### CITY OF VINELAND

# VINELAND, NEW JERSEY

# **SPECIFICATIONS**

# **FOR**

# PURCHASE OF 69KV BREAKERS & 15KV BYPASS SWITCHES FOR ELECTRIC UTILITY

COV BID # 2025-24

BID OPENING: WEDNESDAY, AUGUST 6, 2025 PREVAILING TIME: 2:00 P.M.

> DEPARTMENT OF FINANCE DIVISION OF PURCHASING 640 E WOOD STREET P.O. BOX 1508 VINELAND, NJ 08362-1508

Jeanine N. Meneghetti, QPA
Purchasing Agent
(856) 794-4040 Phone
(856) 405-4605 Facsimile
jmeneghetti@vinelandcity.org



## 640 E. WOOD STREET P.O. BOX 1508 VINELAND, NJ 08362-1508

DEPARTMENT OF FINANCE DIVISION OF PURCHASING JEANINE N. MENEGHETTI, QPA PURCHASING AGENT

PHONE: (856) 794-4040 FAX: (856) 405-4605

### NOTICE TO BIDDERS

Sealed bids will be received by the Purchasing Agent of the City of Vineland on Wednesday, August 6, 2025 at 2:00 p.m. prevailing time in the Purchasing Department, 5<sup>th</sup> Fl., City Hall, 640 E. Wood Street, Vineland, New Jersey 08360, at which time and place bids will be opened and read in public for the furnishing of:

# COV BID 2025-24 PURCHASE OF 69KV BREAKERS & 15KV BYPASS SWITCHES FOR ELECTRIC UTILITY

Bid must be submitted in <u>duplicate</u> and shall be enclosed in an opaque sealed envelope, addressed to "Division of Purchasing, c/o City Clerk, City of Vineland, 640 E. Wood Street, PO Box 1508, Vineland, NJ 08362-1508"

Bidders shall comply with the requirements of N.J.S.A. 10:5-31 and N.J.A.C. 17-27 et seq.

You must submit paper documents as your bid package. We cannot accept electronic copies. The documents to be submitted start with the Check List. (PLEASE DO NOT SUBMIT THE SPECIFICATIONS WITH YOUR BID PACKAGE.) Original signatures must be on one document. (Please use blue ink for the signatures.) The duplicate can be a photocopy.

If you have any questions, please contact the Purchasing Agent at the above number or email <a href="mailto:PurchasingOffice@vinelandcity.org">PurchasingOffice@vinelandcity.org</a>

DO NOT STAPLE DOCUMENTS
NO DOUBLE-SIDED COPIES

# CITY OF VINELAND GENERAL INSTRUCTIONS

### I. SUBMISSION OF BIDS

- A. Sealed bids shall be received in accordance with public advertisement as required by law, with a copy of said notice being attached hereto and made a part of these specifications.
- B. Each bid shall be submitted on the proposal form attached and shall be submitted in a clearly marked sealed envelope addressed to:

If delivered:

If mailed:

DIVISION OF PURCHASING 640 E. WOOD STREET 5<sup>TH</sup> FLOOR VINELAND NJ 08360 DIVISION OF PURCHASING 640 E. WOOD STREET 5<sup>TH</sup> FL PO BOX 1508 VINELAND NJ 08362-1508

\* Do not use PO Box on Overnight Delivery Services, i.e. (Fed-Ex)

Bidder's name, address, bid category, and due date must appear on the outside of the BID ENVELOPE containing the bid.

