEVELOPMENT

PMP from PMI
OSHA 30 certified
International Electrical Testing Association (NETA) – Level I
National Institute for Certification in Engineering Technology (NICET) –Level I

EXPERIENCE

LND Technical Services - *President*
FEBRUARY 2023 – PRESENT

- In charge of Sales and Marketing.
- Work with CEO directly to develop short-term and long-term business plans.
- Advise CEO on how to go market, which customers to target, where to focus company resources.

LND Technical Services - *Executive Vice President*
JUNE 2021 - JANUARY 2023

- In charge of Sales and Executions team.
- Work with CEO directly to develop short-term and long-term business plans.
- Advise CEO on how to go market, which customers to target, where to focus company resources.

Magna IV Engineering - *Director: Sales & Strategic Growth, USA*
FEBRUARY 2019 - MAY 2021

- In charge of sales and marketing for US Market. Work with cross functional team to create winning offer for each proposal. Develop business plan for short term and long-term growth in the US.
- Work with EPC and OEM companies to provide engineering services and testing & commissioning for Utilities and Government clients.

Siemens — Transmission Solutions - *Tender Manager*
OCTOBER 2016 - JANUARY 2019

- In charge of Engineering Procurement Contract Proposals for local execution center for FACTS business. Work with cross functional teams (Front End Sales, Business Development, Operations, Field Operations, Engineering, Supply Chain Management, Risk Assessment, etc.) in United States and Globally to complete each Proposal on time.
- Worked with clients in Utilities market: AEP, TVA, DUKE Energy, MN Power, SCE, PG&E, etc.

ABB – Flexible Alternating Current Transmission System - *Proposal and Project Manager*

SEPTEMBER 2012 - SEPTEMBER 2016

- Directly responsible for the control, monitoring, and execution of Engineering Procurement Contract projects for local execution center for Flexible Alternating Current Transmission System business. Directly responsible for a global matrix team of 15+ to initiate, plan, execute, monitor, and control of two major Engineering Procurement Contract transmission projects over $40M dollars.
- Supported IEEE power & energy chapter with presentations and actively participated in renewable integration forums.

Schneider Electric - *Project & Engineering Services Director*

NOVEMBER 2003 - AUGUST 2012

- Manage and train 60+ people in Bids & Proposals, Pricing, Execution, Company Program, Project Managers, Panel-Builder Support, and Medium Voltage Workshop Teams to support the entire lifecycle of projects and businesses.

Kevin Halma, P. Eng, NETA IV

VP of Global Operations
kevin.halma@lndts.com

EDUCATION

University of Alberta - *Bachelor's Degree of Science in Electrical Engineering*

SKILLS AND QUALIFICATIONS

Project Management, Operations Management, Technical Expertise (testing, commissioning, and maintenance services for electrical distribution equipment, equipment, and systems up to 500kV), Team Leadership and Supervision, Client Relationship Management, Regulatory Compliance and Safety, NETA – Level IV NICET III, OSHA 30, NFPA 70E.

NOTABLE PROJECTS

Cumulus Data / Talen Energy (2022-2024) - project management and oversight for testing/commissioning of 4 Greenfield substations tied to nuclear power plant. 1x 500kV/69kV GIS, 1x 230kV/69kV GIS, 2x 69kV/34.5kV. Protection and control implemented using TiDL relays from SEL. Ground grid testing for all stations.

AES Renewables Baldy Mesa Project (2023) - project management and oversight for testing/commissioning of a 230/34.5kV substation. Includes station ground grid testing.

AES Renewables Westwing Energy Storage Project (2023) - project management and oversight for testing/commissioning of 230/34.5kV substation. Includes ground grid testing.

Cleco Power Marthaville, Flagon, Colt, Perkins Substations / Switchyards (2022-2024) - project management and oversight for testing/commissioning of various 138kV/230kV substation and switchyards. Includes ground grid testing.

EXPERIENCE

LND Technical Services - *VP of Global Operations*
JULY 2022 – PRESENT

- Oversee all day-to-day activities of the organization, ensuring that the organization is managed and performing efficiently and effectively.
- Ensure all high voltage engineering and testing projects are completed on schedule, within budget, and of acceptable quality.
- Perform and participate in the hiring and training of departmental managers.
- Organize and oversee the work and schedule of departmental managers and ensure departmental staffing needs are met.
- Establish, review, and implement policies and procedures that will improve day-to-day operations.
- Establish quantitative and qualitative metrics, guidelines, and standards by which the company's efficiency and effectiveness can be evaluated.
- Drive change and growth within the organization.
- Managing schedule, quality, and cost for engineering and testing department
- Plan, direct, control, evaluate and monitor budgets and forecasts for the operation.

- Ensure company sales forecasts are met and identify/develop sales opportunities with new and existing customers.
- Prepare and review proposals with the intent of obtaining new customers and repeat business.
- Ensure work environments are safe for employees and all safety equipment is available.
- Drive the development of company safe work practices and procedures.
- Improve customer service and satisfaction through policy and procedural changes.
- Communicate and explain company directives, policies, and procedures to departmental managers. Meet with operations staff to explain changes, answer questions, and maintain employee engagement.
- Lead coordination between testing and engineering groups and ensure smooth transition from engineering to testing phases of projects.
- Review manager performance and complete performance reviews.
- Perform other related duties as required.

Magna IV Engineering - *Project Manager*
DECEMBER 2020 - JUNE 2022

- Offer Managed project estimating, contract negotiations, and project management.
- Concurrently managed various projects across the US, ensuring timely delivery within budget constraints.
- Managed projects ranging in size from $2000-$8,5M, handling project estimating, client maintenance, financial accountability, project execution, and safety.
- Supervised multiple teams of engineers, technicians, and electricians in various work locations.
- Oversaw Engineering design projects including protection relay setting development, construction management, power systems studies, and protection relay panel upgrades.
- Conducted field testing and troubleshooting of power delivery equipment up to 500kV.

Magna IV Engineering - *Field Service Manager*
AUGUST 2017 – DECEMBER 2020

- Managed and executed field operations for testing, commissioning, maintenance, and related engineering projects.
- Managed diverse projects ranging from greenfield utility substations to brownfield protection upgrades and maintenance across the USA.
- Collaborated with the sales team to identify new projects and market sectors.
- Supervised project locations including renewable and non-renewable power generation, substation, switching stations, data centers, refineries, compressing stations, water, wastewater, and various industrial and commercial/governmental facilities.

Magna IV Engineering - *Field Service Engineer*
APRIL 2014 - SEPTEMBER 2017

- Performed testing, commissioning, and maintenance services for electrical distribution equipment including circuit breakers (Air, Vacuum, SF6), power transformers (up to 500kV, 350MVA), disconnect switches, instrument transformers (CT, VT, CVT, CCVT), protective relays (SEL, GE, ABB, Siemens, Electromechanical), control systems, motors, generators, and other associated equipment.

Alex Echeverria, PE

VP of Engineering
Alex.Echeverria@lndts.com

EDUCATION

Rensselaer Polytechnic Institute - *BA of Electrical Engineering (1988)*

SKILLS AND QUALIFICATIONS

Quality assurance management and overseeing

Expertise in relay coordination and protection schemes for GE, SEL, Siemens, and electromechanical relays.

In-depth knowledge of IEC 61850 substation automation, including GOOSE messaging implementation.

Comprehensive experience in short circuit modeling, arc flash calculations, and power system analysis.

Strong familiarity with ASPEN OneLiner for transmission short circuit modeling. Effective leadership and communication skills, demonstrated through participation in industry committees and conferences.

Active involvement in EPRI, CEATI, NERC, NPCC, and NYISO committees, contributing to R&D projects and reliability standards.

Presented technical papers at conferences and served as a moderator and panelist on Protection & Control topics.

OSHA 30, NFPA 70E certified.

Bilingual in English and Spanish.

PE license in: NY, PR, MS, ND, CA, CT, SC, DE.

NOTABLE PROJECTS

- Puerto Rico 100 Energy Recovery and Resilience Advisory Group consulting member sponsored by the Department of Energy. The PR 100 AG was tasked with developing the roadmap for the island to reach 100% renewable energy by 2025. This two-year effort presented final results in February 2024.
- Served as the NYPA technical advisor and Deputy Incident Commander during the Hurricane Maria power restoration effort in Puerto Rico
- FEMA Project Formulation key contributor securing $10 Billion in energy infrastructure funding for the rebuilding of the Puerto Rican Electric Power Authority's power grid
- Provided Subject Matter Expertise during the public hearings with the Puerto Rico Energy Bureau for the support of the FEMA 10 year Spend Plan for the rebuilding of the power grid
- Marcy South Series Compensation Project (Lead Engineer)
    - Orchestrated a consortium of seven utilities for New York State's first Series Compensation Project.
    - Conducted transient impedance trajectory analysis and recommended relay setting adjustments based on RTDS testing.
    - Led a Sub Synchronous Resonance study, identifying potential hazards and designing a Remedial Action Scheme.

- Substation and Modernization Automation & Control (SAMAC) Project
    - Led NYPA's first IEC 61850 substation automation project, executing BES protection trips via GOOSE messaging.
    - Managed a large-scale facility with 230kV & 115kV Switchyards, autotransformers, gas/oil circuit breakers, and synchronous condensers.
- Life Extension & Modernization Projects (Various)
    - Conducted protection studies for major generator overhauls, ensuring compliance with NERC PRC Standards.
    - Upgraded protection systems for NYPA's 115kV/230kV/345kV/765kV Transmission System, including short circuit analysis and relay coordination.

EXPERIENCE

LND Technical Services - *VP of Engineering*
DECEMBER 2021 - PRESENT

- Lead and manage engineering initiatives, ensuring alignment with industry standards and project specifications.
- Oversee the development and execution of transmission and distribution engineering projects, quality assurance, including substation design and grid modernization.

New York Power Authority - *Director of Engineering*
1989 - 2021

- Director – Technical Advisor (FEMA): 2017 - 2021
    - Provided technical leadership in the aftermath of natural disasters, ensuring the resilience of power infrastructure.
- Director – Protection and Control Engineering: 2010 – 2017
    - Directed protection and control engineering activities, overseeing relay settings, short circuit modeling, and automation projects.
- Various Roles / Titles: 1989 - 2010
    - Progressed through diverse roles with a focus on electrical engineering and project management.

Bogue Electric - *Electrical Engineer*
1988 - 1989

- Contributed to electrical engineering projects, gaining foundational experience in the field.

Luis A. Polanco

Director of Engineering

Luis.Polanco@lndts.com

EDUCATION

Worcester Polytechnic Institute (WPI), Worcester, MA - *M.S. in Electrical Engineering (MSEE)*

Universidad Nacional Pedro Henrique Ureña, Santo Domingo, DR - *B.S. in Electrical Engineering (BSEE) (2004).*

SKILLS AND QUALIFCATIONS

Bilingual English and Spanish, Protection Studies and Relay Settings, Power System Analysis, Transmission and Distribution Systems, Transformer Consulting, NERC PRC Standards Compliance, Substations Automation (SA), Wide-Area Protection Coordination (WAPC), CAPE Protection Model Updates, Arc-Flash Studies, Project Management, and Strong Communication and Supervisory Leadership skills.

Technical Proficiency: ASPEN, ETAP, EasyPower, CAPE, SKM, SIEMENS PTI PSS/E, Power World Simulator, ATPDraw, Electro-Magnetic Fields Workstation (EPRI), AutoCAD, MicroStation, Visual Basic, GE UR Enervista, SEL AcSELerator 5030, SEL-5010, IPScom (Beckwith), MiCOM (Alstom), DIGIS 4 (Siemens), DOBLE ProTEST, DOBLE Protection Suite, MathCAD, Microsoft Office.

EXPERIENCE

LND Technical Services - *Director of Engineering*
MAY 2024 - PRESENT

- Oversee all day-to-day activities of the organization, ensuring that the organization is managed and performing efficiently and effectively.
- Ensure engineering projects are completed on schedule, within budget, and of acceptable quality.
- Perform and participate in the hiring and training of departmental managers.
- Organize and oversee the work and schedule of departmental managers and ensure departmental staffing needs are met.
- Establish, review, and implement policies and procedures that will improve day-to-day operations.
- Establish quantitative and qualitative metrics, guidelines, and standards by which the company's efficiency and effectiveness can be evaluated.
- Drive change and growth within the organization.
- Managing schedule, quality, and cost for engineering department
- Plan, direct, control, evaluate and monitor budgets and forecasts for the operation.
- Ensure company sales forecasts are met and identify/develop sales opportunities with new and existing customers.

- Prepare and review proposals with the intent of obtaining new customers and repeat business.
- Ensure work environments are safe for employees and all safety equipment is available.
- Drive the development of company safe work practices and procedures.
- Improve customer service and satisfaction through policy and procedural changes.
- Communicate and explain company directives, policies, and procedures to departmental managers. Meet with operations staff to explain changes, answer questions, and maintain employee engagement.
- Review manager performance and complete performance reviews.

Quanta Technology (seconded for LUMA Energy) – *Executive Advisor | Manager Protection, Automation and Controls (PAC)*

JAN 2022 – APRIL 2024

- Led a team of thirty-four on-site engineers and seventeen remote engineers for Transmission and Distribution system protection studies, calculations, and relay settings.
- Managed all aspects of Protection and Controls (PAC) for LUMA T&D system, including key projects like Transmission-Generation demarcation and Wide-Area Protection Coordination.
- Oversaw major initiatives, such as Substations Automation (SA) upgrades and CAPE protection model updates.
- Provided PAC support for projects like feeder/reclosers, DG, PPOA's, BESS interconnections, and relay replacements.
- Supervised the Wide-Area Protection Coordination (WAPC) and CAPE protection model updates.

New York Power Authority (NYPA) – *Senior Project Engineer II – Technical Advisor*

OCTOBER 2019 – JANUARY 2022

- Performed Generation, Transmission & auxiliary systems protection studies, calculations, and relay settings.
- Functioned as Technical Advisor supporting PREPA and USVI utilities on engineering tasks for post-Hurricane Maria restoration and system expansion studies.
- Supported system planning interconnection studies for proposed DG/CHP/Solar projects in the LUMA system.

Independent Power Systems Protection Consultant – *Principal Engineer*

OCTOBER 2019 – JANUARY 2022

- Developed power system protection calculations, short-circuit studies, and arc-flash studies for various clients in the US.
- Ensured compliance with NERC PRC standards and provided relay settings development and programming.
- Supported root-cause-analysis investigations of protection mis-operations and electrical failures.

Resonancia Ingeniería y Consultoría, SRL – *Principal Engineer / CEO*

JULY 2018 – PRESENT

- Managed all Transmission, Distribution, Generation, and Industrial system protection proposals and studies in DR.
- Supported IEEE power & energy chapter with presentations and actively participated in renewable integration forums.

American Electrical Testing (AET) Co., LLC – *Lead Protection and Controls (P&C) Engineer*

JUNE 2017 – OCTOBER 2019

- Managed Transmission, Distribution, Generation, and Industrial system protection studies in the Northeast of the U.S.
- Conducted Root-Cause-Analysis (RCA) for customer trip operations and equipment failure situations.
- Performed detail calculation and relay settings programming between 480V up to 500kV.

General Electric Company (GE) Energy Consulting – *GE Principal Engineer, Power Systems, Protection and Controls*

AUGUST 2014 – JUNE 2017

- Developed Generation power plant protection studies for new GE Gas-turbine and Steam Turbine Generators.
- Conducted NERC PRC Standards compliance studies and expanded GE Energy Consulting's technical capabilities.
- Performed Transmission and Distribution protection projects, including short-circuit analysis and relay settings calculations.

Linh Truong

Project Manager
linh.truong@lndts.com

EDUCATION

University of Technology, BachKhoa - Bachelor of Science, Electrical Engineer (2005)

University of Washington - Bachelor of Science, Industrial & System Engineering (2020) Placed on the Annual Dean's list for high scholarship in college

Certificate: ABB Sales & Customer Care (2014)

SKILLS AND QUALIFICATION

- Proficient in Microsoft Office products
- Excellent written and verbal communication
- Strong decision-making and negotiation skills
- Solid organizational skills with multitasking ability
- In-depth knowledge of electrical engineering and maintenance services
- Thorough understanding of project processes, including budgeting and scheduling
- Self-motivated and able to work under limited supervision
- Self-motivated and able to work under

EXPERIENCE

LND Technical Services – *Project Manger*
AUGUST 2024 - PRESENT

- Determine and define project scope and objectives.
- Develop and maintain a detailed project schedule and work plan.
- Provide project updates on a consistent basis to various stakeholders about strategy, adjustments, and progress.
- Predict resources needed to reach objectives and manage resources in an effective and efficient manner.
- Create long- and short-term plans, including setting targets for milestones and adhering to deadlines.
- Monitor progress and adjust as needed.
- Manage contracts with third party vendors.
- Travel to and work with on-site teams as required.
- Track items that are additional in scope and develop project change orders.
- Use KPI's to monitor project performance and identify areas of improvement.
- Delegate project tasks to employees who are best positioned to complete them.
- Assist with proposal development and scope clarifications during proposal process.
- Work with project controller to prepare budget based on scope of work and schedule requirements and to ensure project financials are met.
- Serve as a point of contact for both customer and project teams.
- Perform quality control on project throughout all project stages.
- Perform Engineering and Field Services teams on technical works as needed.
- Support Sales team on customer site visits, and customer sales meetings.

Arevo Inc. (3D Composite Printer) - *Operations Manager*
DECEMBER 2020 - DECEMBER 2023

- Developed and maintained strong vendor partnerships through strategic negotiations, achieving a 30% reduction in supply costs.
- Led a team of 7, providing mentorship, coaching, and feedback to bolster performance and job satisfaction.
- Enhanced supply chain efficiency, boosting inventory accuracy by 98% and reducing lead times by 20%.
- Coordinated logistics and secured shipping cost reductions of 10% through effective negotiation.
- Employed data analysis tools, Microsoft Office Suite, and other technologies for robust data management and analysis.
- Oversaw project operations to ensure they were executed efficiently and cost-effectively.

Unilever - *Operations Manager Intern*
JULY 2019 - SEPTEMBER 2019

- Engaged in the development of vendors, including material sourcing and negotiation, enhancing supply chain efficiency.
- Participated in risk assessments and change management processes, ensuring the long-term success of project outcomes.

ABB, Process Automation Division, Oil, Gas & Petrochemical – *Account Manager*
SEPTEMBER 2012 – MARCH 2015

- Worked as project management/ coordination and support to consultants and contractors.
- Established and maintained long-term customer relationships to increase market penetration.
- Achievement: Won an Emergency Shutdown System contract, $1M USD, for a new oil & gas platform.

Honeywell - Security Systems Division – *Sales Manager*
AUGUST 2011 - SEPTEMBER 2012

- Led training of Bosch fire products & systems to partners and fire systems designers.
- Organized sales activities, after-sales services to customers, and marketing activities.
- Assisted with proposal development and scope clarifications during the proposal process.
- Achievement: Introduced Bosch fire alarm systems to the Vietnamese market a Exceeded 125% of sales target.

Bosch - Security Systems Division – *Assistant Manager*
AUGUST 2009 - SEPTEMBER 2011

- Liaison with factory for technical support/provided technical advice to partners customers
- Generated and provided market research for the management team's growth strategy.
- Achievement: Managed 3 existing Value-Added Resellers; qualified and onboard 2 additional resellers in one year.

Minh Giao - *Project Manager*
JULY 2005 - SEPTEMBER 2009

- Managed the design, installation, and commissioning of low voltage electrical control panels, ensuring compliance with industry standards and client specifications.
- Coordinated with engineering teams to develop project plans and schedules, effectively allocating resources and managing budgets.
- Acted as the primary technical consultant for low voltage projects, providing expert guidance and recommendations to clients and internal teams.
- Led the execution of low voltage projects from inception to completion, including planning, resource allocation, risk management, and project closeout.
- Collaborated with clients to understand their needs and provided tailored solutions to enhance system reliability and efficiency.
- Led an implementation team and coordinated with third-party contractors to ensure project milestones were met on time and within budget.
- Provided technical direction for development, design, and systems integration to ensure project specifications were fully met.
- Achievements: Completed a quick reaction, internal improvement project resulting in 40%, cost savings and met or exceeded sales targets every year for 5 years

Matthew Miller, NETA IV

Commissioning Manager

Matthew.Miller@lndts.com

EDUCATIONS

Saskatchewan Institute of Applied Science and Technology - *Electrical Engineering Technology Diploma*

Northern Alberta Institute of Technology - *Journeyman Power System Electrician*

SKILLS AND QUALIFICATIONS

International Electrical Testing Association (NETA) - Level IV
BSEE, NFPA 70E, OSHA 30
Transformer Consulting, Commissioning and Maintenance Testing, Substation Design and Setup, Low, Medium, and High Voltage Power Systems, Project Management, Team Leadership, Equipment Availability Coordination, Standards and Procedures Development, Customer Relationship Management, Proposal Development

NOTABLE PROJECTS

Sudbury, ON: Project Management and Supervision of 15-20 employees during pre-turnaround and turnaround shutdown. Scope of work included 144kV/44kV Substation Maintenance Testing, 5kV Cable Terminations & Testing, 44kV Transformer Oil Processing, 480V breaker maintenance testing.

Meadow Lake, SK: Project Management and Supervision of 15-20 employees during pre-turnaround and turnaround shutdown. Scope of work included Substation Maintenance Testing, medium and low voltage transformer, switchgear and breaker maintenance testing.

Stettler, AB: Project management, supervision, and onsite commissioning of new and existing upgrades to a 230kV, 72kV, & 26kV substation. Equipment includes breakers,

transformers, control system, and protection relays.

Fort McMurray, AB: Project Management and Supervision onsite for the partial assembly, vacuum oil filling and acceptance testing of (4) 72kV Transformers and repair of leaks on (2) 4160V Transformers. Project Management and Supervision onsite for the vacuum dry out and vacuum oil filling of (1) 100MVA GSU Transformer

Lloydminster, SK: Project Management and Supervision of 10-20 employees during pre-turnaround and turnaround shutdown. Scope of work included 230kV/25kV Substation Maintenance Testing, 25kV Cable Testing, 25kV Transformer Oil Swap and Re-gasketing, 4160V & 480V transformers and switchgear maintenance testing and upgrades. When operationally available maintenance testing was performed on power transformers, cables, MCCs, breakers, contactors, instrument transformers, and protection relays.

Delta, PA: Supervision of the assembly of (2) 500kV, 500MVA, single phase GSU transformers. Duties included organizing tasks, supervision of construction crew, various QAQC documentation, and acceptance testing and commissioning once assembly was completed. Supervision of the assembly of (3) single phase GSU transformers. Duties included organizing tasks, supervision of construction crew, various QAQC documentation, and acceptance testing and commissioning once assembly was completed.

Kerrobert, SK: Supervision of crew in commissioning of high voltage switchgear and power transformer, commissioning of medium and low voltage switchgear including breakers, soft start units, MCC's instrument transformers, protection relays, contactors, reactors and cables. Development of switching procedure and complete energization of HV, MV, and LV Equipment. Assisted with onsite operational and functional tests as well as start-up of motors and equipment.

Dawson Creek, BC: Commissioning of new MV and LV switchgear, transformers, reactors, MCC's, protection relays, instrument transformers, breakers, cables and motors. Maintenance testing, re-commissioning, and repairs of existing MV and LV gear. Commissioning of all PLC/HMI control for plant operations of electrical equipment. Installation of new protection devices, as well as rewiring new revisions and troubleshooting existing errors in wiring and design.

Elm Creek/Carmen, AB Commissioning and acceptance testing of MV breakers, MCC's, contactors, motors, cables, and reactors. Commissioning and acceptance testing of HV breaker and power transformer. Site energization and motor run testing.

Grenfell/Caron, SK Commissioning and acceptance testing of MV breakers, MCC's, contactors, motors, cables, and reactors. Commissioning an acceptance testing of HV breaker and power transformer. Site energization and motor run testing.

Fort McMurray, AB: Full assembly, vacuum oil filling, acceptance testing and commissioning of (2) 300 MVA Hyundai transformers, (2) 150 MVA transformers, and (2) 125 MVA transformers at Suncor Energy's Cogen expansion.

Regina, SK: Responsibilities included substation maintenance, specifically transformer and breaker repairs, testing and commissioning.

EXPERIENCE

LND Technical Services – *Field Service Manager*
MAY 2023 - PRESENT

- Herbert, SK: Foundation Ground Resistivity Testing at Blue Hill Wind Energy Project of 14 tower sites.
- Led commissioning and maintenance testing for low, medium, and high voltage power systems, ensuring strict adherence to safety protocols.
- Managed schedule, quality, and costs for the maintenance and commissioning testing department, achieving optimal project outcomes.
- Directed a skilled team of engineers, technicians, and project managers, fostering a culture of safety and efficiency.
- Coordinated equipment availability for each job, liaising with internal resources and third-party rental agencies.
- Assisted in developing company standards, policies, and procedures, contributing to the growth and evolution of the organization.
- Collaborated directly with customers to guarantee satisfaction and identify additional project/sales opportunities.
- Recruited, trained, and mentored new employees, fostering a high-performing and cohesive team.
- Reviewed drawings, test reports, and project documents, ensuring accuracy and completeness.
- Conducted on-site testing work as required, applying hands-on expertise to enhance project success.

Magna IV Engineering - *Technical Field Services Manager*
2021 - APRIL 2023

Magna IV Engineering - *Client Manager*
2019 - 2021

Magna IV Engineering - *Project Manager*
2017 - 2019

Shermco Industries Canada (formerly Magna Electric Corporation) - *Technical Services Manager*
2015 - 2016

Shermco Industries Canada - *Technical Services Supervisor*
2014 - 2015

Shermco Industries Canada - *Technical Services Representative*
2012 - 2014

Dynamo Electric - *Field Technologist*
2011 - 2012

Shermco Industries Canada - *Technical Services Representative*
2009 - 2011

Alejandro Reyes

Field Service Manager

Alejandro.Reyes@lndts.com

EDUCATION

San Jacinto College - Associates Engineering Degree

SKILLS AND QUALIFICATIONS

Commissioning and Testing, Relay Configuration and Analysis, SCADA Systems, Ground Grid Testing and Evaluation, Project Management, Technical Training, Safety Compliance, Doble Training Courses, Ashton Relay 101 Course, Enoserv Training Course, National Institute for Certification in Engineering Technology (NICET) – Level I, OSHA 30, International Electrical Testing Association (NETA) – Level I

NOTABLE PROJECTS

Hillcrest Solar (Oct. 2020 – Nov. 2020): *138 KV Substation Relay Commissioning, Energization, and Ground Grid Testing* - Conducted SEL protection relays testing and configuration, logical relay checkout, and SCADA point check sheet completion.

Formosa Plastics (Dec. 2020 – Nov. 2021): *138KV Line Panel Install and Commissioning* - Assisted in the installation of ABB Line relay panel, developed energization plan, and performed functional testing of protection circuits.

Siemens Energy (June 2021 – July 2021): *69KV Substation, 12 LCC Relay Panels and GIS Gear Commissioning and Testing* - Tested and commissioned 12 LCC Siemens panels with 35 relays, reviewed and tested Siemens relay settings, and completed iFAT testing on customer site.

EXPERIENCE

LND Technical Services - *Field Service Manager - P&C Specialist*
AUGUST 2021 - PRESENT

- Oversee and manage all commissioning and maintenance testing activities.
- Managing schedule, quality, and cost for maintenance and commissioning testing department
- Manage and lead a team of engineers, technicians, and project managers to ensure the safe execution of maintenance and commissioning projects.
- Ensure work is executed safely and per company procedures and standards.
- Ensure all equipment required for jobs is available for each job. Coordinate with internal equipment resources and third-party rental agencies.
- Assist with the development of company standards, policies, and procedures.
- Drive change and growth within the organization.
- Coordinate and work directly with customers, ensuring customer satisfaction.
- Identify project/sales opportunities and highlight the opportunities to the sales team. Assist with completing proposals for new projects.
- Hiring, training, and mentoring of new employees

- Review drawings, test reports, and related project documents for accuracy and completeness.
- Review and submit reports to customers.
- Assist test teams with on-site work and provide expertise to team members.
- Perform on-site testing work as needed.

Magna IV Engineering – *Field Service Specialist III* SEPTEMBER 2020 - AUGUST 2021

- Oversaw commissioning of substations ranging from 138kV to 345kV, including protection and control systems, breakers, and switchgear.
- Conducted end-to-end testing with remote clients/utilities and performed comprehensive SCADA checkouts.
- Analyzed and configured relay settings for various manufacturers including SEL, GE, Siemens, and ABB relays.

L&S Electric - *Power Services Technician*
OCTOBER 2017 - SEPTEMBER 2020

- Executed commissioning of wind farm substations across Texas, including Transformer and Breaker testing for 345kV equipment.
- Conducted testing of relay and communication equipment, relay logic testing, communication schemes, and SCADA checkout.
- Responsible for schematic and print markups and as-builts.

Texas New Mexico Power Company - *Relay Technician II*
APRIL 2013 - SEPTEMBER 2017

- Advanced knowledge of SEL and GE relays.
- Performed settings calculations and configured relay logic.
- Extensive knowledge of RTS, Doble and Powerbase for relay testing.
- Responsible for testing and maintaining system protection and control components.
- Responsible for maintaining and configuring all forms of communication equipment (Ex: SCADA, HMI's, Network Ports, Serial Ports, Satellite Clocks, Fiber Communications, and Carrier system communications.)
- Program peripheral devices such as Ethernet switches, Port Servers, and I/O Devices. Responsible for testing of all relay and communication equipment for each site, including relay logic testing, communication schemes, and SCADA checkout.

Zeyu Yang, PE

Principal Power Systems Engineer

zeyu.yang@lndts.com

EDUCATION

Chongqing University - *BA in Electrical Engineering (1983)*

SKILLS AND QUALIFICATION

Detailed Design of Electrical Power Systems, Power System Studies, Protective Relay Settings Development, SCADA Protocol Programming, Project Reporting, Protection and Control Field Test Support, Team Training, Professional Development Support, Cost Estimation.

PE license in: NY, VA, OH, NV, CA, MD, TX, FL, NM. IN, CT, NH, MA.

NOTABLE PROJECTS

220 kV Changan Substation: Lead Electrical Engineer – Protection and Control: 180 MVA 220/110/10 kV Transformer x 3, 220 kV Transmission Line x 12; 110 kV Transmission Line x 12, 220 kV Outdoor switchyard, double buses with bypass connection. 110 kV Outdoor switchyard, double buses with bypass connection. Fully automatic control and supervising substation. Responsible for leading relay protection and control system engineering design; coordinating with clients, other design departments, and vendors; planning design schedule; developing substation automation system specification; evaluating bids; reviewing, and approving vendor documents and drawings; reviewing and supervising design quality; approving and signing final documents and drawings; supporting construction site and pre-commissioning.

500 kV Maoming Substation: Lead Electrical Engineer – Protection and Control: 750 MVA 500/220/35 kV Transformer x 3, 500 kV Transmission Line x 4; 220 kV Transmission Line x 10 500 kV Outdoor switchyard, 3/2 breaker connection. 220 kV Outdoor switchyard, double buses with bypass connection. Responsible for leading relay protection and control system engineering design; coordinating with clients, other design departments, and vendors; planning design schedule; developing specifications substation automation system, 500kV circuit breaker, 750 MVA transformer, 750 MVA transformer protection panels, 500kV CT, and 500kV PT; evaluating bids, reviewing, and approving vendor documents and drawings; reviewing and supervising design quality; approving and signing final documents and drawings; supporting construction site and pre-commissioning.

EXPERIENCE

LND Technical Services - *Principal Power Systems Engineer*
SEPTEMBER 2021 - PRESENT

- Perform and review comprehensive power system studies, including load flow, short circuit currents, protection coordination, arc flash, harmonics, reactive power, transition recovery voltage, and ground grid design.
- Execute and review relay setting calculations, CT saturation studies, and relay settings for various relays such as SEL-321/421/311L/411L/487E/478B/487V/351/451.

- Ensure compliance with NERC standards, overseeing generation/transmission system NERC compliance verification.

American Electric Power Transmission System Projects - *Principal Protection and Control Engineer*
JANUARY 2017 - SEPTEMBER 2021

- Developed P&C philosophy, overall P&C scheme planning, and proposal.
- Prepared scopes, reviewed P&C documents and drawings, and managed equipment specification, cost estimating, and scheduling.
- Led the development and review of substation meter/relay one- and three-line diagrams, AC/DC schematics.
- Provided field support and mentored junior/mid-level engineers and designers.

Worley Parsons - *Senior Electrical Engineer|*
DECEMBER 2010 - MAY 2016

- Reviewed and approved protection relay test reports, conducted power system studies, and proposed overall P&C schemes.
- Led GE Multilin and SEL relay settings, transformer, and bus differential relay setting calculations.
- Supervised design schedules, estimates, team management, and coordinated with clients, vendors, and other design departments.
- Provided mentorship for junior engineers and contributed to technical training.

AMEC American - *Senior Electrical Engineer*
DECEMBER 2007 - DECEMBER 2010

- Reviewed and approved protection relay test reports and performed power system studies.
- Proposed overall P&C schemes based on reliability analysis, redundancy, speed, and selectivity.
- Led GE Multilin and SEL relay settings, transformer, and bus differential relay setting calculations.
- Supervised design schedules, estimates, team management, and coordinated with clients, vendors, and other design departments.
- Provided mentorship for junior engineers and contributed to technical training.

Bantrel Co. - *Power System and Lead P&C Engineer*
AUGUST 2002 - DECEMBER 2007

- 500 kV Huizhou Substation, Lead Electrical Engineer – Protection and Control
- Led relay protection and control system engineering design for a 500kV substation, including transformer protection panels, circuit breakers, and substation automation systems.
- Coordinated with clients, design departments, and vendors, and supervised design quality.
- 500 kV Shenzheng Substation, Lead Electrical Engineer – Protection and Control
- Oversaw relay protection and control system engineering design for a 500kV substation, involving transformer OLTC, reactive compensation capacitor bank, and substation automation systems.
- Coordinated with clients, design departments, and vendors, ensuring design quality.

Simon Xu, PE

Principal Electrical Engineer

simon.xu@lndts.com

EDUCATION

Concordia University, Montreal, QC, Canada - *BA in Computer Engineering (2004)*
Tongji University, Shanghai, China - *BA in Electrical Engineering (1996)*

Certificate: PLC Programmer (Allen Bradley), George Brown College, Toronto, On, Canada (2001)

SKILLS AND QUALIFICATION

ETAP/SKM/Easypower/PSCAD/ASPEN OneLiner/EMTP/MathCAD for power system study

Detailed Design of Electrical Power Systems, Power System Studies, Protective Relay Settings Development, SCADA Protocol Programming, Project Reporting, Protection and Control Field Test Support, Team Training, Professional Development Support, Cost Estimation

P. Eng. in BC, Canada

PE license in: WA, AZ, CA, CO, LA, MD, NE, TX.

NOTABLE PROJECTS

- Talen Energy 345kV/69kV substation, PA: Provided end-to-end distance relay testing, primary injection tests, and test circuit diagrams for transformer differential relays SEL-487E and bus differential relays SEL-487B.
- Elizabeth Solar 138kV substation, Louisiana: Conducted TOV/TRV, lightning insulation coordination, short circuit studies, and reviewed protection coordination study and setting calculations.
- El Paso Verde 115kV substation transient studies, New Mexico: Provided TOV/TRV and lightning insulation coordination studies.
- Baldy Mesa solar farm 115kV substation studies, California: Led studies on load flow, short circuit, reactive power compensation, harmonics, TOV/TRV, and lightning insulation coordination.
- City of Denton GIS studies, Texas: Conducted TOV/TRV, ferroresonant, lightning insulation coordination, and very-fast-transient studies.
- New Frontier Wind Project Power System Study, North Dakota: Conducted short circuit, coordination, and arc flash study for the 100MW wind project. The study scope was from 115kV to 34.5kV and low voltage system. The existing protection relays setting was reviewed, and a new setting was proposed to achieve coordination. NERC PRC-27 coordination with utility was conducted in the study.
- Cardinal Point Wind Project Power System Study, Illinois: Conducted short circuit, coordination, and arc flash study for the 150MW wind project. The study scope was from 138kV to 34.5kV and low voltage system. The existing protection relays setting was reviewed, and a new setting was proposed to achieve coordination. NERC PRC-27 coordination with utility was conducted in the study.

EXPERIENCE

LND Technical Services - *Principal Electrical Engineer*
JULY 2021 - PRESENT

- Perform design, under supervision of the Sr. Protection & Control Engineer, on all aspects of electrical protection and control systems to include protection coordination studies, protective relay settings, SCADA/HMI settings, communication settings, RTU, one-line diagrams, three-line diagrams, control and relaying schematics, wiring diagrams, communications architecture.
- Assist with the development of protective relay settings for all different relay types (GE, SEL, Siemens, ABB, etc)
- Assist with the development of programming files for SCADA/RTU.
- Coordinate protection settings with customer and utility as required.
- Assist with development of protection and control field test procedures and troubleshooting of test procedures. Provide guidance and assistance to field personnel in the execution of protection and control tests.

Magna IV Engineering, Surrey, Canada - *Senior Electrical Consulting Engineer*
JUNE 2019 - JUNE 2021

- Miekle Wind Farm, Boreal Construction, Tumbler Ridge, BC: Prepared substation energization plan and reviewed P&C package for a wind farm.
- Hillcrest Solar Power Plant, Ohio: Provided harmonics study for a 200 MW solar farm using EMTP.
- Arc-Flash and Coordination Study, Surrey Memorial Hospital, Surrey, BC: Led power system modeling and protection device setting.
- 25kV Vacuum Circuit Breaker Retrofit, RTA, Kitimat, BC: Replaced SF6 breaker with vacuum circuit breaker and updated control wiring and SEL-751 relay settings.
- Sachs Harbour Power Station Grounding Project, Northwest Territories: Provided grounding design for an arctic area project.

Wood, Vancouver, Canada - *Senior Electrical Engineer*
FEBRUARY 2018 - MAY 2019

- Lions Gate WWTP, Metro Vancouver, North Vancouver, BC: Technical lead for 25kV and 5kV power system design for a municipal wastewater treatment plant.
- Alpac 50 MW Generator Feasibility Study, AB: Provided protection single line for a proposed 13.8kV 50MW gas generator.
- Burrard Thermal Station Sync Condenser PQ Curve Memo, Port Moody, BC: Provided memo for PQ curve capability for existing sync condensers.
- Aspinwall Water Treatment Plant – Ross Pump Station Electrical Distribution Equipment Improvement Project Schematic Design Report, Pittsburgh, PA, USA: Provided design basis report and concept single line diagrams.

Easi LLC, Tulsa, Oklahoma - *Protection and Control Engineer*
DECEMBER 2016 - JANUARY 2018

- Various Substations for AEP, USA: Led study and design work for numerous substation projects including Laredo, TX, Greenland, AR, South Shreveport, LA, and more.
- Radium, TX: Reviewed protection calculations for 138kV/69kV autotransformer and relay setting files using ASPEN.

WorleyParsons (Advisian) Canada (Vancouver, Canada - *Electrical Project Engineer*
JUNE 2011 - SEPTEMBER 2016

- Westshore Terminal, Delta, BC: Engineer of Record and electrical lead for design of two 13.8kV substations, a pumphouse, and power/data infrastructure.
- Ridley Island Coal Terminal, Prince Rupert, BC: Engineer of Record for new 69kV 20MVA outdoor substation, 13.8kV substations, conveyors, stacker/reclaimers, and more.
- Kitimat LNG Project, TL&T Electric, Kitimat, BC: Engineer of Record for design of a 600V standby generator system for a construction camp.

MMM Group Inc, Vancouver, Canada - *Electrical Project Engineer*
SEPTEMBER 2008 - DECEMBER 2011

- Airport Expansion, Edmonton International Airport: Reviewed electrical drawing specifications for power plant, terminal building, and control tower.
- Jack Bell Research Centre, Vancouver General Hospital: Designed power, lighting, fire alarm, and data/telephone systems for a research facility.

Flow Consulting Group Inc, Vancouver, Canada - *Electrical Designer*
SEPTEMBER 2007 - DECEMBER 2008

- 200 Granville Squire: Verified fault current and protection coordination for a transformer replacement and power system upgrade.

EarthTech Inc, Vancouver, Canada - *Electrical Engineer*
MAY 2007 - SEPTEMBER 2007

- Whistler Athlete's Village: Designed electrical and LV systems for a four-storey dormitory.

Carpian Consulting Inc, Montreal, Canada - *Electrical Designer*
SEPTEMBER 2005 - MAY 2007

- Raglan, Falconbridge, QC: Revised MCC and PLC panels and designed power, lighting, and LV systems for an office and mechanical shop renovation at a nickel-copper mine.

Allard-Willson Engineering Ltd., Toronto, Canada - *Electrical Designer*
July 2000 - August 2001

- Walmart Expansion: Worked on lighting layout drafting and design for retail stores.

Siebe Environment Control Ltd. Shanghai, China - *Electrical Engineer*
AUGUST 1998 - MARCH 2000

- Tianjin Electronics Plant, Motorola, China: Designed HVAC control panel and substation PLC monitoring system for a plant expansion.
- Wenguang Square, Shanghai Media Centre, China: Designed a chilled ceiling control system for one floor of an office building.

Shanghai Modern Architecture and Engineering Ltd, Shanghai, China - *Electrical Assistant Engineer*
SEPTEMBER 1996 - JULY 1998

- Pilot Training Centre, Eastern China Airlines, China: Designed building power and lighting system, including a 10kV substation.