- C. Sealed bids will be received by the Purchasing Agent or designated representative, at the time and location as stated in the Notice to Bidders, and at such time and place will be publicly opened and read aloud.
- D. It is the bidder's responsibility to see that bids are presented to the Purchasing Agent on the hour and at the place designated. Bids may be hand delivered or mailed; however, the City disclaims any responsibility for bids forwarded by regular or express mail. If the bid is sent by express mail service, the designation in sub-section B, above, must also appear on the outside of the express mail envelope. Bids received after the designated time and date will be returned unopened. The City of Vineland shall not be responsible for late postal or overnight delivery, nor shall postmark dates or overnight dates be considered in honoring of bids. The City of Vineland shall not be responsible for bidder's hand delivering bids who arrive late or to the wrong location.
- E. Sealed bids forwarded to the City before the time of opening of bids may be withdrawn upon written application of the bidder who shall be required to produce evidence showing that the individual is or represents the principal or principals involved in the bid. Once bids have been opened, they shall remain firm for a period of sixty (60) calendar days.
- F. All prices and amounts must be written in ink or preferably machine-printed. Bids containing any conditions, omissions, unexplained erasures or alterations, items not called for in the bid proposal form, attachment of additive information not required by the specifications, or irregularities of any kind, may be rejected by the City. Any changes, whiteouts, strikeouts, etc. in the bid must be initialed in ink by the person signing the bid.
- G. Bids will be received only on the bidding forms attached to this specification or a true copy thereof with all notations to be done in ink or typed and signatures must be done in ink. ONLY ORIGINAL

SIGNATURES ON ALL DOCUMENTS WILL BE ACCEPTED. RUBBER STAMPS, COMPUTER GENERATED SIGNATURES, COPIER GENERATED SIGNATURES, OR ANY OTHER ARTIFICIAL SIGNATURES SHALL NOT BE ACCEPTABLE AND SHALL BE REASON FOR REJECTION. City of Vineland will not be held responsible for any erroneous pages or pages missing from this bid document if it is obtained from a source other than the Purchasing Department of the City of Vineland. City of Vineland will not be held responsible if bidders (vendors) fail to receive any updates or addenda to the specification, if they haven't contacted the Purchasing Department.

- H. Each bid proposal form must give the full business address, business phone, fax, the contact person of the bidder, and be signed by an authorized representative as follows:
  - Bids by partnerships must furnish the full name of all partners and must be signed in the partnership name by one of the members of the partnership or by an authorized representative, followed by the signature and designation of the person signing.
  - Bids by corporations must be signed in the legal name of the corporation, followed by the name of the State in which incorporated and must contain the signature and designation of the president, secretary or other person authorized to bind the corporation in the matter.
  - Bids by sole-proprietorship shall be signed by the proprietor.
  - When requested, satisfactory evidence of the authority of the officer signing shall be furnished.
- I. Bidder should be aware of the following statutes that represent "Truth in Contracting" laws:
  - N.J.S.A. 2C:21-34, et seq. governs false claims and representations by bidders. It is a serious crime for the bidder to knowingly submit a false claim and/or knowingly make material misrepresentation.
  - N.J.S.A. 2C:27-10 provides that a person commits a crime if said person offers a benefit to a public servant for an official act performed or to be performed by a public servant, which is a violation of official duty.
  - N.J.S.A. 2C:27-11 provides that a bidder commits a crime if said person, directly or indirectly, confers or agrees to confer any benefit not allowed by law to a public servant.
  - Bidder should consult the statutes or legal counsel for further information.
- J. Potential bidders are hereby cautioned that they are bidding at their own risk and that the specifications/bid packages may or may not be complete if the specifications/bid packages were provided by a third party supplier.
  - The City shall not be responsible for third party supplied specifications/bid packages.
- K. The City reserves the right to reject individual and/or all bids in accordance with law.
- L. Any prospective bidder who wishes to challenge a bid specification shall file such challenge in writing with the Purchasing Agent no less than three (3) business days prior to the opening of the bids. Challenges filed after that time shall be considered void and having no impact on the contracting unit or the award of a contract; N.J.S.A. 40A: 11-13 (e).
- M. Contracts shall be awarded to the lowest responsive and responsible bidder. City Council reserves the right to reject any and all bids and to waive minor discrepancies therein. City Council also reserves the right to split bids, award individual items, or to award groups of items and categories of items.
- N. Questions concerning this bid shall be directed in writing to the Purchasing Department, Attention: Jeanine N. Meneghetti, Purchasing Agent, either by facsimile at (856) 405-4605 or by email at <a href="mailto:PurchasingOffice@vinelandcity.org">PurchasingOffice@vinelandcity.org</a> Last day for questions is noon, Monday, July 21, 2025..