Deepak Maragal, PhD, PE

Principal Technology Engineer

Deepak.Maragal@lndts.com

EDUCATION

National Institute of Technology - Karnataka, India - *BA of Electrical and Electronic Engineering (2003)*
New York University - New York, NY - *M.S. in Electrical and Computer Engineering (2007)*
New York University - New York, NY - *PhD. in Electrical and Computer Engineering (2013)*

NOTABLE PROFESSIONAL DEVELOPMENT AND PATENTS

International Electrical Testing Association (NETA) – Level I
US patent US8744637 B1 on "Universal Adaptive Reclosure"
PE in New York State

NOTABLE PROJECTS

- SAMAC Digital Substation Project, St. Lawrence, Massena, New York (2011-17) Lead Engineer: Responsible for IEC 61850 Design, Engineering, Testing, and Troubleshooting activities with GOOSE and MMS protocols. Communication network design and failovers. SiCAM – WinCC Configuration, RTAC-Gateway configuration.
- Digital Substation Design Development, White Plains New York (2017-2021) Manager: Managed the team consisting of P&C, SCADA-OT, IT, Operations, and Field-Tech to develop NYPA's Digital Substation design standard for the substations of the Smart-Path Connect project. Supported the team to perform lab evaluation of various technologies and products, including IEC 61850 GOOSE, Sample Values, MMS, SEL-TiDL products.
- Develop Digital Substation Implementation Guide, CEATI, Principal Investigator: Led the development of the following guides with several US/canadian utility members of CEATI on:
    - IEC 61850 Implementation Guide – Station Bus (Phase I)
    - IEC 61850 Implementation Guide – Process Bus (Phase II)
    - IEC 61850 Testing Guide (Phase III)
    - IEC 61850 Cyber Security and Networking Guide (Phase IV)
    - IEC 61850 SCADA, HMI, Automation Guide (Phase V)

EXPERIENCE

LND Technical Services - *Principal Technology Engineer*
OCTOBER 2023 - PRESENT

- Perform detailed design on all aspects of electrical power systems to include one-line diagrams, three-line diagrams, control and relaying schematics, wiring diagrams, SCADA, communications, conduit and cable sizing/routing, grounding design, general arrangement, selection of equipment, writing of equipment specifications, project and construction cost estimates, and project scheduling
- Prepare computer-based models and perform power system studies on utility and industrial/commercial electrical power generation, transmission and distribution systems,

including short circuit, load flow, relay coordination, arc flash, motor starting, power factor, harmonic analysis, and other related studies. Employee should create simple hand checks to quantify the computer aided results

- Develop protective relay settings for all different relay types (GE, SEL, Siemens, ABB, etc)
- Perform Relay Settings Quality Checks (QC)
- Perform SCADA remote control design Integration, including updating Operations Instructions, outage and energization plants and SCADA datasheets submissions.
- Assist with development of protection and control field test procedures and troubleshooting of test procedures. Provide guidance and assistance to field personnel in the execution of protection and control tests
- Support the Substation engineering department with EMF field measurements and special requests to report pre and post construction measurements of proposed and existing substation and transmission line projects
- Battery Energy Storage System Project (BESS)
    - Spearheaded the design, implementation, and testing of BESS protection systems, ensuring compliance with IEEE 1547 Category III requirements for maximum voltage and inertial support.
    - Conducted Arc-Flash and Breaker Rating Studies for Hospitals, Industrial Plants, and Substations, optimizing protection systems for reduced arc flash energies.
    - Developed RTAC settings for relay/meter to SCADA telemetry over DNP3 protocol, providing expert guidance on protocol selection based on equipment capabilities.
- BES Solar Farm Engineering and Testing
    - Provided expert guidance in designing Transformer Control and Monitoring System for 138kV Grid-Connected Solar Farms, ensuring AVR capability and NERC VAR/PRC compliance.
    - Implemented intelligent harmonic triggering in existing relays, meeting IEEE 519 standard requirements and NERC PRC-002 compliance.
    - Led PLC upgrade plans for OGS-New York, enhancing auto-transfer schemes for switching between utility/generation sources.
- NERC Compliance Studies
    - Conducted various NERC compliance studies for PRC-019, PRC-024, PRC-025 for generators and substations in Puerto Rico.
    - Led compliance efforts for new solar generation plants and BESS systems in California & Louisiana on PRC002, PRC-019, PRC-024, PRC-025, PRC-026, PRC-027, VAR-002, NERC-CIP-005.
- Training and Standards Development
    - Provided training to younger engineering staff on standards and practices related to Engineering Drawings, Arc-Flash studies, and Protection Coordination.
    - Expertise in IEC 61850 Standard – GOOSE, SV, MMS, PTP, PRP.
    - Developed implementation guides for CEATI P&C, including IEC 61850 Station Bus, Process Bus, and ongoing Testing, Cyber Security, SCADA, HMI, Automation guides.

Eureka Power Solutions, LLC
2015 - 2023

- Delivered consulting services in the Utility sector, specializing in Arc Flash Studies, Microgrids, Interconnection studies, Transient Analysis, and Compliance on NERC PRC-005, PRC-027, FERC Order 881.

- Supported Avangrid's design-review of IEC 61850 protection relay settings.
- Involved in product development, developing guides for CEATI P&C, with a focus on IEC 61850 implementation and testing.
- Manager, System Integration and Test

New York Power Authority
2017 - DECEMBER 2021

- Developed and implemented strategies for adopting new technology, tools, and practices in testing, including Model Based Testing and Non-Invasive Testing techniques.
- Led testing efforts for various protection relays and technologies, ensuring Cyber Security Testing and NERC-CIP compliance.
- Evaluated and implemented new technologies and products in the lab environment, including Digital Substation with IEC 61850 technologies and various protection relay products.
- Senior Protection & Control Engineer I

New York Power Authority
2013 - 2017

- Led IEC-61850 technology implementation involving over 250 relays from GE, Siemens, & SEL relays.
- Designed engineering drawings and developed protection schemes and settings for Transmission Lines, Transformers, Generators, and Capacitor/Reactor Banks.
- Mentored young engineers and conducted training on IEC-61850 systems.
- Research & Technology Development Engineer

New York Power Authority
2007 - 2013

- Implemented real-time Condition Monitoring Systems in generators, transformers, and circuit breakers.
- Led various projects related to Synchrophasor, Smart-grid applications, Power Quality Analysis, and Power System Transient Analysis.
- Managed project schedules, design reviews, and troubleshooting efforts.

Polytechnic University - *Research Assistant*
2006 - 2007

- Automated power system model generation in Matlab & EMTP.
- Conducted Distribution System transient studies.
- Operations Officer / Automation Engineer

Indian Oil Corporation Limited
2003 - 2006

- Led day-to-day Operations activities, including Pipeline Operations, Tank-Truck operations, and Invoicing.
- Managed Terminal Automation System (SCADA) Operation, Maintenance, and Troubleshooting efforts.
- Designed and implemented a novel Fire-pump Control System and led Plant Electrical safety and maintenance.

Masood Jalalian, PE, NETA IV

Sr. Commissioning Engineer

Masood.Jalalian@lndts.com

EDUCATION

Concordia University, Montreal, Canada, - *M. Eng Electrical Computer Engineering*

Isfahan University of Technology, Isfahan, Ira - *Bachelor's Degree, Electrical Power Engineering*

SKILLS AND QUALIFICATIONS

Protection and Control Systems Engineering, Testing and Commissioning, Fault Analysis, Relay Setting Calculations, Troubleshooting, IEC61850/GOOSE Messaging, DNP Maps and NDP Protocols/Modbus, TCP/IP and RTU, Project Management, Commissioning Test Procedures, CIPv6 Codes Implementation, Smart Grid Systems Installation and Commissioning, SCADA and Communication Systems, RTU (Orion 5r, Orion LX), and Substation Maintenance and Testing.

NFPA 70E, OSHA 30 certified

PE license in: NY, OH, MI, IN, VA, KY, TN, FL, TX, MN, CO, AZ, CA.

NOTABLE PROJECTS

- Mitsubishi Power, BESS Project- CA, developed documents including Equipment installation checklists, Integration testing procedures and Performance requirement validation testing procedures- 2023.
- Pattern Energy Group, Albuquerque- NM, performed transients' studies, prepared test plans and tested 345 KV line Traveling Wave Relays – 2021
- 200MW Hillcrest Solar Project, Hillcrest, OH, Performed power system studies and NERC Compliance calculations and Prepared relays settings / configurations for main substation- 2020.
- PNM, Albuquerque-NM, installed relay panels, Performed acceptance tests-2017.
- Florida Power & Light, FL, Installed RTU panels, Configured RTU systems and Performed acceptance tests- 2016.
- The Linde Group- Lonesome Creek Train 1, McKenzie County, ND, Reviewed coordination studies and prepared relays electronic setting files, Designed Mian-Tie-Main logics including GOOSE messaging for site main substation- 2015.
- Evolution Well Services, Houston, TX- Performed acceptance tests on Mobile 13.8/ 4.16 KV Substations including primary (Breakers, CTs, PTs, Switches, Cables, Transformer) and secondary (Relays) equipment - 2015
- Husky-SIERRA, Fort Nelson- BC, Performed site coordination study and prepared relay electronic setting files- 2013.

EXPERIENCE

LND Technical Services - *Principal Protection & Control Engineer*
DECEMBER 2021 - PRESENT

- Provide Lead testing and commissioning services for Protection and Control systems in utility and industrial settings, specializing in systems up to 500kV.
- Subject Matter Expert in IEC 61850 testing and commissioning, ensuring compliance with industry standards.
- Design and engineer protection and control systems, conduct coordination studies, develop relay settings, and design and test SCADA systems.
- Perform detailed fault analysis to determine necessary corrective actions, oversee company-wide P&C testing and providing mentorship and training.

RESA Power - *Principal P&C Engineer*
OCTOBER 2019 – APRIL 2023

- Offer testing and commissioning services for Protection and Control systems, demonstrating expertise in fault analysis and system operation.
- Engage in engineering activities related to protection and control systems.
- Mentor and train employees, contributing to skill development within the team.

Magna IV USA Inc - *Sr. Field Service Engineer*
2010 - 2019

- Prepared setting calculations and electronic files for various relays, covering commissioning, start-up, acceptance, and maintenance tests.
- Specialized in troubleshooting and conducting investigations into abnormal system failures.
- Designed and tested IEC61850/GOOSE messaging, DNP maps, NDP protocols/Modbus, and TCP/IP, RTU

Shermco Industries - *Sr. P&C Engineer and Project Manager*
2017 - 2018

- Provided project management, engineering, and technical field services, focusing on relays, for client systems with voltages up to 345kV.
- Led pre-commissioning and commissioning projects, both CIP and non-CIP.
- Commissioned DC Systems and Battery Energy Storage conducted relay maintenance, and acceptance testing.
- Developed and coordinated commissioning test procedures for substations.

North American Protection and Control - *Sr. Field Engineer*
2016 - 2017

- Installed and tested RTUs, conducted commissioning for FPL Stations.
- Specialized in Smart Grid systems, including RTUs (Orion 5r, Orion LX), SCADA, and communication system installation and commissioning.
- Prepared comprehensive test plans for stations with voltage levels up to 500kV, focusing on CIP Stations.

Sr. Field Engineer - Various Companies
2001 - 2016

Nathan Strilaeff, P. Eng

Protection and Control Engineer

Nathan.Strilaeff@lndts.com

EDUCATION

University of Saskatchewan - *BS in Electrical Engineering (2017)*

SKILLS AND QUALIFICATIONS

International Electrical Testing Association (NETA) Level IV
Substation Commissioning, Relay Testing, NERC Compliance Studies, Arc Flash/Short Circuit/Coordination Studies, Project Management, Team Leadership, Technical Mentoring, Electrical Design, Client Relationship Management, Field Maintenance Oversight
P. Eng. in BC, Canada

NOTABLE PROJECTS

GEISMAR LA – Electrical System Design: Led the electrical design team for a complete replacement of a power distribution building, totaling 28MVA of loading.

BEATRICE NE – Electrical System Design: Contributed to the electrical design team for a site-wide electrical system upgrade.

VARIOUS USA – NERC Compliance Studies: Coordinated and completed NERC compliance studies for solar and wind collector substations.

TALTSON NWT – Backup Electrical System Design: Completed a full design of a backup electrical system for a remote hydro facility.

VARIOUS CANADA, USA – Arc Flash Studies: Conducted complete arc flash, short circuit, and coordination studies on electrical systems rated up to 230kV and 120MVA.

TALTSON NWT – Water Pumphouse Electrical Design: Designed a new water pumphouse at a remote hydro facility.

SUDBURY ON – Site Electrical Maintenance: Project manager/site lead for a weeklong crew completing electrical maintenance on a 115kV substation.

EXPERIENCE

LND Technical Services - *Protection and Control Engineer*
2023 - PRESENT

- Substation Commissioning
    - Led protection and control commissioning of new utility substations, encompassing relay testing, AC/DC schematics verifications, and function logic testing.
    - Conducted ground grid testing, including continuity checks, fall of potential testing, soil resistivity testing, and connection resistance verification.
- Substation Engineering
    - Developed relay settings, conducted NERC compliance studies, and performed arc flash/short circuit/coordination studies.

Magna IV Engineering - *Engineering Supervisor, P. Eng*
APRIL 2022 - 2023

- Led a team of 5 electrical engineers, providing guidance and technical expertise for successful project completion.
- Produced proposals/quotations for projects exceeding $600k, reviewed/approved electrical designs, and managed projects ranging from $5k to $600k.
- Planned, scheduled, and monitored Saskatchewan engineering staff to ensure timely project completion within budget.
- Mentored junior engineering staff, standardized engineering documents, and provided technical assistance for problem-solving.

Magna IV Engineering - *Field Engineer, P. Eng*
OCTOBER 2021 - APRIL 2022

- Led the design of new electrical distribution systems at various industrial facilities, including equipment specification, system loading calculations, and project management.
- Provided consulting services, managed electrical equipment upgrade projects, and oversaw field maintenance projects.
- Developed client relationships to mutually benefit both client and contractor.

Magna IV Engineering - *Technical Representative, Engineer-in-Training*
MARCH 2017 - OCTOBER 2021

- Conducted field commissioning, maintenance, and acceptance testing on electrical equipment, adhering to NETA standards.
- Generated technical reports outlining equipment integrity, system deficiencies, and recommendations.
- Performed electrical system studies for small to large industrial facilities, including arc flash, coordination, short circuit, and power quality studies.
- Assisted in electrical design for small industrial facilities, creating drawings, equipment specifications, and construction work packages.

Todd Billie, NETA IV

Principal Field Service Engineer

Todd.Billie@lndts.com

EDUCATION

ITT Tech - *IEC 61850 Principal Test Integration Engineer (2011)*

SKILLS AND QUALIFICATIONS

International Electrical Testing Association (NETA) – Level IV

NICET II, NFPA 70E, OSHA 30

Testing and Commissioning (Low, Medium, High Voltage), Apparatus and Protection Control Testing, SF6 Breaker Testing, Relay Commissioning (Siemens Siprotec, Digsi Software), Substation Maintenance, DC Integrity Testing, Ground Grid Impedance Testing, Soil Resistivity Testing, Step & Touch Potential Testing, Fall of Potential Method, IEEE 81-2012 Compliance, Ground System Impedance Measurement, Test Plan Development, Data Analysis and Reporting, Safety Standards (IEEE Standard 80-2000, IEEE Std 80-2013, NESC), Corrective Measures Implementation, Project Management for Testing/Evaluation, Electrical System Ground Fault Analysis

NOTABLE PROJECTS

Led testing and commissioning for various utility solar interconnection substations.

Played a key role in commissioning and maintenance of substations for Linxon, Talen Energy, Cleco, Google, Cleveland Cliffs, Origis Energy, Xcel Energy, and more.

EXPERIENCE

LND Technical Services - *Principal Field Service Engineer*

AUGUST 2021 - PRESENT

- Lead and mentor a team for utility-scale solar, BESS, and renewable substation projects.
- Testing and commissioning of low, medium, and high voltage power delivery equipment (34.5kV - 500kV).
- Responsible for testing apparatus and protection and control equipment.

Magna IV Engineering - *NETA IV Field Service Technician*

MAY 2015 - AUGUST 2021

- Conducted testing of low, medium, and high voltage power delivery equipment, including apparatus and protection and control.

Precision Testing Group - *Field Service Technician*

JANUARY 2012 – MAY 2015

LNT Electric - *Electrical Apprentice*

SEPTEMBER 2005 - APRIL 2009

Sharon Kenner, NETA IV

Principal Field Service Engineer

sharon.kenner@lndts.com

EDUCATION

Ecotech Institute - *Associates of Science in Electrical Engineering*

SKILLS AND QUALIFICATIONS

NFPA 70E, OSHA 30 certified

AVO Level 1 Thermographer

PdMA Level II Data Analysis

Robotics Maintenance and Programming

International Electrical Testing Association (NETA) – Level IV

Protection and Control Systems Engineering, Testing and Commissioning, Fault Analysis, Relay Setting Calculations, Troubleshooting, IEC61850/GOOSE Messaging, DNP Maps and NDP Protocols/Modbus, TCP/IP and RTU, Project Management, Commissioning Test Procedures, CIPv6 Codes Implementation, Smart Grid Systems Installation and Commissioning, SCADA and Communication Systems, RTU (Orion 5r, Orion LX), and Substation Maintenance and Testing

NOTABLE PROJECTS

Mitsubishi Power, BESS Project- CA: Developed documents including: Equipment installation checklists, Integration testing procedures and Performance requirement validation testing procedures- 2023.

Pattern Energy Group, Albuquerque- NM: Performed transients studies, Prepared test plans and tested 345KV line Traveling Wave Relays – 2021

200MW Hillcrest Solar Project, Hillcrest, OH: Performed power system studies and NERC Compliance calculations and Prepared relays settings / configurations for main substation- 2020

PNM, Albuquerque-NM, Installed relay panels, Performed acceptance tests-2017

Florida Power & Light, FL, Installed RTU panels, Configured RTU systems and Performed acceptance tests-2016

The Linde Group- Lonesome Creek Train 1, McKenzie County, ND: Reviewed coordination studies and prepared relays electronic setting files, Designed Mian-Tie-Main logics including GOOSE messaging for site main substation- 2015

Evolution Well Services, Houston, TX: Performed acceptance tests on Mobile 13.8/ 4.16 KV Substations including primary (Breakers, CTs, PTs, Switches, Cables, Transformer) and secondary(Relays) equipment - 2015

Husky-SIERRA, Fort Nelson- BC: Performed site coordination study and prepared relay electronic setting files- 2013

EXPERIENCE

LND Technical Services - *Principal Field Service Engineer*
February 2023 - Present

- Lead, supervise, and mentor a team of technicians and engineers to successfully complete projects.
- Provide testing and commissioning services for electrical systems for the utility, industrial, and commercial marketplace for systems up to 500kV.

LND Technical Services - *Sr. Field Engineer - 1099 Contract*
December 2021 - January 2023

- Provided testing and commissioning services for electrical systems for the utility, industrial, and commercial marketplace for systems up to 500kV.

Magna IV USA Inc - *Field Service Supervisor*
2014 - January 2022

- Conducted NETA Testing for low, medium, and high-voltage electrical equipment, including circuit breakers, transformers, power cables, generators, motors, switchgear, and protective relays.
- Managed and coordinated a team of technicians to ensure complete project execution. Completed detailed reports and documentation.

ESS Metron - *Electrical Test/Field Service Supervisor*
2012 - 2014

- Conducted in-house and on-site testing, troubleshooting, and startup of all products, including LV/HV switchgear, PDCs, portable substations, control cabinets, and MCCs.
- Supervised a team of up to 16 field services technicians.

Abound Solar - *Process Engineer*
2009 - January 2012

- Managed quality control of various products.
- Conducted data analytics to improve processes. Supervised technicians and performed QA/QC.

Shannon Culbertson, NETA III

Principal P&C Field Engineer

shannon.culbertson@lndts.com

EDUCATION

Greenville Technical College - *Associates of Science in Electrical Engineering*
University of South Carolina - *Bachelor of Science in Interdisciplinary Studies*

SKILLS AND QUALIFICATIONS

International Electrical Testing Association (NETA) Level III
NFPA 70E, OSHA 30 certified
Protection and Control (P&C) Systems Testing and Commissioning, IEC 61850 Expertise, SCADA System Design and Testing, Fault Analysis and Corrective Action, Relay Settings Development, Engineering Documentation and Standards Compliance, AutoCAD Drafting and Design

NOTABLE PROJECTS

Gordon Road Substation, Conducted IEC 61850 Testing and Commissioning
Golden Pass Export Project, Integrated and tested IEC 61850 for a 69kV Industrial GIS Substation

PNM, Tested and commissioned BES Protection Systems up to 345kV
Talen Energy, Tested and commissioned a 500kV/69kV GIS Substation
Utility Scada Upgrade and Commissioning, Created HMI's using SEL RTAC Diagram Builder, developed SAT and FAT commissioning documents.

Generation Facility Shut-Down Relay Testing, tested 230 MW generators, including SEL-300G Generator relays and SEL-787, SEL-751, and SEL-351 relays

Oil Refinery Main-Tie-Main Scheme Testing: Tested main-tie-main breaker control scheme with SEL-351 and SEL-751 relays.

Industrial Customer Transformer Monitor/Control FAT, Verified and documented SEL-2414 Transformer Monitor operations, conducted analog testing with Omicron CMC-356 test set.

Electric Utility Feeder Relay Upgrades, Upgraded GE F60 relays with SEL-351S relays, commissioned units with Omicron CMC-356 test set.

Industrial Customer Relay Protection Engineering, tested protective elements in SEL-311L, verified field wiring, and tested local and remote tripping, reclosing, and status communication.

Renewable Energy Integration Project, Conducted AutoCAD drafting and design.

Powercore Substation Control Engineering Enclosures Modular Drop-In Control Buildings, installed over 50 SEL POWERCORE buildings, conducted check-outs, commissioning, factory acceptance testing (FAT), and warranty services.

New Line Additions to Automotive Manufacturing Plant, Installed 83 5-axis KUKA robots, conveyor systems, high-speed inspection camera and laser-engraving stations, Siemens PLCs, and electrical distribution systems (480V).

EXPERIENCE

LND Technical Services - *Principal P&C Field Engineer*
JANUARY 2023 - PRESENT

- Provide Lead testing and commissioning services for Protection and Control systems in utility and industrial settings, specializing in systems up to 500kV.
- Subject Matter Expert in IEC 61850 testing and commissioning, ensuring compliance with industry standards.
- Design and engineer protection and control systems, conduct coordination studies, develop relay settings, and design and test SCADA systems.
- Perform detailed fault analysis to determine necessary corrective actions, oversee company-wide P&C testing and providing mentorship and training.

LND Technical Services - *Sr. P&C Field Engineer - 1099 Contract*
DECEMBER 2021 - DECEMBER 2022

- Provided testing and commissioning services for Protection and Control systems in utility and industrial sectors.

Magna IV USA Inc - *Sr. Field Service Engineer*
JULY 2019 - DECEMBER 2022

- Conducted testing and commissioning services for Protection and Control systems, specializing in IEC 61850 testing and commissioning.
- Designed and tested SCADA systems, ensuring efficient and reliable operation.

SEL Engineering Services - *Technician III*
2021 - 2019

- Provided testing and commissioning services for Protection and Control systems in utility and industrial environments.

Journeyman Electrician - Various Companies
1999 - 2021

Benjamin Cholin, NETA III

Sr. Field Engineer
Benjamin.Choplin@lndts.com

EDUCATION

University of Saskatchewan - *Bachelor of Science, Electrical Engineering*

SKILLS AND QUALIFICATIONS

NFPA 70E, OSHA 30 certified
ETAP, Power System Studies, Protection Relays Settings Development, Easypower, Commissioning, NETA Maintenance & Acceptance Testing, NETA Level III, AutoCAD, Project Management, Power Systems Troubleshooting

NOTABLE PROJECTS

Substation Protection and Control Commissioning, Lancaster CA (Feb. 2024):
Completed commissioning testing of the protection scheme in a 230/35kV substation connecting a battery energy storage system to the utility grid. Testing included full commissioning of all control schemes and metering circuits. This included primary injection of CT's and PT's, functional checks of all control logic, and NETA testing of the following protection relays utilizing the Doble RTS software:

- SEL-787 Transformer Protection Relay
- SEL-587Z High-Impedance Differential Relay
- SEL-751A Feeder Protection Relay

Substation Apparatus Commissioning, Lake Charles LA (January 2024):
Completed commissioning testing on the following substation apparatus:

- 135kV SF6 Filled Circuit Breakers
- 135kV Coupling Capacitor Voltage Transformer
- 135kV Current Transformer
- 135kV Disconnect Switch
- Substation Ground Grid
- 35kV Vacuum Circuit Breaker
- 35kV Current Transformer

Maintenance Project Management, Albany NY (Jan 2023 – May 2023):
Managed a team consisting of myself and 6 electricians to complete $1.1M in maintenance work over a 4-month span. When I took over the project it was over 4 months behind schedule. At the end of my secondment, I turned the project back over to the New York regional manager on schedule with a roadmap to keeping it on schedule for the remainder of the service contract. On top of project management duties, I was also technical lead on site which came with the following responsibilities:

- Generated switching plans and verified LOTO completion.
- Trained technical personnel in NETA testing procedures.
- Responded to emergency callouts.
- Supervised and assisted with all apparatus testing.
- Completed all protection relay testing.

Maintenance scope included the following along with all associated protective devices: 35kV Equipment

- Vacuum Circuit Breaker
- Load Break Disconnect Switch
- 30MVA, 35/13.8kV Transformer 13.8kV Equipment
- Vacuum Circuit Breaker
- Air Circuit Breaker
- Switchgear
- Disconnect Switch
- 13.8/0.48kV Transformer

Generator Station Protection Commissioning, Sachs Harbour NT (December 2022):
Independently completed generator protection relay testing GE Multilin G30 generator protection relays. Scope of work included:

- Generating and executing test plans for three G30 relays with generator protection elements including loss of excitation, sensitive directional overcurrent, differential, and under/over frequency, under/over voltage, and overcurrent.
- Generating and executing test plans for four F35 relays with feeder protection elements including under/over voltage, and overcurrent.
- Redlined switchgear control and three-line diagrams.
- Various apparatus testing and commissioning including switchgear, current transformers, circuit breakers, and cables.

NGR Upgrades, Alberta Oil Sands (April 2022 – October 2022):
Provided technical support and completed NGR system upgrades to maintain compliance with changes to the CEC regarding monitoring of transformer neutral grounding resistor health.

- Implemented wiring changes needed to facilitate use of 48hour timer in the NGR health trip circuit.
- Updated relay settings and completed firmware upgrades to Startco SE-330 relays.
- Updated Siemens Siprotec relay protection settings to accommodate changes to trip logic.
- Troubleshot communication errors and updated Modbus settings in protection relays to enable communications with the onsite control room.
- Performed witness testing of upgraded NGR's and protection relays to ensure compliance with client standards.

Transformer Protection Testing, Alberta Oil Sands (October 2022):
Completed transformer protection testing of 35/5kV, 30MVA transformer protection following installation of transformer. Testing included complete testing of 7SJ and 7UT Siemens Siprotec relays including primary injection onto transformer to verify all CT circuits and correct differential protection operation.

SEL-2411 Automation Controller Troubleshoot, Watson SK (August 2021): Investigated newly installed SEL-2411 automation controller used for transformer tap changer control that would not allow tap changer operation. I investigated logic settings within SEL design template to identify offending logic bits which found that failed CT's internal to the transformer were preventing tap changer control. I also identified gaps in SEL design template that prevented tap changer control without transformer tap monitor beyond internal relay counting. Due to a tight timeline to transformer re-energization, I designed a solution that enabled tap changer control without external tap position tracking while still allowing for a manual tap position reset in the event of a mismatch being identified.

Ground Grid Testing, Utility Generation Substation, NT (Summer 2021): Completed ground grid and soil resistivity testing as per IEEE 81-2012 at various utility generation sites to assess the requirements to expand existing ground grids. Measured ground impedance with the Fall-of-potential method and earth resistivity via the Four-point method in the Wenner Arrangement. Also verified existing ground grid connections by measuring resistance to ground at all accessible ground risers.

EXPERIENCE

LND Technical Services – *Sr. Field Engineer*

JANUARY 2024 – PRESENT

- Provide excellent customer service.
- Perform testing, commissioning, and maintenance of low, medium, and high voltage electrical equipment, including:
- Protection and controls, Transformers, power cables, circuit breakers, switchgear, etc.
- Work with engineers to identify, troubleshoot, and resolve problems.
- Work as part of a team to accomplish a common goal.
- Prepare and review test documentation.
- Prepare and submit daily reports.
- Perform safety analysis of jobs and tasks.
- Use and continually develop interpersonal skills.

Magna IV Engineering - *Electrical Engineer-in-Training*

MAY 2023 – DECEMBER 2023

- Completed power system studies and contributed to the design of industrial and utility site layouts.
- Assisted in drafting single-line diagrams, control schematics, and equipment layouts using AutoCAD.

Magna IV USA Inc - *Field Service Technician, Engineer-in-Training*

JUNE 2021 - MAY 2023

- Managed projects, coordinated technical staff, and ensured the safe and efficient completion of maintenance contracts.
- Conducted power systems protection relay troubleshooting, maintenance testing, and commissioning.

Magna IV USA Inc - *Field Service Technician, Student*

APRIL 2017 - MAY 2021

- Completed acceptance and maintenance testing of electrical apparatus, ensuring compliance with safety and performance standards.
- Conducted thermographic scanning and assisted in circuit breaker repair and remanufacturing.

Viral Bhalia, NETA II

Sr. Field Engineer
viralkumar.bhalia@lndts.com

EDUCATION

Centennial College - *Advanced Diploma in Automation and Robotics Engineering*
Dharmsinh Desai University - *Bachelor of Engineering in Instrumentation and Control*

SKILLS AND QUALIFICATIONS

NFPA 70E, OSHA 30 certified
Engineering in Training (E.I.T.) with APEGA Since 2018
International Electrical Testing Association (NETA) Level II
CEC Course Completion with British Columbia Institute of Technology (BCIT)
Engineering Design: Develop LV and MV electrical systems designs, inspect construction work, Perform Arc Flash studies, Perform Arc Flash studies, technical drawing audits and Evaluate equipment, perform gap analysis, and report findings.
Protection and Control: Worked with protection relays from various manufacturers, tested various types of protection and operated multiple types of relay test sets, Omicron, Manta.
Maintenance and Commissioning
Project Lead

NOTABLE PROJECTS

- Heartland Power Generation Station – Maintenance Testing of the MV Breakers - Canada
- Kearl Lake IOL - Maintenance Testing of MV apparatuses and Protective Relays- Canada
- Wolf Midstream – MEG Energy – Maintenance Testing of MV apparatuses and Protective Relays Canada
- Suncor Fort Hills Major Shutdown - Maintenance Testing of HV, MV & LV apparatuses; and Protective Relays- Canada
- Albian Oil Sands – Commissioning of HV, MV & LV apparatuses; and Protective Relays- Canada
- Straight Up Mod yard - Commissioning of MV & LV apparatuses; and Protective Relays- Canada
- Suncor Base Plant Major Shutdown - Maintenance Testing of HV, MV & LV apparatuses; and Protective Relays- Canada
- Longview Power Generation Station - Commissioning of 500 kV CTVT combo – West Virginia, USA
- Battery Energy Storage System (Tesla Megapack) - Commissioning of MV & LV apparatuses – Canada.
- Suncor Base plant CBR Cogen - Commissioning of MV & LV apparatuses, Feeder and Transformer Protection Relays – Canada.
- Talen Energy Power Plant - Commissioning of 69 kV substation and 34.5 kV switchgear apparatuses – Pennsylvania, USA.
- Suncor Base plant CBR Cogen (3 months Support) - Commissioning of MV, HV and LV apparatuses, motor protection, and doble testing of power transformer – Canada

- Suncor Base Plant U1 Shutdown – Maintenance Testing of HV, MV & LV apparatuses – Canada
- International Paper Shutdown - Maintenance Testing of HV, MV & LV apparatuses – Canada
- Imperial Norman Wells – Site wide Shutdown- Maintenance Testing of HV, MV & LV apparatuses and Generator protection- electromechanical relays.
- Hickory GIS Sub Station – Commissioning of the MV and HV apparatuses – Texas, USA

EXPERIENCE

LND Technical Services – *Sr. Field Engineer*
JUNE 2024 - PRESENT

2498382 Alberta Inc - *Commissiong and Maintenance Consultant*
MARCH 2023 - MAY 2024

PBX Engineering - *Electrical Design Engineer*
OCTOBER 2019 – DECEMBER 2022

Magna IV Engineering - *Field Service Engineer in Training*
FEBURARY 2018 – OCTOBER 2019

Sigma Power-Stuart Olson- *Technical Specialist: Protection and Control*
SEPTEMBER 2017 – FEBURARY 2018

Magna IV Engineering- *Electrical Field Services Technologist*
JANUARY 2016 – SEPTEMBER 2017

Powell Canada- *Electrical Field Services Technician*
AUGUST 2014 – DECEMBER 2015

Huy Tran

Field Service Engineer_

huy.tran@lndts.com

EDUCATION

Nova Community College - Associate of Science in Electrical Engineer (2020)
George Mason University - Bachelor of Science in Electrical Engineer (2023)

SKILLS AND QUALIFICATION

NFPA 70E, OSHA 30 certified
ETAP, Power System Studies, Protection Relays Settings Development
Engineering Design, Protection and Control, Testing, Maintenance and Commissioning.
Teamwork oriented, Work well under pressure.
Well organized, and respectful to the schedule.

EXPERIENCE

LND Technical Services - *Field Service Engineer*
JANUARY 2024 – PRESENT

- Provide excellent customer service.
- Perform testing, commissioning, and maintenance of low, medium, and high voltage electrical equipment, including:
- Protection and controls, Transformers, power cables, circuit breakers, switchgear, etc.
- Work with engineers to identify, troubleshoot, and resolve problems.
- Work as part of a team to accomplish a common goal.
- Prepare and review test documentation.
- Prepare and submit daily reports.
- Perform safety analysis of jobs and tasks.
- Use and continually develop interpersonal skills.

Weinberg Medical Physics LLC – *Intern Engineer*
JUNE 2022 – AUGUST 2022.

- Create a new coil (called sniffer coil 1mm) to get a better echo and less noise than the old coil size 10 cm.
- Using FPGA and Python to test the echo of the liquid (cuso4), apply a magnetic field and Radio Frequency, and MATLAB sketch the result.
- Result: Improve the signal better than twice the time, machines will be more compact, and the cost will be cheaper, difficulty was the coil was handmade.

Tin Bui, NETA II

Sr. P&C Field Engineer
tin.bui@lndts.com

EDUCATION

University of Houston - *Bachelor of Science in Electrical Power Engineering Technology*

SKILLS AND QUALIFICATIONS

International Electrical Testing Association (NETA) Level II
NFPA 70E, OSHA 30 certified
NFPA 99 Testing
Specialization in Electrical Power Systems
Testing, Maintenance, and Commissioning of Electrical Distribution Systems and Power Systems
Electrical Systems drawing using AutoCAD
Relay Testing, Installation, and Upgrades
Substation Commissioning

EXPERIENCE

LND Technical Services – *Sr. P&C Field Engineer*
AUGUST 2022 – PRESENT

- Provide on-site commissioning, maintenance, retrofits, start-up and troubleshooting of protection and control systems for Utility and industrial facilities.
- Perform development and execution of test protocols and procedures for protection & control systems
- Complete factory acceptance testing of protection panels
- Assist with development of standard procedures for protection & control system commissioning and maintenance.
- Complete as-built drawings for field installations, as part of turnover packages
- Perform fault analysis following trip events, as required
- Coordinate testing activities with owner/utility
- Complete SCADA/RTU verification
- Assist in the development of protective relay settings for all different relay types (GE, SEL, Siemens, ABB, etc)
- Assist in the development of programming files for SCADA systems
- Assist with specialized engineering studies and NERC reporting

Shermco Industries - *Electrical Field Engineer*
AUGUST 2018 - AUGUST 2022

- Capabilities include – Power Systems from 12Vdc to 138kVac transformer testing, 480V to 35kV switchgear, circuit breakers, relays, cables, battery systems, NFPA-99 grounding systems, substation commissioning, etc.

Alejandro Hernandez

Protection & Control Engineer_

alejandro.hernandez@lndts.com

EDUCATION

University of Puerto Rico at Mayagüez (UPRM) - *Bachelor of Science in Electrical Engineer, Control Systems (2019*)

SKILLS AND QUALIFICATION

Knowledge and experience with medium and high voltage power systems, including generation, transmission and distribution networks in industrial, utility and power generation industry
Protection Relaying for Transmission & Generation, PLC & SCADA systems, Control Systems, Testing, Maintenance, and Commissioning.
Proficient in CAPE, AutoCAD, MATLAB and Asset Suite software.
Possesses effective written and oral communications skills.
Bilingual (Spanish and English).
NFPA 70E certified

EXPERIENCE

LND Technical Services – *P&C Engineer*
AUGUST 2024 – PRESENT

- Perform design, under supervision of the Senior Protection & Control Engineer, on all aspects of electrical protection and control systems to include protection coordination studies, protective relay settings, SCADA/HMI settings, communication settings, RTU, one-line diagrams, three-line diagrams, control and relaying schematics, wiring diagrams, communications architecture.
- Assist with the preparation of computer-based models for coordination studies.
- Assist with the development of protective relay settings for all different relay types (GE, SEL, Siemens, ABB, etc)
- Assist with the development of programming files for SCADA/RTU.
- Coordinate protection settings with customer and utility as required.
- Assist company with application for PE Licensure in various states. Apply for PE license on behalf of the company.
- Assist with developing company practices and procedures for Protection and Control engineering work.
- Assist with development of protection and control field test procedures and troubleshooting of test procedures. Provide guidance and assistance to field personnel in the execution of protection and control tests

Luma Energy – *Techincal Specialist 2*
MAY 2021 – AUGUST 2024.

- Develop Short Circuit Studies & Analysis: Using CAPE software to create new relay settings for 230, 115 & 38kV Transmission Lines in Puerto Rico grid, relay replacements and emergency settings for transformers replacements and outages.

- Wide Area Protection Coordination Project: In charge of visiting all the transmission substations around the island to collect all the data associated to overcurrent settings for lines and transformers. Compare and analyze the as-read data with issued work orders, answering RFI's related to the system, running sensitivity & coordination studies to create new settings for 230 & 115kV Transmission Lines in collaboration with Quanta Technologies Team. Create new work orders packages to implement the new recommended settings in the field.
- T&D Demarcation for LUMA/PREPA: Create plot plans for all the PREPA Generation Sites. Create lists of existing protection equipment associated with Transmission, Distribution and Generation.

Project Management Department at Carolina Autonomous Municipal Government – *Project Engineer*

SEPTEMBER 2020 - MAY 2021

- Project Coordinator in infrastructure projects for recovery after Irma and María Hurricanes.
- Analyze and create breakdown analysis for FEMA funds projects.
- Cost Analysis for recovery projects associated with María Hurricane.

Luma Energy – *P&C Techincal Specialist 1*
JUNE 2022 – AUGUST 2024.

- Recloser and Trip Saver studies for the improvement of reliability of the electrical system.
- The Demarcation Project provides a list and diagrams that divided the protection system of transmission and generation.
- Breaker and Relay Replacement Studies.

Puerto Rico Energy Center (PREC) – *Energy Management Team Leader (Energy Audit)*
AUGUST 2018 - JUNE 2022

- Awarded the Industrial Assessment Center (IAC) Student Certificate for exceptional participation.
- Energy Audits on Manufacturing Industries and Hotel with objective to improve energy efficiency.

University of Texas at El Paso (UTEP) – *CHRES Summer Research Internship*
JUNE 2021 – AUGUST 2021

- Simulation Models to Optimize Off-grid Microgrids Design and Operation
- Design, Analysis and Simulate a Microgrid Case Study

Sandia National Laboratory– *Summer Internship*
JUNE 2019 – AUGUST 2019

- Energy Storage Optimization.
- Analysis Renewable Energy with Energy Storage using Simulation Tools.

Saju Raju

HV P&C Filed Engineer

saju.raju@lndts.com

EDUCATION

EICT Polytechnic College Erode, India - • Associate Degree in Electrical & Electronics Engineering (2007)

SKILLS AND QUALIFICATION

QMS ISO 9001 2015 Certified Internal Auditor From SGS
Knowledge and expertise with medium and high voltage power systems, focus on protection and control
Knowledge and expertise of substation general design, setup, and components
Expertise with Theoretical and Practical experience in Primary equipment's and secondary Equipment's
Proficiency with SEL, GE, ABB, and Siemens relays
Testing and Commissioning of Electrical Distribution Systems and Power Systems

NOTABLE PROJECTS

132/11.5KV KHAIRAN D GIS S/S, Kuwait:

- 132KV and 11.5KV Siemens Relay Testing & Commissioning
- 132KV GIS Equipment Testing, Alarm, Interlock, Gas Trip Logic, CT &VT Primary Injection & GIS High Voltage.
- 11.5KV Switchgear Equipment Testing, Alarm, Interlock, ARC Protection, CT &VT Primary Injection & GIS High Voltage.
- 30MVA Power Transformer Testing and auxiliary function Testing.
- Transformer & Busbar Stability Test and Commissioning Activities.

11/0.433 KV Indoor Substations, Qatar:

- Siemens, GE & ABB Make Relay Testing & Commissioning.
- 11KV Switchgear &Transformer Testing & Commissioning.
- LV Switchgear, Meters & CT VT and Cables Testing & Commissioning.
- Preparing Test Reports and Markup Drawings.