# II. BID SECURITY AND BONDING REQUIREMENTS

|          | _  | The following provisions it indicated by an (X), shall be applicable to this bid and be made a part of the bid documents:   |
|----------|----|---|
|          | A. | BID GUARANTEE   |
|          |    | Bidder shall submit with the bid a certified check, cashier's check or a bid bond in the amount of ten percent (10%) of the total price bid, but not in excess of \$20,000, payable unconditionally to the City.  |
|          |    | When submitting a Bid Bond, it shall contain Power of Attorney for full amount of Bid Bond from a surety company authorized to do business in the State of New Jersey and acceptable to the City.   |
|          |    | The check or bond of the unsuccessful bidder(s) shall be returned pursuant to N.J.S.A. 40A:11-24a. The check or bond of the bidder to whom the contract is awarded shall be retained until a contract is executed and the required performance bond or other security is submitted.   |
|          |    | The check or bond of the successful bidder shall be forfeited if the bidder fails to enter into a contract pursuant to N.J.S.A. 40A:11-21.  |
|          |    | Failure to submit a bid guarantee shall result in rejection of the bid.   |
|          | В. | CONSENT OF SURETY   |
|          |    | Bidder shall submit with the bid a Certificate (Consent of Surety) with Power of Attorney for full amount of bid price from a Surety Company authorized to do business in the State of New Jersey and acceptable to the City stating that it will provide said bidder with a Performance Bond in the full amount of the bid. This certificate shall be obtained in order to confirm that the bidder to whom the contract is awarded will furnish Performance and Payment Bonds from an acceptable surety company on behalf of said bidder, any or all subcontractors or by each respective subcontractor or by any combination thereof which results in performance security equal to the total amount of the contract, pursuant to N.J.S.A. 40A:11-22. |
|          |    | Failure to submit a consent of surety shall result in rejection of the bid.   |
|          | C. | PERFORMANCE BOND  |
|          |    | Successful bidder shall simultaneously with the delivery of the executed contract, submit an executed bond in the amount of one hundred percent (100%) of the acceptable bid as security for the faithful performance of this contract.   |
|          |    | The performance bond provided shall not be released until final acceptance of the whole work and then only if any liens or claims have been satisfied. The surety on such bond or bonds shall be a duly authorized surety company authorized to do business in the State of New Jersey pursuant to N.J.S.A. 17:31-5.  |
|          |    | Failure to submit this with the executed contract shall be cause for declaring the contract null and void pursuant to N.J.S.A. 40A:11-22.   |
|          | D. | LABOR AND MATERIAL (PAYMENT) BOND   |
| <b>i</b> |    | Bidder shall with the delivery of the performance bond submit an executed payment bond to guarantee payment to laborers and suppliers for the labor and material used in the work performed under the contract.   |

Failure to submit a labor and material bond with the performance bond shall be cause for declaring the

contract null and void.