JIGCC Projects, Saudi Arabia:

- 13.5/6.6 KV Transformer, Switchgear Testing & Commissioning
- 13.5KV Switch Gear Equipment testing, Alarm, Interlock, High voltage, ARC protection, CT Primary injection and VT Primary injection testing.
- Protection Relays Testing.
- Commissioning Activities.

Brisbane Airport Project, Australia: Testing of 11 KV ABB Make VD4 Model VCB Switchboards, and SEL 751 Relays.

Melbourne Metro Project, Australia: Testing of 22 KV ABB Make VD4 Model VCB Switchboards.

EXPERIENCE

LND Technical Services – *HV P&C Technician*
Will start in February 2025

- Provide on-site commissioning, maintenance, retrofits, start-up and troubleshooting of protection and control systems for Utility and industrial facilities.
- Perform development and execution of test protocols and procedures for protection & control systems. Complete factory acceptance testing of protection panels
- Assist with development of standard procedures for protection & control system commissioning and maintenance.
- Complete as-built drawings for field installations, as part of turnover packages
- Coordinate testing activities with owner/utility
- Complete SCADA/RTU verification
- Assist in the development of protective relay settings for all different relay types (GE, SEL, Siemens, ABB, etc)
- Assist in the development of programming files for SCADA systems
- Assist with specialized engineering studies and NERC reporting
- Review field test results for accuracy and provide input on test results
- Mentor and train junior employees in the knowledge area of protection & control

Zinfra, Melbourne (Australia) – *Electrical P&C Tester*
JULY 2023 – NOW

- Preparing and submitting the NWA and Applications to TOC and DOC.
- Receiving the SFT from the Operator
- Preparing the JSA
- Preparing Markup Drawings

LAI Switchboards, Melbourne (Australia) – *Electrical Tester*
MAY 2018 – JUNE 2023.

- Reviewing of all quality related documents related to electrical systems.
- CT& Energy Meter Testing, Functional Test, IR &High Voltage test of LV Switchboards and control Panels
- CT, VT Testing, Functional Testing, IR & High Voltage Test of 11 KV & 22 KV ABB Make (VD4 Type VCB) Switchboards
- Protection Panel Testing (ABB & Schneider Make Relays)
- CT &VT Primary Injection Testing
- Preparing the Test Reports and Test Certificates

SAIPEM SpA, Saudi Arabia – *Electrical T&C Engineer*
APRIL 2017 – OCTOBER 2017.

- Testing & Commissioning of Switchgear, Transformer, CT &VT & Cables etc.
- Preparing the Test Reports and As Built Drawings.
- Testing & Commissioning of Areva, SEL & Schneider Relays
- IED Configuration, Calibration and Testing of Relays

- Producing Testing &Commissioning Documents
- Develop the Test Reports and ITPs
- Clear the Punch points and rectification works
- Verification of FAT Reports and comparison of FAT Reports and SAT Reports
- Reviewing and certifying documentation completed by others at the end of each day prior to closing work permits.
- commissioning documents are completed progressively in accordance with Contract requirements.

Al Kulaib International Trading Co. WLL, Kuwait – *Electrical T&C Engineer*
JANUARY 2014 – MARCH 2017.

- Testing & Commissioning of Switchgear, Transformer, CT, VT, Isolator & Cables etc.
- Testing & Commissioning of Siemens &ABB Make Relays.
- Testing & Commissioning of Meters, Neutral Earthing Resistor
- Preparing Test Reports and Markup Drawings.
- IED Configuration, Calibration and Testing of Relays
- Producing Testing &Commissioning Documents
- Develop the Test Reports and ITPs
- Clear the Punch points and rectification works
- Verification of FAT Reports and comparison of FAT Reports and SAT Reports
- Reviewing and certifying documentation completed by others at the end of each day prior to close work permits.
- commissioning documents are completed progressively in accordance with Contract requirements.

Al-Ahleia Switchgear Co, Kuwait – *Electrical T&C Engineer*
JUNE 2012 – DECEMBER 2013.

- Testing & Commissioning of Switchgear, Transformer, CT, VT, Isolator & Cables etc.
- Testing & Commissioning of Siemens &ABB Make Relays.
- Testing & Commissioning of Meters, Neutral Earthing Resistor
- Preparing Test Reports and Markup Drawings.
- IED Configuration, Calibration and Testing of Relays
- Producing Testing &Commissioning Documents
- Develop the Test Reports and ITPs
- Clear the Punch points and rectification works
- Verification of FAT Reports and comparison of FAT Reports and SAT Reports
- Reviewing and certifying documentation completed by others at the end of each day prior to close work permits.
- commissioning documents are completed progressively in accordance with Contract requirements.

Imperial Trading & Contracting Company W.L.L, Qatar – *Electrical T&C Engineer*
OCTOBER 2010 – JUNE 2012.

- Testing & Commissioning of Switchgear, Transformer, CT &VT & Cables etc.
- Preparing the Test Reports and As Built Drawings.

- Preparing for as built Drawing
- Testing & Commissioning of GE & ABB Relays
- IED Configuration, Calibration and Testing of Relays
- Producing Testing &Commissioning Documents
- Develop the Test Reports and ITPs
- Clear the Punch points and rectification works
- Verification of FAT Reports and comparison of FAT Reports and SAT Reports

Technocrafts Electrical Contractors, Indian – *Electrical T&C Engineer*
MAY 2007 – SEPTEMBER 2010.

- Testing & Commissioning of Switchgear, Transformer, CT &VT, Isolator, Neutral Earthing Resistor & Cables etc.
- Preparing the Test Reports and As Built Drawings.
- Testing & Commissioning of Alstom Relays
- IED Configuration, Calibration and Testing of Relays
- Producing Testing &Commissioning Documents
- Develop the Test Reports and ITPs
- Clear the Punch points and rectification works
- Verification of FAT Reports and comparison of FAT Reports and SAT Reports

Ethan Little, NETA II

Field Service Technologist

Ethan.Little@lndts.com

EDUCATION

NAIT - *Electrical Engineering Technology Diploma*

SKILLS AND QUALIFICATIONS

International Electrical Testing Association (NETA) - *Level II*

NICET I NFPA 70E, OSHA 30 certified

EXPERIENCE

LND Technical Services - *Field Service Technologist*

MAY 2022 - PRESENT

- Execute on-site testing and commissioning, specializing in low, medium, and high voltage applications within the utility and industrial sectors.
- Conduct comprehensive ground grid testing and evaluation.
- Perform DC Integrity Testing, Ground Impedance Testing, Soil Resistivity Testing, and Step & Touch Potential Voltage measurements, adhering strictly to IEEE standards and NESC guidelines.
- Generate detailed reports outlining test plans, measurement data, analysis, and recommended corrective measures to align with industry standards and client requirements.

Magna IV Engineering - *Field Service Technician Level I*

AUGUST 2020 - MAY 2022

- Conducted commissioning and maintenance activities for various electrical equipment, including switchgear, circuit breakers, transformers, motor control centers, cables, and instrument transformers.
- Proficient in interpreting and implementing red line drawings, ensuring accurate project execution and reporting.

NAIT - *Lab Supervisor*

SEPTEMBER 2019 - APRIL 2020

- Provided platform IT support and academic guidance to students within the lab environment, addressing network, software, and hardware issues.
- Facilitated troubleshooting sessions and maintained lab equipment to ensure uninterrupted functionality.

Magna IV Engineering - *Warehouse Coordinator*

JUNE-AUGUST 2019

- Managed all facets of warehouse operations, including receiving, shipping, and material handling for electrical test equipment.
- Oversaw warehouse inventory and database management, ensuring accuracy and accessibility of equipment.
- Administered fleet and asset management systems, handling purchasing, scheduling, tracking, and maintenance activities.

LH Electrical LTD - *Laborer*

JUNE 2016-AUGUST 2017

- Executed semi-skilled tasks related to the installation, maintenance, and repair of electrical systems, gaining foundational experience in the field.

Oscar Calzada, NETA II

Field Service Technician

oscar.calzada@lndts.com

SKILLS AND QUALIFICATION

NFPA 70E, OSHA 30 certified
Project Management, Safety Management, Job Planning
Electrical Equipment Maintenance, Testing and Repairs, Substation equipment, Switch installation.
International Electrical Testing Association (NETA) – *Level II*

EXPERIENCE

LND Technical Services – *Field Service Technician*
APRIL 2024 – PRESENT

- Perform on-site testing and commissioning for low, medium, and high voltage applications in the utility and industrial sectors.
- Specialize in ground grid testing and evaluation, ensuring compliance with IEEE Std 80-2013 and NESC guidelines.
- Execute DC Integrity Testing, Ground Grid Impedance Testing, Soil Resistivity Testing, and Step & Touch Potential Voltage measurements, adhering rigorously to industry standards and client specifications.
- Prepare and review test documentation.
- Prepare and submit daily reports.
- Perform safety analysis of jobs and tasks.

Power Standard – *Electrician*
MAY 2019 – APRIL 2024.

- Ran conduit, pulled wire and installed outlets, fixtures, and switches.
- Maintained a safe work environment by adhering to all local codes, regulations, and safety standards.
- Installed and maintained electrical systems in commercial, residential, and industrial settings.
- Read blueprints and schematics to properly install light fixtures and other electrical system parts.
- Prepared and assembled conduits to connect wiring.
- Repaired faulty wiring connections and replaced damaged items such as switches and outlets.
- Completed repairs on motors, transformers, switchgear assemblies, fuses, circuit breakers, relays and other components of the system.
- Mentored apprentice electricians using coaching methods to improve skills.
- Led a crew in building a substation.

Pike Electric – *Electrician/ Substation Technician*
JUNE 2015 - MAY 2019

- Reviewed work and materials to confirm adherence to local building codes.
- Coordinated with other contractors to ensure efficient installation of electrical wiring in new construction projects.

- Used machinery to install ground grid and underground PVC.
- Led a crew in building a substation.

Triad Electric & Controls – *Apprentice Electrician*
SEPTEMBER 2011 – JUNE 2015

- Arranged wiring and fixtures in preparation for installations.
- Cut, bent, threaded, and ran conduit and other wiring systems.
- Troubleshot electrical issues by checking switches, circuit breakers, and outlets.
- Interpreted blueprints and schematics to complete repairs.

Attachment E
Cost Schedule

COST SCHEDULE
Labor Support Services

Vendor Name LND Technical Services, LLC

Direct Labor – Job Titles	Hourly Rate
A. Electrician	$ 88.00
B. NETA I	$ 99.00
C. NETA II	$ 121.00
D. NETA III	$ 165.00
E. NETA IV	$ 220.00
F. Principal Field Engineer	$ 242.00
G. Senior Protection and Control Engineer	$ 264.00
H. Principal Protection and Control Engineer	$ 308.00
I. Project Manager	$ 176.00
J. Project Controller	$ 110.00
K. Professional Engineer (PE)	$ 242.00

Definitions:

Standard Hours
Standard hours of operation are from 8am – 5pm, Monday – Friday. Work outside standard hours will be billed as per below.

Overtime Hours

Overtime at a factor of 1.5x base rate will be applied to labor outside of the standard hours, detailed above, after 8 hours per workday, and to all Saturday work. Overtime at a factor of 2.0x base rate will be applied after 12 hours per workday, all Sunday work, and all Statutory Holidays.

CLARIFICATION:

- The Labor Rate is shown in 2025, and the increase rate per year is 4.5% after first year.
- The Labor Rate is exclusive the test equipment, travel cost, and accommodation.
- Our standard mark up for third party cost is 11%

LND Technical Services®

STATEMENT OF QUALIFICATIONS

Lndts.com

+1 858-609-9837

ABOUT US

LND Technical Services is Women and Minority Owned Small Business founded in 2020 with its head office in Houston, TX.

As a NETA accredited company, we have a dedicated team of professionals in Protection and Control, Power System Engineering, and Technical Field Services.

LND Technical Services mission is to make our clients successful. We follow PMBOK Guide and Standards to execute our projects. When we execute projects, we execute them like we own it. We put everything we have into ensuring the successful execution of everything we do. This is how we keep our customers coming back to us, and why our customers are nearly always repeat customers.

PRESIDENT
AT LND TECHNICAL SERVICES, LLC

OUR LEADERSHIP TEAM

CEO

Phuong Le MBA, MS

Responsible for Profit and Loss of the company

Over twenty years of successful accomplishments in leading teams and projects

PRESIDENT

Nam Le PMP, GWCPM

Responsible for Sales and Marketing

Over twenty years of successful accomplishments in various disciplines of management including projects execution, services, sales/marketing, engineering, & manufacturing.

HR DIRECTOR

Anh Dao

Responsible for human resources of the company.

Over 15 years in customer services

VP OF ENGINEERING

Alex Echeverria PE

Responsible for Engineering Department

Over thirty years of successful accomplishments in various engineering positions with NYPA.

VP OF OPERATIONS

Kevin Halma P.Eng

Responsible for company operations

Over 10 years of Leading Project Execution in Engineering and Technical Field Services

FIELD SERVICES MANAGER

Alejandro Reyes

Responsible for Field Services projects

Over 10 years of electrical commissioning and testing experience on HV Substations with specialty in protection and control systems.

LND Technical Services

PUBLIC

COMPANY PERSONNEL

PROFESSIONAL	Personnel
Sales and Marketing	10
Human Resources	3
Operations	4
Finance	3
Engineering	20
Protection and Control Engineer (1099 Contractors)	3
Field Services Engineer/Technician	24
Field Services Engineer/Technician (1099 Contractors)	7
Construction Managers (1099 Contractors)	3
Administrator/Assistance	4
Designer/Drafter	4

OFFICE

OFFICE LOCATIONS	YEAR
San Diego, CA (Regional)	2020
Houston, TX (HQ)	2021
Bronx, NY (Regional)	2021
Denver, CO (Regional)	2021
Columbus, OH (Satellite)	2021
Albany, NY (Satellite)	2023
Ho Chi Minh City, Vietnam	2023
San Juan, Puerto Rico	2024

MARKET

Market
Transmission and Distribution Utilities, Power Plants, Large Industrial, Government, Wind farm, Solar Farm, Battery Storage System, Hospital, and Highrise Building.

ENGINEERING SERVICES

- NERC Compliance
- IEC61850
- Protection and Control System Design
- Protection Coordination Study
- Relay Settings Development
- SCADA & HMI Design/Program
- Power Quality Study
- Harmonics Study
- Power Compensation Study
- Load Flow Study
- Flicker Study
- Transient Recovery Voltage Study
- Temporary Overvoltage Condition Study
- System Switching Transient Study
- Very Fast Transient Overvoltage Study
- Ferro resonance Study
- Interconnection Study
- Arc Flash Study
- Insulation Coordination Study
- Short Circuit Study
- Grounding Study/Design
- Drafting
- Design Review
- Study Review

LND Technical Services

PUBLIC

ENGINEERING FIELD SERVICES

COMMISSION AND MAINTAIN

Our team can commission and maintain a wide range of electrical equipment, which typically includes the following:

- NERC Compliance Testing
- Protective and Control System
- 61850 commissioning
- SCADA and E2E
- UPS/Battery/Charger System
- Power Transformers
- Vacuum Circuit Breakers
- SF6 Circuit Breakers
- CTs, CCVTs, PTs, SSVTs
- Air Insulated Switchgear
- Gas Insulated Switchgear
- Protection and Control system retrofit.
- Disconnect Switches
- Reactors & Capacitors
- Generators and other substation equipment.
- Root Cause Analysis

TESTING COMMISSIONING

LNDTS can perform full Acceptance Testing & Commissioning for all your electrical power and communication systems. Our technicians are experienced with apparatus and protection systems for voltages up to 500kV.

LND Technical Services

PUBLIC

ENGINEERING FIELD SERVICES

OFFLINE MAINTENANCE & TESTING

LNDTS also perform offline maintenance and testing, testing to NETA standards. To limit your system downtime, we can work with you to provide and create an in-depth plan and schedule of activities, which allows for the safe and effective execution of work.

ONLINE MAINTENANCE

LNDTS can perform online maintenance, including infrared scanning and oil sampling, to avoid any downtime while gathering valuable information

ENGINEERING FIELD SERVICES

PREDICTIVE

- Thermal Imaging
- Offline electrical testing
- Transformer oil & gas analysis
- Fault analysis
- Power quality and harmonic analysis
- SF6 gas analysis

ROUTINE MAINTENANCE

- Switches
- Transformers
- Breakers
- Protective Relays
- DC systems
- Air-insulated switchgear

LND Technical Services

PUBLIC

KEY PROJECTS REFERENCE LIST

Customer	Project Name	Scope of Work	Voltage Rating	Location	Start Dates	Notes
BETA Engineering	*ORIGIS 69/34.5kV MD2 IEP Solar Farm*	*Relay Protection Coordination and Relay Setting. Arch Flash Study, Labels Printing and Installation. Reactive Power / Load Flow and Capacitor Bank Switching, Harmonics Study, NGR Sizing, Short Circuit Study. Perform Testing and Commissioning for all equipment, protection relays system, E2E, NERC Compliance, and SCADA.*	*69kV*	*MD*	*May-21*	*Completed*
Hitachi	*TSMC AZ 480V -230kV GIS Substation Phase 1*	*Design, Build, Install and Test Protection and Control System Testing and Commissioning all MV-LV Transformers*	*480V-230kV*	*AZ*	*May-21*	*Completed*
BETA Engineering	*AES 230/34.5kV Westwing Energy Storage*	*Relay Protection Coordination and Relay Setting Load Flow/Reactive Power Compensation Study. Development, NERC Compliance Reports, and Construction Support. NGR Sizing Calculation. Harmonics Study and Flicker Study. Arc Flash Study, Labels Printing and Installation. Insulation Coordination & Transient Stability Studies. Perform Testing and Commissioning for all equipment, protection relays system, E2E, NERC Compliance, and SCADA.*	*230kV*	*AZ*	*Jul-21*	*Completed*
Linxon	*Talen Nuclear Power Plant Substations*	*Perform Testing and Commissioning for all equipment, protection relays system, IEC61850, SCADA, E2E, and Automation for 3 HV Substations*	*500kV/230kV/69kV*	*PA*	*Mar-22*	*Ongoing*
Convergent Energy + Power	*Long Term Master Services Agreement*	*Owner Engineering for Renewable Substations*	*115kV*	*PR*	*Apr-22*	*Ongoing*
Talen Energy	*SS04 69kV Substation*	*Perform Testing and Commissioning for all equipment, protection relays system, IEC61850, SCADA, E2E, and Automation*	*69kV*	*PA*	*Jul-22*	*Completed*

KEY PROJECTS REFERENCE LIST

Customer	Project Name	Scope of Work	Voltage Rating	Location	Start Dates	Notes
Pattern Energy	*Long Term Master Services Agreement*	*Owner Engineering for Renewable Substations*	*480V-115kV*	*PR*	*Dec-22*	*Ongoing*
New York State Office of General Services	*Long Term Services Agreement for Harriman Campus HV Substation*	*Perform Maintenance, Inspection, and Repairs for the entire Electrical System*	*115KV*	*NY*	*Feb-23*	*Ongoing*
U.S Army Engineer	*Olmsted Dam*	*Perform Yearly Maintenance for MV-LV Electrical System*	*480V-15kV*	*KY*	*Jan-23*	*Completed*
Department of VA	*Lebanon PA VA Medical Center*	*Perform Maintenance, Inspection, and Repairs for the entire Electrical System*	*120V-15KV*	*PA*	*Feb-23*	*Completed*
Siemens Energy	*LADWP 230kV STATCOMS*	*Perform Testing and Commissioning for all equipment, protection relays system.*	*230kV*	*CA*	*Mar-23*	*Ongoing*
Kinder Morgan	*Long Term Master Services Agreement*	*Perform Maintenance, Inspection, and Repairs for the entire Electrical System for all facilities in United States*	*120V-34.5KV*	*USA*	*May-23*	*Ongoing*
Summit Midstream	*Long Term Master Services Agreement*	*Perform Maintenance, Inspection, and Repairs for the entire Electrical System for all facilities in United States*	*120V-34.5KV*	*USA*	*May-23*	*Ongoing*
Capital Power	*Renewable HV Substations short- and long-term maintenances*	*Perform maintenance on HV Substations and Solar Panels for Windfarms, and Solar Farms*	*120V-345kV*	*USA*	*Apr-23*	*Ongoing*
New York State Office of Mental Health	*Long Term Services Agreement for Pilgrim Psychiatric Center*	*Preventive Maintenance and Testing for Electrical Switchgear and Ancillary Equipment*	*480V-13.2kV*	*NY*	*Jul-23*	*Ongoing*
BETA Engineering	*EDPR High Voltage Substations*	*Perform Testing and Commissioning for all equipment, protection relays system, E2E, NERC Compliance, and SCADA.*	*120V-230kV*	*Various Locations*	*Jul-23*	*Ongoing*

KEY PROJECTS REFERENCE LIST

Customer	Project Name	Scope of Work	Voltage Rating	Location	Start Dates	Notes
Department of VA	*Clarksburg WV Louis A Johnson VA Medical Center*	*Maintenance, Inspection and testing of the Electrical Power Distribution System and all of its components*	*480V-15kV*	*WV*	*Aug-23*	*Ongoing*
BETA Engineering	*SDGE 12.47kV Borrego Spring BESS Substation*	*Perform Studies including Load flow, Reactive Power and Short circuit, Relay coordination, Ampacity calculations, AC/DC Arc Flash analysis, NERC compliance*	*12.47kV*	*TX*	*Oct-23*	*Ongoing*
Space X	*Space X – Boca Chica*	*SWGR & Transformer Testing*	*480V-13.2kV*	*USA*	*Nov-23*	*Ongoing*
New York State Office of Mental Health	*Long Term Services Agreement for Bronx Psychiatric Center*	*5 Year Inspection and Testing for Electrical Switchgear & Ancillary Equipment*	*480V-13.2kV*	*NY*	*Dec-23*	*Ongoing*
BETA Engineering	*Hickory GIS Substation*	*Perform testing and maintenance for Susquehanna 230/69kV Substation*	*13.2kV-115kV*	*TX*	*Jan-24*	*Ongoing*
Talen Energy	*Susquehanna 230/69kV Substation*	*Perform testing and maintenance for Susquehanna 230/69kV Substation*	*480V-115kV*	*PA*	*Feb-24*	*Ongoing*
Capital Power	*Cardinal Point O&M Building*	*EasyPower Models with Arc Flash (AF) and protection coordination (PC) studies in compliance with NERC PRC-027*	*480V-115kV*	*IL*	*Feb-24*	*Ongoing*
New York State Office of Mental Health	*Long Term Services Agreement for New York State Psychiatric Institute (NYSPI)*	*5 Year Inspection and Testing for Electrical Switchgear & Ancillary Equipment*	*480V-13.2kV*	*NY*	*May-24*	*Ongoing*
BETA Engineering	*RAGSDALE TST*	*Perform Testing and Commissioning for all equipment, protection relays system, E2E and SCADA*	*240V-34.5kV*	*IN*	*May-24*	*Ongoing*
Siemens Energy	*LS Power Fern Rd & Orchard STATCOM*	*Communication and Configuration Protection & Controls. Testing and commissioning for LS Power Fern Rd & Orchard Statcom Substations*	*480V-500kV*	*CA*	*Jun-24*	*Ongoing*

SAFETY

At LND Technical Services, safety is engrained into everything we do. If a job cannot be completed safely, we will exercise every option in the hierarchy of controls in an attempt to make the job safe. If the job still cannot be completed safety, we will not do the job. We strive to educate our customers on job safety and pride ourselves on our safety standards and procedures.

All junior level employees are paired with senior level employees to ensure they are properly trained in both job procedures and safety. Our internal training program ensures that everyone has a basic understanding of safety and company protocol prior to travelling to site.

QUALITY

Quality and safety are of our utmost importance at LND Technical Services. We pride ourselves in providing superior service and workmanship in everything we do. Our goal is to do things properly the first time to ensure your project remains on schedule and within budget.

When we build our teams, we start with very high level and technically detailed engineers and technicians and create the team from the top down. A blend of senior expertise and young engineers eager to learn helps us to create a dynamic and always improving level of expertise.

CERTIFICATIONS

LND Technical Services is Women and Minority Owned Small Business

CERTIFICATIONS	AGENCY
NETA	NETA
WBE	WBENC
WOSB	WBENC
ABE MBE WBE	South Central Texas Region
MBE	USPAACC
WMBE	Port Authority NY NJ
WBE (CALIFORNIA)	SUPPLIER CLEARINGHOUSE
MBE (CALIFORNIA)	SUPPLIER CLEARINGHOUSE

VENDOR INFORMATION RESPONSE

Vendors shall complete and return this form in their proposal.
If the proposal includes subcontractors, form must be completed for each subcontractor as well.

1. VENDOR CONTACT INFORMATION

1.1 COMPANY NAME AND CONTACT INFORMATION:

The information provided in the table below shall be used for development of the contract, if awarded.

Requested Information	Response
Company Name:	LND Technical Services, LLC
Company Street Address:	9337 Katy Fwy, Ste B-5104
City, State, Zip Code:	Houston, TX 77024
Telephone Number, including area code:	858-609-9837
Toll Free Number, including area code:	
Email Address:	nam.le@lndts.com

1.2 CONTACT PERSON FOR QUESTIONS/CONTRACT NEGOTIATIONS

Requested Information	Response
Name:	Nam Le
Title:	President
Address:	9337 Katy Fwy, Site B-5104
City, State, Zip Code:	Houston, TX 77024
Email Address:	nam.le@lndts.com
Telephone Number, including area code:	919-449-4168
Toll Free Number, including area code:	

2. VENDOR INFORMATION

2.1 Vendors shall provide an overall company profile in the following table:

Question	Response
Company Name:	LND Technical Services, LLC
Ownership (sole proprietor, partnership, etc.):	Partnership
State of Incorporation:	Delaware
Date of Incorporation:	5/11/2020
# of years in business:	4
List of top officers:	Phuong Le-CEO, Nam Le-President, Anh Dao-HR Director, Alex Cheverria-VP of Engineering, Kevin Halnma-VP of Operations
Location of company headquarters, to include City and State:	9337 Katy Fwy, STE B-5104, Houston, TX 77024
Location(s) of the office that shall provide the services described in this RFP:	9337 Katy Fwy, STE B-5104, Houston, TX 77024
Number of employees locally with the expertise to support the requirements identified in this RFP:	0
Number of employees nationally with the expertise to support the requirements in this RFP:	34
Location(s) from which employees shall be assigned for this project:	California; New York; Texas; Colorado; Purto Rico; Ohio.

2.2 VENDOR LICENSING

2.2.1 **Please be advised:** Pursuant to NRS 80.010, a corporation organized pursuant to the laws of another state shall register with the State of Nevada, Secretary of State's Office as a foreign corporation before a contract can be executed between the State of Nevada and the awarded vendor, unless specifically exempted by NRS 80.015.

2.2.2 The selected vendor, prior to doing business in the State of Nevada, shall be appropriately licensed by the State of Nevada, Secretary of State's Office pursuant to NRS 76. Information regarding the Nevada Business License can be located at http://nvsos.gov.

Question	Response			
Nevada Business License Number:				
Legal Entity Name:				
Is the Legal Entity Name the same name as vendor is Doing Business As (DBA)?	Yes	○	No	◉
If the answer is 'No', provide explanation below:				
LND Technical Services will provide Nevada business license upon receipt of bid award notification.				

2.3 STATE OF NEVADA EXPERIENCE

Question	Response			
Has the vendor ever been engaged under contract by any State of Nevada agency?	Yes	◯	No	◉

2.3.1 If 'Yes', complete the following table for each State agency for whom the work was performed.

2.3.2 Table can be duplicated for each contract being identified.

Question	Response
State Agency Name:	
State Agency Contact Name:	
Dates Services Were Performed:	
Type of Duties Performed:	
Total Dollar Value of the Contract:	

2.4 CURRENT OR FORMER EMPLOYEE

Question	Response			
Are you now or have you been within the last two (2) years an employee of the State of Nevada, or any of its agencies, departments, or divisions?	Yes	◯	No	◉
If 'Yes', please explain when the employee is planning to render services; i.e., while on annual leave, compensatory time, or on their own time?				

2.4.1 If you employ (a) any person who is a current employee of an agency of the State of Nevada, or (b) any person who has been an employee of an agency of the State of Nevada within the past two (2) years, and if such person shall be performing or producing the services which you shall be contracted to provide under this contract, you shall disclose the identity of each such person in your response to this RFP, and specify the services that each person shall be expected to perform.

2.5 PRIOR OR ONGOING CONTRACTUAL ISSUES

2.5.1 Disclosure of any significant prior or ongoing contract failures, contract breaches, civil or criminal litigation in which the vendor has been alleged to be liable or held liable in a matter involving a contract with the State of Nevada or any other governmental entity.

2.5.2 Any pending claim or litigation occurring within the past six (6) years which may adversely affect the vendor's ability to perform or fulfill its obligations if a contract is awarded as a result of this RFP shall also be disclosed.

Question	Response			
Does any of the above apply to your company?	Yes	◯	No	◉

2.5.3 If 'Yes', please provide the information in the table below.

2.5.4 Table can be duplicated for each issue being identified.

Question	Response	
Date of alleged contract failure or breach:		
Parties involved:		
Description of the contract failure, contract breach, or litigation, including the products or services involved:		
Amount in controversy:		
Resolution or current status of the dispute:		
If the matter has resulted in a court case:	**Court**	**Case Number**
Status of the litigation:		

3. PAYMENT AUTHORIZATION FOR USE OF PROCUREMENT CARD

Using agencies may desire to use a Procurement Card as a method of payment to vendors.

PAYMENT AUTHORIZATION FOR USE OF PROCUREMENT CARD				
Question	Response			
Please indicate if you will accept this method of payment?	Yes	○	No	◉

4. NAME OF INDIVIDUAL AUTHORIZED TO BIND THE ORGANIZATION

Requested Information	Response
Name:	Nam Le
Title:	President

4.1 SIGNATURE OF INDIVIDUAL AUTHORIZED TO BIND THE VENDOR

Individual shall be legally authorized to bind the vendor per NRS 333.337	
Signature:	Nal
Date:	12/09/2024

VENDOR CERTIFICATIONS

Vendor agrees and shall comply with the following:

1. Any and all prices that may be charged under the terms of the contract do not and shall not violate any existing federal, State or municipal laws or regulations concerning discrimination and/or price fixing. The vendor agrees to indemnify, exonerate and hold the State harmless from liability for any such violation now and throughout the term of the contract.

2. All proposed capabilities can be demonstrated by the vendor.

3. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, agreement or disclosure with or to any other contractor, vendor or potential vendor.

4. All proposal terms, including prices, shall remain in effect for a minimum of 180 days after the proposal due date. In the case of the awarded vendor, all proposal terms, including prices, shall remain in effect throughout the contract negotiation process.

5. No attempt has been made at any time to induce any firm or person to refrain from proposing or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal. All proposals shall be made in good faith and without collusion.

6. All conditions and provisions of this RFP are deemed to be accepted by the vendor and incorporated by reference in the proposal, except such conditions and provisions that the vendor expressly excludes in the proposal. Any exclusion shall be in writing and included in the proposal at the time of submission.

7. Each vendor shall disclose any existing or potential conflict of interest relative to the performance of the contractual services resulting from this RFP. Any such relationship that might be perceived or represented as a conflict shall be disclosed. By submitting a proposal in response to this RFP, vendors affirm that they have not given, nor intend to give at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant or any employee or representative of same, in connection with this procurement. Any attempt to intentionally or unintentionally conceal or obfuscate a conflict of interest shall automatically result in the disqualification of a vendor's proposal. An award shall not be made where a conflict of interest exists. The State shall determine whether a conflict of interest exists and whether it may reflect negatively on the State's selection of a vendor. The State reserves the right to disqualify any vendor on the grounds of actual or apparent conflict of interest.

8. All employees assigned to the project are authorized to work in this country.

9. The company has a written equal opportunity policy that does not discriminate in employment practices with regard to race, color, national origin, physical condition, creed, religion, age, sex, marital status, sexual orientation, developmental disability or disability of another nature.

10. The company has a written policy regarding compliance for maintaining a drug-free workplace.

11. Vendor understands and acknowledges that the representations within their proposal are material and important and shall be relied on by the State in evaluation of the proposal. Any vendor misrepresentations shall be treated as fraudulent concealment from the State of the true facts relating to the proposal.

12. Vendor shall certify that any and all subcontractors comply with Sections 7, 8, 9, and 10, above.

The proposal shall be signed by the individual(s) legally authorized to bind the vendor per NRS 333.337.

Company Name:	LND Technical Services, LLC
Print Name:	Nam Le
Signature:	
Date:	12/09/2024

CONFIDENTIALITY AND CERTIFICATION OF INDEMNIFICATION

Submitted proposals, which are marked confidential in their entirety, or those in which a significant portion of the submitted proposal is marked confidential shall not be accepted by the State of Nevada. Pursuant to NRS 333.333, only proprietary information may be labeled a trade secret as defined in NRS 600A.030(5). All proposals are confidential until the contract is awarded; at which time, both successful and unsuccessful vendor proposals become public information.

In accordance with the submittal instructions of this RFP, vendors are requested to submit confidential information in separate files flagged as confidential in NevadaEPro.

The State shall not be responsible for any information contained within the proposal. If vendors do not comply with the labeling requirements, proposals shall be released as submitted. In the event a governing board acts as the final authority, there may be public discussion regarding the submitted proposals that shall be in an open meeting format, the proposals shall remain confidential.

By signing below, I understand it is my responsibility as the vendor to act in protection of the labeled information and agree to defend and indemnify the State of Nevada for honoring such designation. I duly realize failure to so act shall constitute a complete waiver, and all submitted information shall become public information; additionally, failure to label any information that is released by the State shall constitute a complete waiver of any and all claims for damages caused by the release of the information.

If this proposal contains Confidential Information, Trade Secrets and/or Proprietary information. Please initial the appropriate response in the boxes below and provide the justification for confidential status. Attached additional pages if necessary.

Proprietary Information	Yes	○	No	◉
Justification for Confidential Status:				
Company Name:	LND Technical Services, LLC			
Signature:	Nal			
Print Name:	Nam Le			
Date:	12/09/2024			

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or shall be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federally appropriated funds have been paid or shall be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all sub awards at all tiers (including subcontracts, sub grants, and contracts under grants, loans, and cooperative agreements) and that all sub recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Vendor Name:	LND Technical Services, LLC
Project Title:	Maintenance and Testing Labor Support Agreement
Print Name of Official Authorized to Sign Application:	Nam Le
Signature of Official Authorized to Sign Application:	
Date:	12/09/2024

COLORADO RIVER COMMISSION OF NEVADA
AGENDA ITEM H
FOR MEETING OF APRIL 8, 2025

SUBJECT: *For Possible Action:* Approve Contract No. LS-25-RMS between RMS Energy and the Colorado River Commission of Nevada, based on Bid Solicitation No. 69CRC-S3056 for maintenance and testing labor support for a term ending June 30, 2028, not to exceed $1,200,000.
RELATED TO AGENDA ITEM: None.
RECOMMENDATION OR RECOMMENDED MOTION: Staff recommend the Commission approve the contract and authorize the Executive Director to sign the contract on behalf of the Commission.
FISCAL IMPACT: Contract not to exceed $1,200,000.

STAFF COMMENTS AND BACKGROUND:

A. Power Delivery Group's Six Year Project Plan

The Colorado River Commission of Nevada's (Commission) Power Delivery Group (PDG) operates an electrical system that delivers power to the Southern Nevada Water Authority, including major cities in Southern Nevada for water pumping and waste-water treatment. The system provides the energy to move the water across a large part of the Las Vegas Valley.

The PDG started building an electrical system to provide service to SNWA in the late 1990s and the system has continued to grow over the past twenty-five plus years. Further, the system includes 27 high voltage substations, with three more expected to be completed in the next two years. The system also comprises various underground and overhead transmission lines, including 32 miles of existing transmission lines, with an additional ten miles planned for completion by the end of 2025. Furthermore, the system is exposed to increasing summer temperatures in the Las Vegas Valley, which place additional stress on infrastructure.

To manage capital and maintenance projects, the PDG has developed a Project Plan covering the years 2022 through 2031, outlining key initiatives. The plan is attached.

B. Industry Practice and Purpose for Contracts

In the utility industry, it is common to contract with external firms for maintenance and testing support, particularly for specialized or labor-intensive tasks. The PDG is looking to expand its list of available contractors to increase competition and open opportunities for additional firms that provide quality, specialized services. Staff proposes awarding two contracts focused on electrical system testing and two contracts for construction and repair. By contracting with multiple vendors, the PDG will expand its contractor pool, increasing competition and flexibility to meet schedules during maintenance seasons.

C. Proposed Contract

The proposed contract with RMS Energy will focus on maintenance and testing labor support, with a term ending June 28, 2028, and a total not-to-exceed amount of $1,200,000. This contract is an enabling contract to allow necessary work to be requested and performed under purchase orders that outline the specific scope of work and negotiated cost.

D. Staff's Recommendation

Staff recommend the Commission approve Contract No. LS-25-RMS and authorize the Executive Director to sign the contract.

COLORADO RIVER COMMISSION OF NEVADA AGENDA ITEM I FOR MEETING OF APRIL 8, 2025

SUBJECT: *For Possible Action:* Approval of Amendment No. 1 to Garnet Valley Project Documents Contract No. CRCGV-02 for Material and Equipment between the Colorado River Commission of Nevada and Peak Substation Services, LLC., to increase the contract price by $208,755 to $1,239,255 and authorize a change order contingency amount not to exceed $20,875.
RELATED TO AGENDA ITEM: None.
RECOMMENDATION OR RECOMMENDED MOTION: Staff recommend the CRCNV approve Amendment No. 1 to Contract No. CRCBF-02.
FISCAL IMPACT: Amendment No. 1 will increase the amount by $229,630.

STAFF COMMENTS AND BACKGROUND:

A. Purpose of the Contract

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 to assist in the design and procurement of the electrical infrastructure for the Garnet Valley Water System project.

B. Background of Bid/Procurement

The original Request for Proposals (RFP) for the materials under this contract was issued on March 3, 2024, with responses due May 13, 2024. The RFP was sent to 29 vendors and only one response was received from Peak Substation Services, LLC. This Amendment No. 1, to the original contract, will allow for additional material and equipment to be purchased that are necessary for the Garnet Valley project.

C. Staff's Recommendation

Staff recommend the Commission approve Amendment No. 1 to CRCGV-02 contract between the Commission and Peak Substation Services, LLC., and authorize the Executive Director to sign on behalf of the Commission.

AMENDMENT NO. 1 TO

GARNET VALLEY WATER SYSTEM – 2920 SUBSTATION PROJECT DOCUMENTS

CONTRACT NO. CRCGV-02

This Amendment No. 1 to the Garnet Valley Water System - 2920 Substation Project Contract No. CRCGV-02 Material and Equipment, Bid Documents and Specifications ("Amendment No. 1") is made by and between the Colorado River Commission of Nevada ("CRCNV") and Peak Substation Services, LLC ("Contractor"). Capitalized terms used herein have the meaning ascribed to them in the Garnet Valley Water System – 2920 Substation Contract No. CRCGV-02 Material and Equipment, Bid Documents and Specifications ("Project Documents"). The Project Documents are attached hereto at Exhibit A.

EXPLANATORY RECITALS

A. The CRCNV coordinates materials for the construction of the Garnet Valley Water System - 2920 Substation Project (the "Garnet Valley Project") for the Southern Nevada Water Authority ("SNWA").

B. The Garney Valley Project consists of a new 230kV Substation, located in Apex. Nevada.

C. Through coordination with Nevada Energy, additional material is required for metering infrastructure at the Garnet Valley Project.

D. Pursuant to the Project Documents, Contractor performed certain Work to provide materials described in Section 300 Bid Form for a Contract Price of $1,030,500.

E. The CRCNV requests and Contractor agrees to amend the Project Documents to include additional materials for the Garnet Valley Project as needed for the metering changes, and any other changes that may occur by separate change order.

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

1. Contractor agrees to provide the CRCNV with additional materials described in Exhibit

B ("Additional Materials") and to perform any Work associated therewith in accordance with the Project Documents. The Additional Materials shall be included as Equipment defined in Section 400 of the Project Documents.

2. The Contract Price shall be increased to $1,239,255. The additional payment due shall be made in accordance with the payment procedures in Section 400.

3. Delivery of the Additional Materials shall be on or after July 2, 2025 and on or before July 23, 2025, the anticipated Final Acceptance Date.

4. The term of the Project Documents shall extend as necessary for the delivery and acceptance of the Additional Materials and completion of the associated Work including all warranties and guarantees as if the Additional Materials were part of the Equipment when the Project Documents commenced.

5. The Explanatory Recitals set forth above are incorporated herein as terms to this Amendment No. 1.

6. Except as otherwise provided herein, all provisions of the Project Documents are in full force and effect.

The Parties have executed this Amendment No. 1 on the date set forth below.

Colorado River Commission of Nevada	Peak Substation Services, LLC
By:_____	By:_____
Name:_____	Name: JASON HARRIS
Title:_____	Title: NATIONAL SALES MANAGER
Date:_____	Date: 1-28-25

ORIGINAL

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

Garnet Valley Water System - 2920 Substation

Contract No. CRCGV-02
Material and Equipment

Bid Documents and Specifications

Awarded
June 11, 2024

ORIGINAL

GARNET VALLEY WATER SYSTEM - 2920 SUBSTATION

Contract No. CRCGV-02
Material and Equipment

Bid Documents and Specifications

TABLE OF CONTENTS

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:

The structures for substations shall consist of manufacturer designed structural steel frame-work for mounting and connecting all equipment in accordance with attached drawings. Items supplied by others are given for information purposes only. Structures shall be provided as shown on the drawings. Arrangement of all circuits and static masts shall be as shown on the plans. Structures shall be designed for the loads given in Section 1.15 of Section 1000 (Certification Sheet and Specifications for Material and Equipment).