|   | E. 1                            | MAINTENANCE BOND   |  |  |  |  |  |  |  |
|---|---------------------------------|--|--|--|--|--|--|--|--|
|   |                                 | Upon acceptance of the work by the City, the contractor shall submit a maintenance bond (N.J.S.A. 40A:11-16.3) in an amount not to exceed 100% of the project costs guaranteeing against defective quality of work or materials for the period of:   |  |  |  |  |  |  |  |
|   |                                 | 1 year 2 years   |  |  |  |  |  |  |  |
|   | III. INTERPRETATION AND ADDENDA |  |  |  |  |  |  |  |  |
|   |                                 | The bidder understands and agrees that its bid is submitted on the basis of the specifications prepared by the City. The bidder accepts the obligation to become familiar with these specifications.   |  |  |  |  |  |  |  |
|   |                                 | Bidders are expected to examine the specifications and related bid documents with care and observe all their requirements. Ambiguities, errors or omissions noted by bidders should be promptly reported in writing to the Purchasing Agent. Any prospective bidder who wishes to challenge a bid specification shall file such challenges in writing with the contracting agent no less than three business days prior to the opening of the bids. Challenges filed after that time shall be considered void and having no impact on the contracting unit or the award of a contract pursuant to N.J.S.A. 40A:11-13. In the event the bidder fails to notify the City of such ambiguities, errors or omissions, the bidder shall be bound by the requirements of the specifications and the bidder's submitted bid. |  |  |  |  |  |  |  |
|   |                                 | No oral interpretation and or clarification of the meaning of the specifications for any goods and services will be made to any bidder. Such request shall be in writing, addressed to the Purchasing Agent. In order to be given consideration, a written request must be received at least ten (10) business days prior to the date fixed for the opening of the bid for goods and services.   |  |  |  |  |  |  |  |
|   |                                 | All interpretations, clarifications and any supplemental instructions will be in the form of written addenda to the specifications, and will be distributed to all prospective bidders. All addenda so issued shall become part of the specification and bid documents, and shall be acknowledged by the bidder in the bid. The City's interpretations or corrections thereof shall be final.  |  |  |  |  |  |  |  |
|   |                                 | When issuing addenda, the City shall provide required notice prior to the official receipt of bids to any person who has submitted a bid or who has received a bid package pursuant to N.J.S.A. 40A:11-23c.1.  |  |  |  |  |  |  |  |
|   | D. I                            | Discrepancies in Bids  |  |  |  |  |  |  |  |
|   |                                 | 1. Ditto marks are not considered writing or printing and shall not be used.   |  |  |  |  |  |  |  |
|   |                                 | 2. In the event that there is a discrepancy between the unit prices and the extended totals, the unit prices shall prevail. In the event there is an error of the summation of the extended totals, the computation by the City of the extended totals shall govern.   |  |  |  |  |  |  |  |
|   | E.                              | Pre-Bid Conference   |  |  |  |  |  |  |  |
| X | 1                               | stated in the Notice to Bidders: Pre-Bid Conference is not required for this bid.  |  |  |  |  |  |  |  |
|   | JA                              | A pre-bid conference for this proposal will be held on  Attendance is not mandatory, but is strongly recommended. Failure to attend does not relieve the bidder of ny obligations or requirements.   |  |  |  |  |  |  |  |

### IV. BRAND NAMES, STANDARDS OF QUALITY AND PERFORMANCE

- A. Brand names and/or descriptions used in these specifications are to acquaint bidders with the types of goods and services desired and will be used as a standard by which goods and services offered as equivalent will be evaluated.
- B. Variations between the goods and services described and the goods and services offered are to be fully identified and described by the bidder on a separate sheet and submitted with the bid proposal form. Vendor literature WILL NOT suffice in explaining exceptions to these specifications. In the absence of any exceptions by the bidder, it will be presumed and required that the goods and services as described in the bid specification be provided or performed.
- C. It is the responsibility of the bidder to document and/or demonstrate the equivalency of the goods and services offered. The City reserves the right to evaluate the equivalency of the goods and services.
- D. In submitting its bid, the bidder certifies that the goods and services to be furnished will not infringe upon any valid patent or trademark and that the successful bidder shall, at its own expense, defend any and all actions or suits charging such infringement, and will save the City harmless from any damages resulting from such infringement.
- E. Only manufactured and farm products of the United States, wherever available, shall be used pursuant to N.J.S.A. 40A:11-18.
- F. The contractor shall guarantee any or all goods and services supplied under these specifications. Defective or inferior goods shall be replaced at the expense of the contractor. The contractor will be responsible for return freight or restocking charges.