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: 03/29/2024 By: 

Shae Pelkowski

Assistant Director for Engineering and Operations

BID RESPONSE DEADLINE: 05/13/2024

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:

Garnet Valley Water System - 2920 Substation
Contract No. CRCGV-02
Material and Equipment

2. This Bid is Submitted By:

Name: Peak Substation Service, LLC
c/o Jason Harris
Address: 801 1st Ave North
Birmingham, AL 35203-3007

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. 69CRC-VQ15330	Dated 5/13/2024
No. N/A	Dated N/A
No. N/A	Dated N/A

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.

ORIGINAL

Bid Item	Specification Section	Description	Unit	Unit Price	Qty	Extended Price	Proposed Manufacturer	Delivery - Weeks After N-T-P*
401	1000	Steel for structures shall conform to ASTM Specification Standards described in Section 1.15. All components shall be hot dipped galvanized after fabrication in accordance with ASTM Specifications listed in Section 1.15 and as described in Specification No. 33 72 73. F.O.B. Las Vegas, NV (36.308883°, -114.989844°).	Lot	1,030,500.-	1	1,030,500.-	PEAK	28 wks
CONTRACT PRICE							1,030,500.-	

*Notice-to-Proceed.

ORIGINAL

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: PEAK SUBSTATION SERVICES, LLC
(Corporation Name)

By: _____
(Signature of Authorized Person)

JASON HARRIS SALES MANAGER
(Printed Name and Title)

Business Address:
801 1ST AVE NORTH
BIRMINGHAM, AL 35203

Phone No. 877-324-0909 x1 Fax No. 205-324-0955

Email: jharris@peaksubstation.com

This Bid is Submitted On: May 13, 2024

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. CRCGV-02
GARNET VALLEY WATER SYSTEM - 2920 SUBSTATION

THIS CONTRACT is made and entered into by and between the COLORADO RIVER COMMISSION OF NEVADA, hereinafter referred to as the "CRCNV," and,

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	Steel for structures shall conform to ASTM Specification Standards described in Section 1.15. All components shall be hot dipped galvanized after fabrication in accordance with ASTM Specifications listed in Section 1.15 and as described in Specification No. 33 72 73. F.O.B. Las Vegas, NV (36.308883°, -114.989844°).

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. CRCGV-02, Material and Equipment; 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 Garnet Valley Water System - 2920 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. Shae Pelkowski, 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	Steel for structures shall conform to ASTM Specification Standards described in Section 1.15. All components shall be hot dipped galvanized after fabrication in accordance with ASTM Specifications listed in Section 1.15 and as described in Specification No. 33 72 73. F.O.B. Las Vegas, NV (36.308883°, -114.989844°).	$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 **Shae Pelkowski, 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.

F. **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.

13.11 **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.

13.12 **Indemnification; Limited Liability.**

13.12.1 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.

13.12.2 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.

13.13 **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

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.

ORIGINAL

IN WITNESS WHEREOF, the Contractor and the CRCNV have executed three duplicate originals of this Contract this 11th day of June, 2024. The CRCNV will retain two counterparts and one counterpart will be delivered to the Contractor.

CONTRACTOR PEAK SUBSTATION SERVICES, LLC

By: _____ JASON HARRIS

Its: SALES MANAGER

ATTEST

_____

DIR. OF ESTIMATION

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

ORIGINAL

Bond No. 016245702

SECTION 500
PERFORMANCE BOND

CONTRACTOR (Name and Address):

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

SURETY (Name and Principal Place of Business):

Liberty Mutual Insurance Company
175 Berkeley Street
Boston, MA 02116

CRCNV (Name and Address):

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

CONTRACT

Date: 6-11-2024

Amount: $ 1,030,500.00 (One Million Thirty Thousand Five Hundred and 00/100 Dollars)

Description: Contract No. CRCGV-02, Garnet Valley Water System - 2920 Substation
Location: Clark County, Nevada

BOND

Date (Not earlier than Contract Date): 6-12-2024

Modifications to this Bond Form: N/A

CONTRACTOR AS PRINCIPAL (Seal below)

Company: Peak Substation Services, LLC

Signature:

Name and Title: JASON HARRIS
NATIONAL SALES MANAGER

Attest: Will Davis

Name and Title: WILLIAM DAVIS
DIR. OF ESTIMATION

SURETY (Seal below)

Company: Liberty Mutual Insurance Company

Signature:

Name and Title: Jeffrey M. Wilson, Attorney-in-Fact

Attest:

Name and Title: Alisa B. Ferris, Sr. Vice President - Surety

ORIGINAL

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: **8205020-016032**

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Alisa B Ferris, Anna Childress, Jeffrey M. Wilson, Mark W. Edwards II, Richard H. Mitchell, Robert R. Freel, Sam Audia, William M. Smith

all of the city of Birmingham state of AL each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 11th day of March, 2021.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: _____
David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 11th day of March, 2021 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.

Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: _____
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS: Section 12. Power of Attorney.
Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts: Section 5. Surety Bonds and Undertakings.
Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this _____ day of _____, _____.

By: _____
Renee C. Llewellyn, Assistant Secretary

LMS-12873 LMIC OCIC WAIC Multi Co 02/21

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

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 Garnet Valley Water System – 2920 Substation is a 12.47kV to 4.16kV substation serving the Southern Nevada Water Authority 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 Material and Equipment 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 Las Vegas, NV (36.308883°,-114.989844°).

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. Shae Pelkowski
Colorado River Commission of Nevada
Telephone: (702) 856-3611
Cell Phone: (702) 682-6972
Email: spelkowski@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. CRCGV-02.

4.2 The CRCNV will test Equipment supplied under this Contract No. CRCGV-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 dates to be proposed by Contractor based on current equipment lead time.

5.2 The anticipated Final Acceptance Date for all Equipment is 10/01/2025.

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:

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

3.1.2 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.

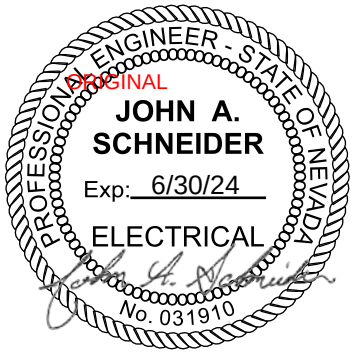
1.2.2.4 Instruct CRCNV's designated personnel in proper operation and maintenance of all Equipment.

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 72 73
Material and Equipment

Digitally signed by
Schneider, John A.
Date: 2024.01.11
15:24:40-06'00'



SECTION 33 72 73

MATERIAL AND EQUIPMENT

PART 1 - GENERAL

A. These Specifications describe the types, sizes and characteristics of the various materials required for the construction of the substation for the Owner.

B. The structures for substations shall consist of manufacturer designed structural steel frame-work for mounting and connecting all equipment in accordance with attached drawings. Items supplied by others are given for information purposes only. Structures shall be provided as shown on the drawings. Arrangement of all circuits and static masts shall be as shown on the plans. Structures shall be designed for the loads given in Section 1.15.

C. Steel for structures shall conform to ASTM Specification Standards described in Section 1.15. All components shall be hot dipped galvanized after fabrication in accordance with ASTM Specifications listed in Section 1.15.

D. The Bidder shall provide unit prices for the items listed on Schedule I (attached) with the bid proposal.

E. Drawings for approval shall be submitted after the award of the contract: general arrangement drawings showing structures with all equipment, buses, etc. mounted thereon; elevation and erection drawings sufficient to show all details required to construct the substation as designed; shop drawings of the structures and equipment.

1.1 SCOPE

A. This specification describes material and equipment to be furnished for construction of a complete substation with all associated material and equipment.

1.2 DEFINITION OF TERMS

A. “Bidder”, “Supplier”, and “Seller” shall be considered synonymous terms and shall mean person, firm or corporation with whom Owner may enter into contract for execution of work specified.

B. "Owner" shall mean:

Southern Nevada Water Authority
100 City Parkway, Suite 700
Las Vegas, NV 89106
(702) 862-3786

Colorado River Commission of Nevada
Attn: Bob Reese
555 E Washington Avenue
Las Vegas, NV 89101

(702) 486-2670
breese@crc.nv.gov

C. "Engineer" shall mean:

HDR Engineering, Inc.
Attn: John Schneider
Project Manager
3231 Greensboro Drive, Suite 200
Bismarck, ND 58503
Phone: (701) 557-9711
john.schneider@hdrinc.com

D. “Work” shall mean work to be done in the course of construction and furnishing materials and equipment under the Material Contract, unless some other meaning is indicated by the context.

1.3 INTENT OF SPECIFICATIONS

A. To set forth requirements of performance, type of equipment desired, standards of materials and construction, tests to be made, and guarantees to be met.

B. To require Seller to furnish all materials and equipment and perform all work and services described in the contract documents, unless otherwise specifically indicated.

C. To require Seller to provide complete and operable equipment in spite of omission of specific reference to any minor component part.

D. To require Seller to provide new materials and equipment.

1.4 INTERPRETATION OF SPECIFICATIONS

A. Seller shall report any errors or ambiguities in specifications to the Engineer as soon as detected. Engineer will answer questions and interpret the intended meaning of the specification. Engineer’s interpretation shall be accepted as final.

1.5 METHOD OF BIDDING

A. Equivalent products:
1. Whenever specifications or plans call for item of material or equipment by manufacturer’s name and type, “or equal”, it is intended that products of equal quality and performance by other manufacturers may be substituted, subject to the approval of the Engineer.
2. Furnish drawings or other data as required to indicate all modifications resulting from use of such substitute items. Furnish general arrangement drawings, full descriptive data, and other information required to demonstrate to Engineer that material or equipment proposed is, in fact, equal to that specified. Burden of proof of equality shall in all cases remain with Seller. Final approval of the substitution shall be made by the Engineer.
3. Abide by Engineer’s decisions when proposed substitutions of material or equipment are deemed to be unacceptable.

4. Owner may consider such factors as over-all project arrangement, over-all project cost, and similar factors in determining acceptability of proposed substitutions.
5. Approval of substitutions shall not relieve Seller of responsibility for providing workmanship, material, and equipment equal to that specified.

B. Form of bid price submittal:
1. Unit prices for all items to be furnished and delivered under this specification shall be provided on Schedule I. Lump sum prices for each schedule shall be provided on Summary of Proposal.
2. Bid price shall cover complete work described in specifications, including costs incidental thereto, unless specifically indicated otherwise.

1.6 DATA TO ACCOMPANY BIDS

A. A complete Equipment Contract and Summary of Proposal, as bound in the front of this specification, shall be properly completed and submitted to the Engineer, along with all other material listed below. All items to be submitted shall be sent to the Engineer no later than the time and date specified.
1. Any exceptions taken by the Bidder to the Specifications, Equipment Contract, or Summary of Proposal at time of bid shall be clearly and simply stated or summarized, in a specially prepared letter of transmittal attached to and made a part of the Summary of Proposal. **Note: Manufacturer's "standard conditions of sale" catalog pages are not acceptable for purposes of stating exceptions to the specifications.**
2. Bidder shall complete one copy of the "Summary of Proposal" for each alternative bid or proposal submitted. Additional copies may be prepared by photocopying the blank "Summary of Proposal" pages. Bidder shall clearly identify each summary by alternate number.

B. Bidder's proposal shall also contain, as a minimum, one copy of the following:
1. Manufacturer's specifications, guarantees, and descriptive data on equipment proposed.
2. Itemized list of special tools and spare parts which Bidder proposes to furnish.
3. Outline drawings showing general arrangement, approximate dimensions, space requirements and clearance, and approximate weights of proposed equipment.
4. Standard and specified accessories and instruments to be furnished separately shall be listed in detail. List shall clearly define those items to be shipped separately. It is understood that all items not so listed shall be shipped, mounted and connected. Use Summary of Proposal for listing.
5. Complete copy of the warranty the Bidder will offer.

1.7 PROPOSAL SUBMITTAL

A. Proposals submitted by the Bidder shall be signed and dated. The proposal for supplying the equipment and material covered in this specification shall be accompanied by a list describing any substitutions, deletions, additions, or exceptions to items described in Sections 1.15 through 1.16 of this specification. Material delivery dates shall be included with the proposal.

B. Bidder's quotations shall include delivery of all equipment and materials to the job site. All correspondence, questions, subsequent drawings and transmittals shall be directed to the Engineer.

1.8 EQUIPMENT GUARANTEE

A. Without limiting any other provision of this specification regarding guarantees, guarantee the equipment as follows:
   1. Seller shall guarantee to the Owner that the complete substation, together with all parts included in the original purchase, is free of defect in workmanship and materials and is capable of continuous and satisfactory performance when operated in accordance with the instructions provided by the Seller at the specified rating and capacity.
   2. Guarantee shall cover all freight by common carrier in full and the costs of removal from the site and reinstallation after repair. If the Owner's contractor can repair any defect to the satisfaction of the Engineer, the guarantee shall cover all associated costs provided the Seller is notified in advance of the defect.

1.9 DELIVERY AND SHIPMENT

A. Bid shall include delivery F.O.B. jobsite, freight prepaid, with final destination delivery date as specified by the Seller in the Summary of Proposal.

   Project Location: Las Vegas, NV (36.308883°,-114.989844°)

B. All material shall be clearly marked as follows:

   Apex Substation
   Southern Nevada Water Authority
   Las Vegas, Nevada

C. The Seller shall notify the Owner and Engineer when equipment is ready for shipment. Such notice shall include projected routing and estimated time in transit. Notice shall be provided 48 hours prior to delivery.
   1. All equipment in this Contract with a common delivery destination shall be made in a common shipment. The Seller shall be responsible for all incidental costs incurred by the Owner due to separate shipments of such equipment.
   2. Immediately after shipment, Seller shall notify the Owner and Engineer of transportation carrier and all transfers and references to permit follow-up on status of shipment and delivery.
   3. The Seller shall investigate all limitations in regard to shipping the equipment F.O.B. destination.
   4. Equipment damaged in shipment will be refused on delivery and it will be the Seller's responsibility to arrange for prompt repair or replacement to the standards of new equipment. The Seller will not be relieved of the responsibility of delivering undamaged equipment even if the damage is internal or otherwise goes undetected and the nature of the damage remains unknown until the equipment is energized and tested.

1.10 DRAWINGS AND INSTRUCTIONAL MATERIAL

A. Specification Drawings

1. These drawings and specifications are instruments of service to be used on this project only and are to be returned to the Engineer upon completion of the work as set forth herein.

B. Shop Drawings for Review

1. "Shop Drawings" refers to all the detailed installation drawings prepared by the Seller and/or his suppliers required to construct the material as defined in the specifications, and shall include all fabrication drawings, working drawings, design calculations, material schedules, detailed layouts, and assembly information. Shop drawings shall be reviewed and approved by the Engineer before manufacturing begins.
2. The Seller agrees that submittals and shop drawings processed by the Engineer are not change orders; that the purpose of submittals and shop drawings by the Seller is to demonstrate to the Engineer that the Seller understands the design concept, that he demonstrates his understanding by indicating which equipment and material he intends to furnish and install, and by detailing the fabrication and installation methods he intends to use. The Seller alone accepts all responsibility for assuring that all materials furnished under these specifications meet in full all requirements of the contract documents. The Engineer's review is for the general conformance with the design concept and contract documents. Markings or comments shall not be construed as relieving the Seller from compliance with the project plans and specifications, nor departures there from. The Seller remains responsible for details and accuracy for confirming and correlating all quantities and dimensions, for selecting fabrication processes and for techniques of assembly.
3. Submit the following shop drawings to the Engineer in the manner specified hereinafter. Make initial submittal of information required on or before the date specified in the Summary of Proposal.
    a. General Arrangement Drawings, including Plan and Elevations, as well as other drawings as required to fully describe and facilitate construction. These drawings shall clearly show all materials marked so as to correspond with material list item numbers. Grounding details shall include item numbers to indicate location of all structure and subgrade grounding materials. Bolt torque requirements shall be included on the bus drawings.
    b. Detailed material list showing item number, quantity, manufacturer, and type and/or part number of all material and equipment to be furnished and installed in this station.
    c. Structural steel design calculations, including limitations and design criteria. Provide foundation loading data required to design all concrete foundations and anchor bolts.
    d. Structural steel shop drawing and erection drawings shall show all details necessary for fabrication and assembly, including Steel Bill of Materials describing all steel, bolts, etc. Drawings shall include erection view, drawn to scale, indicating individual piece marks for ease in erection. The views shall also indicate size, type and quantity of erection bolts required. These drawings shall be furnished prior to fabrication.
    e. Equipment outline, wiring and schematic drawings for all electrical power equipment and power switching apparatus furnished by the Seller. Outline drawings shall show major standard features and

required accessories. Nameplate drawings shall be furnished for power and oil-filled equipment. Wiring and schematic drawings shall show all accessories and indicate connection points for customer wiring. Equipment approval drawings shall be furnished at such time that factory construction and shipping schedules will not be interrupted.

C. Engineer's Action

1. Engineer will review shop drawings and include action taken according to the following classifications:
   a. No Exceptions Taken: Indicates that the shop drawing has been reviewed and appears to be in general agreement with the requirements. Material Seller may make further distribution of shop drawings and proceed with fabrication and/or installation of the work detailed on the drawing.
   b. Make Corrections Noted: Design revisions, deletions, additions and comments shown on these drawings shall be incorporated into the design before proceeding with fabrication of drawing distribution.
   c. Amend and Resubmit: Indicates that the shop drawing, or part thereof, does not appear to be in general agreement with the requirements. Engineer's comments are noted on the shop drawing and/or separate letter. Material Seller shall recheck and make any necessary revisions and resubmit for Engineer's review.
   d. Rejected: Indicates that the shop drawings do not conform to requirements. Reasons for rejection are noted on the shop drawing and/or separate letter.

D. Shop Drawing Submittal Distribution

1. Initial Submittal (REVIEW): Submit one (1) digital copy in PDF format of each shop drawing to the Engineer; direct mailing to the Engineer's email address given in Section 1.2, C. One (1) copy of the shop drawings indicating the Engineer's action will be returned to the Seller with in one (1) week from the date of receipt.
2. Resubmittal: If drawing is returned to the Seller with Engineer's comments and action noted "RESUBMIT", the drawing should be rechecked, revised as necessary and resubmitted in manner described in "1) Initial Submittal". Corrected submittal shall be returned to Engineer two (2) weeks after notice requiring resubmittal.
3. Final Distribution (CERTIFIED): Within the time schedule listed in the Summary of Proposal, Seller shall submit to the Engineer, one (1) digital copy in AutoCAD format of all final drawings covered in Section B above. AutoCAD drawings shall be provided on a compact disk, along with all related dependent files such as, x-refs, font files, and plot styles. Drawings shall be stamped "Certified for Construction" and contain all corrections noted by the Engineer on his review of the Drawings. Direct mail to the Engineer's address given in Section 1.2, C.

E. Instruction Manuals, Test Reports, and Parts Lists

1. Seller shall furnish complete instruction manuals covering installation, operation and maintenance for all equipment to the Engineer for distribution.

2. Submit one (1) digital PDF copy to Engineer for distribution.

F. Shop Drawing and Instructional Material Transmittal Form
1. Seller may use his own form of transmittal letter for distribution of shop drawings, clearly marked "For Review" or "Certified" as applicable.
2. Submit one (1) digital PDF copy of transmittal form with each set of drawings or instructional materials.

G. Seller's Responsibility
1. Prior to submittal, check shop drawings for errors, correctness of details, and conformance with the specifications.
2. Notify Engineer of any inconsistencies or questions regarding approval revisions or comments on the drawings.
3. Review of shop drawings by Engineer does not relieve the Seller of responsibility for errors, correctness of details, or conformance with the specifications.
4. Fabrication and shipment of materials or equipment prior to Owner's release of drawings, data and information mentioned hereinbefore shall be at Seller's risk.

1.11 MATERIAL AND DESIGN STANDARDS

A. All material used in the manufacture of these substations and their components are to be of the best available for the purposes for which used, considering strength, durability and safety, and shall conform to the latest applicable sections of the following specifications, codes, and standards:
1. American National Standards Institute (ANSI).
2. National Electrical Manufacturer's Association (NEMA).
3. American Society for Testing Materials (ASTM).
4. International Electrotechnical Commission (IEC) Standards.
5. Institute of Electrical and Electronic Engineers (IEEE).
6. National Electric Safety Code (NESC).
7. Rural Utilities Services (RUS) specifications.
8. ASCE 113, Substation Structural Steel Design
9. AISC 360-10, Steel Specifications for Structural Buildings

B. If any conflict occurs between this specification and these design standards or codes, the most stringent requirement shall apply. Nothing in this specification shall be construed to permit material not conforming to these design standards. Also, this shall not be construed as relieving the Seller from complying with any requirements in the specification which are in excess of the design standards.

C. These substations shall be designated and manufactured of standard sections and shall be completely coordinated and pre-assembled wherever possible.

D. Attached drawings shall be part of this specification. General arrangement shall be in accordance with the specification drawings.

1.12 DEFECTIVE EQUIPMENT

A. Should equipment fail to conform to specifications or to operate satisfactorily, Owner will have right to operate equipment until defects are corrected and guarantees met.

B. Owner will have right to operate rejected equipment until it is replaced without cost for depreciation, use, or wear.

C. Equipment may be removed from operation for examination, adjustment, alteration, or change, only at time approved by the Owner.

1.13 SUBSTATION RATINGS

A. The Substation covered under this specification will have the following rating in accordance with the applicable ANSI Standards:

Incoming Transmission Voltage	230 kV Phase-to-Phase
High Voltage Equipment BIL	900 kV
Incoming Transmission Conductor	954 AAC, Magnolia
Outgoing Distribution Voltage	12.47/7.2 kV Grd. Wye
Low Voltage Equipment BIL	110 kV
Frequency	60 Hz
Elevation above sea level	2300 ft.*
*For altitudes above 3,300 feet, apply Altitude Correction Factors to the voltage and continuous current ratings in accordance with ANSI Standards.	

Ambient Temperature Minimum	0°C
Ambient Temperature Maximum	50°C
Seismic Loading	
SDS:	0.522
SD1:	0.284
FPGA	1.34

1.14 MATERIAL AND EQUIPMENT NOT COVERED UNDER THIS SPECIFICATION

A. Equipment listed in this section will be provided by the Owner or under separate specifications.
1. Land, fill, and site preparation
2. Fence and Gates
3. HV Transmission Line, Hardware, and Suspension Insulators
4. MV URD Cable and Terminations
5. Power Transformers
6. Distribution Transformers
7. Power Circuit Breakers
8. Control Enclosure and Accessories
9. Foundations
10. Grounding Material
11. Control Cable, Conduit and Wiring
12. Station Lights and Accessories

1.15 SUBSTATION STRUCTURES

A. General

1. Furnish one (1) complete lot of prefabricated, hot dip galvanized steel structures as shown on the specification drawings. Assemblies, fittings, clamps, and other hardware for mounting all equipment shown on the specification drawings shall be included with the structural steel.
2. Structural material shall be in accordance with specifications ASTM-A36 for steel plates and ASTM-A500 Grade B for steel tubes with minimum yield point of 46,000 psi. Punching and drilling shall be done accurately. Center-to-center distance between end holes of a piece shall not vary more than 1/16 inch from the fabrication drawings. Burrs caused by drilling or punching shall be removed prior to galvanizing.
3. All structural material shall be hot dip galvanized in accordance with specifications ASTM A123, A143, A153, and A384. All galvanized pieces shall be free of spurs.
4. Each piece shall be plainly marked with its respective erection identification mark. Pieces shall be bundled in lots of approximately 100 lbs. with each bundle containing pieces for use on a common structure. Bundles shall be marked to identify the structure to which they belong. Larger structural pieces may be shipped separately. Welded or shop assembled sections shall be adequately braced to prevent damage in shipment. All crates, boxes and bundles shall be clearly marked with list of contents.
5. Structures are to be designed according to the latest applicable specifications of the National Electric Safety Code and NEMA Publication SG-6, Part 36.
6. Suitable tabs shall be provided at the base of each column for attaching NEMA 2-hole ground connectors. Provisions, where required, shall be made to secure ground wires extending up structures at maximum 4 ft. intervals. Structures requiring additional tabs include instrument transformer stands, deadends, and switch stands. Deadend structures shall also include tabs for mounting OPGW clamps as shown on specification drawings from the peak of the structure to the base.
7. Structures shall have mounting provisions for junction boxes noted on specification drawings.
8. Unbalanced loading due to one or more broken conductors shall be considered in design.
9. All anchor bolt patterns shall be symmetrical.

B. Bolts and Fasteners
1. High strength bolts shall meet ASTM A325 specifications, and be furnished with nuts and MF locknuts conforming to ASTM A563, Grade DH. Bolts, nuts, and washers shall be hot dip galvanized in accordance with ASTM specification A153, Class C. Galvanized bolts shall be free of spurs. **The required number of bolts, nuts, and washers shall be increased by five percent. Bolts, nuts, and washer shall be boxed and labeled separately by size and type**.

C. Anchor Bolts
1. Anchor bolts shall take the form of either headed bolts or straight rod meeting ASTM F1554 specifications, grade as required, and color coded on the end to help facilitate easy identification in the field. Bent anchor bolts are not acceptable in most cases and must be approved by the Engineer before using. Each anchor bolt shall be furnished with a

minimum of three (3) A563 heavy hex nuts, grade as required, and two (2) F436 flat circular washers unless otherwise noted.

2. Straight rod anchor bolts shall be provided with an anchoring device on one end, which is to be embedded in concrete. The anchoring device shall consist of a heavy hex nut welded at the unstressed end of the anchor bolt. This anchor nut is not included with the quantities described above.
3. All anchor bolts, nuts, and washers shall be hot dip galvanized conforming to ASTM A153, Class C specifications.

D. High Voltage Section

1. All structures, tubular bus, bus supports, bus connectors, and conductor, except line conductor, as shown on the specification drawings, are to be included in the material package. Structures shall be designed to support all wires without offsetting strain from incoming or outgoing conductors.

Voltage Rating	230 kV, 900 kV BIL
Short Circuit Current Rating (sym.)	40 kA
Ice and Wind Loading	
Structure	90 mph wind
Conductors	
Wind	90 mph wind
Ice	0 inch
NESC District	Light
Number Incoming Conductors (per deadend)	Three (3)
Maximum Incoming Conductor Tension (per phase)	4,000 lbs.
Incoming Conductor (per phase)	954 AAC, Magnolia
Number Incoming Static Wires (per deadend)	Two (2)
Maximum Incoming Static Wire Tension (per line)	2,000 lbs.
Incoming Static Wires	3/8” EHS or OPGW
Maximum Incoming Line Angle	15°

E. Low Voltage Section

1. All structures, tubular bus, bus supports, bus connectors, and conductor and any other necessary hardware for a complete low voltage installation are to be included in the material package.
2. Design loading for wind and ice shall be the same as for high voltage structures. Drilling and mountings shall be furnished for all equipment and hardware as shown on the specification drawings.

Voltage Rating	15 kV, 110 kV BIL
Short Circuit Current Rating (sym.)	25 kA

F. Static Mast Structure

1. General:
   a. Design loading for wind and ice shall be the same as for high voltage structures. Accumulated loads on structures shall be

increased by individual overload factors in accordance with the latest revision of the National Electric Safety Code.

b. Seller shall verify all dimensions to verify proper fit up of structure connections prior to fabrication. Any deviation in dimension or materials from that shown on the drawings shall be submitted to the Engineer for his written approval prior to fabrication. Such submittals shall be in the form of shop drawings, per Section 1.10 of this specification.

c. The static mast column shall be constant taper round or multi-sided (8 or 12 sides) tubular sections in accordance with applicable ASTM requirements. Structural steel shall be ASTM A36, A500 Grade B or A572. Minimum section thickness shall be 3/16 inch. Mill test reports shall be made available, if requested, at no cost to the Owner.

d. Prior to the static mast being worked in any manner, structural materials shall be cleaned of all rust and foreign particles. Material shall be straight within the tolerance allowed by ASTM Specification A6. If straightening is necessary, it may be done by mechanical means or any application of a limited amount of localized heat. Straightening shall be done in a manner that will not injure the material.

e. Arc welding electrodes shall be in accordance with the requirements of the American Welding Society Specification D1.1, latest edition. Welding electrodes shall be E-70XX or equivalent wire if semi-automatic or automatic welding is used. Welding shall be performed by operators who have been qualified by tests as prescribed by AWS D1.1 to perform the type of welding required.

2. Foundation Supported

a. Concrete foundations installed by others will have a minimum 28 day compressive strength of 4,500 psi.

b. Structure base plates shall be designed to accommodate anchor bolt size and layout. Anchor bolt embedment length shall be designed in accordance with the latest American Concrete Institute (ACI) standards.

c. Anchor bolts shall be as required by structure design and shall be in accordance with the latest ASTM standards. For high strength anchor bolts, ASTM A615 Grade 60 or Grade 75 (preferred) shall be furnished with a minimum of 3 heavy hex nuts and 2 flat washers each, unless otherwise noted.

d. Each design load case shall be considered independently to determine the maximum stress in any member as well as overall deflection of the static mast. Structures shall be analyzed for the simultaneous application of ultimate vertical, transverse and longitudinal wire loads, structure wind loads, and structure dead load.

1.16 SUBSTATION MATERIAL AND EQUIPMENT

A. Quantities for the following materials and equipment shall be determined by the Seller in accordance with the bid schedule and general arrangement drawings. Package shall include all material necessary for a complete installation as indicated on specification drawings.

B. All Group-Operated Switches (GOAB) shall be complete with insulators, operating mechanism, provisions for padlocking in either the open or closed position, operating pipe, grounding connectors and flexible grounding braid as shown in RUS Bulletin 1724E-300 (Figure 9-37:Typical Switch Grounding). Assembly of GOAB switches is indicated below. All low side disconnect switches shall be furnished completely assembled on insulators.

1. High Side GOAB Switch (Center Break)

Type	Center Break "V" w/ Arcing Horns
Voltage Class	230 kV, 900 kV BIL
Continuous Current	1,200 A
Blade	Aluminum
Operator	Worm Gear
Mounting	Vertical
Phase Spacing	16'-0"
Insulators	per Insulator specification
Assembly	Individual switch poles shall be furnished fully assembled.

2. High Side GOAB Switch (Vertical Break)

Type	Vertical Break
Voltage Class	230 kV, 900 kV BIL
Continuous Current	1,200 A
Blade	Aluminum
Operator	Worm Gear
Mounting	Horizontal
Phase Spacing	12'-0"
Insulators	per Insulator specification
Assembly	Individual switch poles shall be furnished fully assembled.

3. High Side Surge Arresters

Manufacturer	Ohio Brass
Type	EVP
Class	Station Class
Voltage Rating	140 kV MCOV
Design Requirements	ANSI Standard C62.11
Color	ANSI #70 Gray
Mounting	Tripod Base, 10" B.C.
Terminals	Ground Terminal – Clamp Type, Line Terminal – 4-hole Spade

4. High Side Insulators

Voltage Class	230 kV, 900 kV BIL
Technical Reference Number	TR-304

Type	Station Post, 5” B.C. Uniform Stack
Porcelain	ANSI #70 Gray

5. Low Side GOAB Switch

Type	Vertical Break
Voltage Rating	15 kV, 110 kV BIL
Continuous Current	1,200 Amps (min.)
Operator	Manual Swing Handle
Mounting	Horizontal
Phase Spacing	3’-0”
Insulators	per Insulator specification
Assembly	Individual switch poles shall be furnished fully assembled.

6. Low Side Fuse Disconnect Switch

Manufacturer	S&C
Type (Complete with Live Parts)	SMD-20
Terminals	2 Hole NEMA (Tinned)
Style	Station Vertical Offset
Voltage Class	15 kV, 110 kV BIL
Fuse Unit Type	SMU-20
Continuous Current-Fuse Holder	200 Amps
Fuse Unit Current Rating	5E, Std
Number of Fuse Units	Four (4)
Insulators	per Insulator specification

7. Low Side Station Service Transformers

Type	Pole mount, CSP
ANSI Standard	C57.12.20
Capacity	25 kVA
Voltage Rating	7,200-240/120 V
BIL	95 kV
Impedance	ANSI Std
Taps	None
Windings	Copper
Color	ANSI #70 Gray

8. Low Side Surge Arresters

Manufacturer	Ohio Brass
Type	PVI-LP
Class	Intermediate Class
Voltage Rating	7.65 kV MCOV

Design Requirements	ANSI Standard C62.11
Color	ANSI #70 Gray
Mounting	Tripod Base, 10” B.C.
Terminals	Ground Terminal – Clamp Type, Line Terminal – 4-hole Spade

9. Low Side Insulators

Voltage Class	15 kV, 110 kV BIL
Technical Reference Number	TR-205
Type	Station Post, 3" B.C.
Porcelain	ANSI #70 Gray

10. Conductors and Connectors

a. Type, size and quality of major bus materials are shown on the drawings. The intent is to set a standard for bus and equipment as well as to specify other necessary requirements.

1) General

a) Provide all necessary bus conductor, connectors, and other materials required to completely interconnect power equipment as shown on specification drawings. This includes all bus connectors, bus splicing material, bolts, nuts, washers, etc. Connectors for all equipment including high and low side transformer bushings (4-hole pad) shall be included.

b) For all spare distribution bays, the Supplier shall furnish all connectors necessary to allow the Owner to make jumpers to connect the bus, low voltage switches and an Owner-furnished recloser to complete the bay at a future date.

2) Bus Conductor

a) A minimum number of conductor types and sizes have been included in the design of electrical bus in this section. All sections of tubular conductor longer than eight feet between supports require damping conductors. Damping conductor shall be furnished as specified on the following table:

DAMPING CONDUCTOR REQUIREMENTS	
Nominal Tubular Bus Size (inch)	**Minimum Size ACSR Conductor (kcmil)**
1.5	211.6
2	266.8
2.5	266.8
3	336.4
4	556.5

b) High Side Bus

Rigid Bus	4” Sch 40 Al Tube
Conductor in Main Current Paths	954 AAC, Magnolia
Conductor taps	795 AAC, Dahlia

c) Low Side Bus

Rigid Bus	4” Sch 40 Al Tube
Conductor in Main Current Paths	556.5 AAC, Dahlia
Conductor taps	1/0 ACSR, Raven

d) Tubular bus conductor shall be Schedule 40 seamless electrical grade 6063-T6. Tubular buswork shall have smooth surface Industry Class IV finish. Care shall be exercised in handling and packaging bus conductor for shipment to prevent abrasion or other damage.

3) Bus Connections

a) High voltage bus connections and terminals shall be bolted-type, and low voltage shall be bolted-type unless otherwise noted. Stainless steel bus bolts shall be furnished for bolted connections. **Nuts shall be silicon bronze.**

b) Low voltage bus tee connectors shall be bolted tube-conductor or conductor-conductor connectors. Bus tee connections utilizing NEMA pads and terminals will not be accepted.

c) On copper-to-aluminum and aluminum-to-aluminum connections, each bolt shall be furnished with one Belleville and two flat washers. On copper-to-copper connections, each bolt shall have one flat and one lock washer. Copper and copper alloy composition connectors shall have tinned contact surfaces where used for copper-to-aluminum connections.

d) Stainless steel Belleville washers shall be a minimum of 0.109" thick with a 3,750 pound load required to flatten the washer. Stainless steel flat washers shall be a minimum of 0.125" thick. All washers shall be 1 5/8" diameter.

e) All bolts shall be sized to extend completely through nuts, with a minimum of 1/8” and a maximum of 3/8” thread reveal when properly torqued.

f) Contact inhibitor shall be furnished for all aluminum connections.

11. Switch Stick and Container

Stick	
Manufacturer	Hastings
Catalog Number	3120 (Includes P10431 Universal Head)
Size	Adjustable 12’-18'
Construction	Fiberglass
Quantity	One (1) per Substation

Container	
Manufacturer	Hastings
Catalog Number	01-3353
Size	6" X 13'
Mounting Accessory	Fence Mounting Kit, Cat No. 01-3200-041
Construction	Heavy Duty Plastic with Hardware for Fence Mounting

Signs	
Warning High Voltage	
Size	10" x 14"
Construction	18 ga. Steel w/Porcelain Enamel Finish
Accessories	Mounting Hardware by Others

APPENDIX
SUMMARY OF PROPOSAL

(Requires Completion by Bidder)

*Denotes required value

A. Price and Delivery

1) Total Package Price, delivered FOB jobsite: $1,030,500.00

2) Specified Delivery Lead Times:

Anchor bolts	16 weeks ARO
Structural steel	24 weeks ARO
Balance of package	28 weeks ARO

3) Can Bidder meet specified lead times based upon award of contract with ten (10) days from bid award? YES (Yes/No)

4) If not, Bidder shall provide earliest guaranteed delivery lead times (weeks ARO):

Anchor bolts	_____
Structural steel, less static mast(s)	_____
Balance of package	_____

6) Are prices quoted in A.1 above firm? YES (Yes/No)

7) If not, what is the maximum percentage increase that will be applied to the price quoted in A.1 to meet specified lead times? _____

B. Drawings & Structure Calculations

Will Bidder meet delivery lead times as listed below for drawings & structure calculations?

1) Drawings & Structure Calculations for review, 12 weeks ARO, based on contract award date within ten (10) working days after bid award. YES * (Yes, No)

2) Certified drawings, 20 weeks ARO, based on return of reviewed drawings by Owner within ten (10) working days of receipt. YES * (Yes, No)

3) If Bidder cannot meet drawing & calculation lead times listed above, Bidder shall provide

earliest guaranteed delivery lead times which can be met (weeks ARO):

Structure Calculations: _____

Review Drawings: _____

Certified Drawings: _____

C. Data

1) Bidder PEAK SUBSTATION SERVICES

2) Name & Location of Steel Fabricator STRUCTURAL STEEL PRODUCTS, DALLAS

3) Estimated Weights and Dimensions (Shipping):

   a. Weight of largest piece of material to be shipped 10,000 lbs

   b. Dimensions of largest shipped item 40' x _____ x _____

4) Describe extent of any required field assembly for equipment (e.g., switches assembled or un-assembled):

_____

_____

_____

NOTE: AUTHORIZED SIGNATURE INDICATES ABOVE VALUES DENOTED WITH * ARE GUARANTEED

PEAK SUBSTATION SERVICES (Bidder) — JASON HARRIS (By)

801 1ST AVE. NORTH (Address) — SALES MANAGER (Title)

BIRMINGHAM AL 35203 (Address) — 5-13-2024 (Date)

Schedule I – Substation Items

Item and Description	Manufacturer	Qty.	Unit Price	Extended Price
TRANSMISSION				
1. Structural Steel		1 Lot	598,011.00	598,011.00
a. A-frame Deadend	STRUCTURAL STEEL PRODUCTS DALLAS	1	INC	
b. Metering Stand	PAX GONZALES, LA	3	INC	
c. Switch Stand		4	INC	
d. Singe-phase Bus Supports		8	INC	
e. Three-phase Bus Supports		4	INC	
f. Static Mast	STRUCTURAL STEEL PRODUCTS DALLAS	2	INC	
g. Switch Platforms	PAX	4	INC	
h. Breaker Platforms		2	INC	
2. Anchor Bolts		1 Lot	INC.	
3. 230 kV GOAB Switch, CBV	ROYAL	1	50,815.00	50,815.00
4. 230 kV GOAB Switch, VB		3	38,340.00	115,020.00
5. 230 kV Surge Arresters	ABB	3	5,000.00	15,000.00
6. 230 kV Insulators	NEWELL	23	750.00	17,250.00
7. Electrical Bus & Connectors	PDI SPRINGFIELD MO	1 Lot	74,285.00	74,285.00
			Transmission Subtotal:	
DISTRIBUTION				
1. Structural Steel		1 Lot	INC.	
a. Switch Stand	PAX	2	INC	
b. Service Transformer Stand	PAX	2	INC	
c. Termination Stand	PAX	2	INC	
d. Switch Platforms	PAX	2	INC	
e. Breaker Platforms	PAX	2	INC	
2. Anchor Bolts	PAX	1 Lot	INC	
3. 15 kV GOAB Switch, VB	ROYAL	2	18,353.00	36,706.00

Item and Description	Manufacturer	Qty.	Unit Price	Extended Price
4. 15 kV Surge Arresters	ABB	6	215.00	1,290.00
5. 15 kV Fuse Disconnect Switch	S:C	2	5,000.00	1,290.00
6. 15 kV Fuse Units	S:C	4	287.00	1,148.00
7. 15 kV Service Transformer	ABB	2	54,285.00	108,570.00
8. 15 kV Station Post Insulators	NEWELL	12	45.00	540.00
9. Electrical Bus & Connectors	PDI SOUTHWEST, INC	1 Lot	INC.	
10. Switch Stick & Container	HASTINGS	1	715.00	715.00
11. Warning High Voltage Signs	BRADY	10	115.00	1,150.00
			Distribution Subtotal:	
			Grand Total:	1,030,500.00

END OF SECTION

SECTION 1100
Drawing List

Drawing Number	Description
3533s-18-E-E50	SWITCHING DIAGRAM
3533s-18-E-E51	GENERAL ARRANGEMENT
3533s-18-E-E52	ELEVATIONS SECTIONS A & B
3533s-18-E-E53	ELEVATION SECTIONS C, D, E & F
3533s-18-E-E54	RELAYING ONE LINE DIAGRAM
3533s-18-E-E161	PCB PLATFORM - SP1

INTENTIONALLY LEFT BLANK