### V. INSURANCE AND INDEMNIFICATION

The insurance documents as listed below shall include but are not limited to the following coverage's. (where insurance requirements are listed under other sections of these specifications, the higher limits will prevail.)

### A. INSURANCE REQUIREMENTS

1. Worker's Compensation Insurance

Workers Compensation insurance shall be maintained in full force during the life of the contract, covering all employees engaged in performance of the contract pursuant to N.J.S.A. 34:15-12(a) and N.J.A.C. 12:235-1.6. Statutory Limit for Workers' Compensation and \$500,000 for Employer's Liability.

2. General Liability Insurance

General liability insurance shall be provided with limits of not less than \$1,000,000 any one person/any one accident for bodily injury and property damage and \$3,000,000 aggregate, and shall be maintained in full force during the life of the contract.

3. Automobile Liability Insurance

Automobile liability insurance covering contractor for claims arising from owned, hired and non-owned vehicles with limits of not less than \$1,000,000 any one person / any one accident for bodily injury and property damage, and shall be maintained in full force during the life of the contract.

4. Other Forms of Insurance Required

### B. CERTIFICATES OF THE REQUIRED INSURANCE

Certificates of Insurance for those policies required above shall be submitted with the contract. Such coverage shall be with an insurance company authorized to do business in the State of New Jersey and shall name the City of Vineland as an additional insured.

Self-insured contractors shall submit an affidavit attesting to their self-insured coverage and shall name the City of Vineland as an additional insured.

### C. INDEMNIFICATION

Bidder shall indemnify and hold harmless the City of Vineland from all claims, suits or actions, and damages or costs of every name and description to which the City of Vineland may be subjected or put by reason of injury to the person or property of another, or the property of the City of Vineland resulting from negligent acts or omissions on the part of the contractor, the contractor's agents, servants or subcontractors in the delivery of goods and services, or in the performance of the work under the contract.

### VI. PRICING INFORMATION FOR PREPARATION OF BIDS

- A. The City of Vineland is exempt from any local, state or federal sales, use or excise tax.
- B. Estimated Quantities (Open-End Contracts): The City has attempted to identify the item(s) and the estimated amounts of each item bid to cover its requirements; however, past experience shows that the amount ordered may be different than that submitted for bidding. The right is reserved to decrease or increase the quantities specified in the specifications pursuant to N.J.A.C. 5:30-11.2 and 11.10. NO MINIMUM PURCHASE IS IMPLIED OR GUARANTEED.
- C. Contractor shall be responsible for obtaining any applicable permits or licenses from any government entity that has jurisdiction to require the same. All bids submitted shall have included this cost.
- D. Bidders shall insert prices for furnishing goods and services required by these specifications. Prices shall be net, including any charges for packing, crating, containers, etc. All transportation charges shall be fully prepaid by the contractor, F.O.B. destination and placement at locations specified by the City. As specified, placement may require inside deliveries. No additional charges will be allowed for any transportation costs resulting from partial shipments made for the contractor's convenience.
- E. No bidder will be allowed to offer more than one price on each item even though he/she may feel that he has two (2) or more types/products that will meet the specifications. Bidders must determine for themselves which type/product to offer. If said bidder should submit more than one price on any item, all prices for the item shall be rejected.

### VII. STATUTORY AND OTHER REQUIREMENTS

The following are mandatory requirements of this bid and contract.

### A. MANDATORY AFFIRMATIVE ACTION CERTIFICATION

No firm may be issued a contract unless it complies with the affirmative action provisions of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27-1 et seq. The following information summarizes the full, required regulatory text, which is included as Exhibit A of this bid specification.

1. Goods and Services (including professional services) Contracts

Each contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents:

- i. A photocopy of a valid letter that the contractor is operating under an existing Federally approved or sanctioned affirmative action program (good for one year from the date of the letter); or
- ii. A photocopy of a Certificate of Employee Information Report approval, issued in accordance with N.J.A.C. 17:27-4; or
- iii. A photocopy of an Employee Information Report (Form AA 302) provided by the Division and distributed to the public agency to be completed by the contractor in accordance with N.J.A.C. 17:27-4.

### 2. Maintenance/Construction Contracts

After notification of award, but prior to signing the contract, the contractor shall submit to the public agency compliance officer and the Division of Contract Compliance and Equal Employment Opportunity in Public Contracts (Division) an initial project workforce report (Form AA201) provided to the public agency by the Division for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7.

The contractor shall also submit a copy of the Monthly Project Workforce Report once a month thereafter for the duration of the contract to the Division and to the public agency compliance officer. The contractor shall also cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the job and/or off-the-job programs for outreach and training of minorities and women.

### B. AMERICANS WITH DISABILITIES ACT OF 1990

Discrimination on the basis of disability in contracting for the purchase of goods and services is prohibited. Bidders are required to read Americans with Disabilities language that is included as Appendix A of this specification and agree that the provisions of Title II of the Act are made a part of the contract. The contractor is obligated to comply with the Act and to hold the City harmless.

### C. STOCKHOLDER DISCLOSURE

N.J.S.A. 52:25-24.2 provides that no corporation, partnership, limited partnership, limited liability corporation, limited liability partnership, Subchapter S corporation or sole proprietorship, shall be awarded any contract for the performance of any work or the furnishing of any goods and services, unless, prior to the receipt of the bid or accompanying the bid of said corporation, partnership, limited partnership, limited liability corporation, limited liability partnership, Subchapter S corporation or sole proprietorship, bidders shall submit a statement setting forth the names and addresses of all stockholders in the corporation or partnership who own (10%) ten percent or more of its stock of any class, or of all individual partners in the

partnership who own a ten percent or greater interest therein. The included Statement of ownership shall be completed and attached to the bid proposal. This requirement applies to all forms of corporations and partnerships, including, but not limited to, limited partnerships, limited liability corporations, limited liability partnerships and Subchapter S corporations. Failure to submit a stockholder disclosure document shall result in rejection of the bid.

### D. PROOF OF BUSINESS REGISTRATION

N.J.S.A. 52:32-44 requires that each bidder (contractor) submit proof of business registration. Certificate must be submitted prior to award of the contract and the bidder had to have obtained the BRC prior to receipt of bids. A BRC is obtained from the New Jersey Division of Revenue. Information on obtaining a BRC is available on the internet at <a href="https://www.nj.gov/njbgs">www.nj.gov/njbgs</a> or by phone at (609) 292-1730. N.J.S.A. 52:32-44 imposes the following requirements on contractors and all subcontractors that **knowingly** provide goods or perform services for a contractor fulfilling this contract:

- 1) The contractor shall provide written notice to its subcontractors and suppliers to submit proof of business registration to the contractor;
- 2) Prior to receipt of final payment from a contracting agency, a contractor must submit to the contacting agency an accurate list of all subcontractors or attest that none was used;
- 3) During the term of this contract, the contractor and its affiliates shall collect and remit, and shall notify all subcontractors and their affiliates that they must collect and remit to the Director, New Jersey Division of Taxation, the use tax due pursuant to the Sales and Use Tax Act, (N.J.S.A. 54:32B-1 et seq.) on all sales of tangible personal property delivered into this State.

A contractor, subcontractor or supplier who fails to provide proof of business registration or provides false business registration information shall be liable to a penalty of \$25 for each day of violation, not to exceed \$50,000 for each business registration not properly provided or maintained under a contract with a contracting agency. Information on the law and its requirements is available by calling (609) 292-1730.

If boxes of the following items are checked, they are mandatory requirements of the bid proposal and contract.

### E. NEW JERSEY WORKER AND COMMUNITY RIGHT TO KNOW ACT

The manufacturer or supplier of chemical substances or mixtures shall label them in accordance with the N.J. Worker and Community Right to Know Law (N.J.S.A. 34:5A-1 et seq., and N.J.A.C 8:59-2 et seq.,). Containers that the law and rules require to be labeled shall show the Chemical Abstracts Service number of all the components and the chemical name. Further, all applicable Material Safety Data Sheets (MSDS) - hazardous substance fact sheet - must be furnished.

### F. PREVAILING WAGE ACT

Pursuant to N.J.S.A. 34:11-56.25 et seq., contractors on projects for public work shall adhere to all requirements of the New Jersey Prevailing Wage Act. The contractor shall be required to submit a certified payroll record to the City within ten (10) days of the payment of the wages. The contractor is also responsible for obtaining and submitting all subcontractors' certified payroll records within the aforementioned time period. The contractor shall submit said certified payrolls in the form set forth in N.J.A.C. 12:60-6.1(c). It is the contractor's responsibility to obtain any additional copies of the certified payroll form to be submitted by contacting the New Jersey Department of Labor and Workforce Development, Division of Workplace Standards. Bidders are cautioned to take into consideration statutory legal requirements, particularly, the payment of prevailing wages. It is Bidder's sole responsibility for determining the correct labor classification(s) and paying the correct and proper wage and benefits and it is imperative that the Contractor familiarize itself with the current wage and benefit rates before submitting bids based on these specifications. NOTE: Additional information and current wage rates are available at: http://lwd.state.nj.us/labor/wagehour/wagehour index.html.

## G. THE PUBLIC WORKS CONTRACTOR REGISTRATION ACT

N.J.S.A. 34:11-56.48 et seq. requires that a general or prime contractor and any listed subcontractors named in the contractor's bid proposal shall possess a certificate at the time the bid proposal is submitted. After bid proposals are received and prior to award of contract, the successful contractor shall submit a copy of the contractor's certification along with those of all listed subcontractors. All non-listed subcontractors and lower tier sub-subcontractors shall be registered prior to starting work on the project. It is the general contractor's responsibility that all non-listed sub-contractors at any tier have their certificate prior to starting work on the job.

Under the law a "contractor" is "a person, partnership, association, joint stock company, trust, corporation or other legal business entity or successor thereof who enters into a contract" which is subject to the provisions of the New Jersey Prevailing Wage Act [N.J.S.A. 34:11-56.25, et seq.] It applies to contractors based in New Jersey or in another state.

The law defines "public works projects" as contracts for "public work" as defined in the Prevailing Wage statute [N.J.S.A. 34:11-56.26(5)]. The term means:

- "Construction, reconstruction, demolition, alteration, or repair work, or maintenance work, including painting and decorating, done under contract and paid for in whole or in part out of the funds of a public body, except work performed under a rehabilitation program.
- "Public work" shall also mean construction, reconstruction, demolition, alteration, or repair work, done on any property or premises, whether or not the work is paid for from public funds..."
- "Maintenance work" means the repair of existing facilities when the size, type or
  extent of such facilities is not thereby changed or increased. While "maintenance"
  includes painting and decorating and is covered under the law, it does not include
  work such as routine landscape maintenance or janitorial services.

To register, a contractor must provide the State Department of Labor with a full and accurately completed application form. The form is available online at <a href="http://lwd.state.nj.us/labor/wagehour/regperm/pw">http://lwd.state.nj.us/labor/wagehour/regperm/pw</a> cont reg.html

N.J.S.A. 34:11-56.55 specifically prohibits accepting applications for registration as a substitute for a certificate of registration.

# H. NON-COLLUSION AFFIDAVIT (Not Applicable)

The Affidavit shall be properly executed and submitted with the bid proposal.

### I. PAY TO PLAY

Starting in January, 2007, business entities are advised of their responsibility to file an annual disclosure statement of political contributions with the New Jersey Election Law Enforcement Commission (ELEC) pursuant to N.J.S.A. 19:44A-20.27 if they receive contracts in excess of \$50,000 from public entities in a calendar year.

Business entities are responsible for determining if filing is necessary. Additional information on this requirement is available from ELEC at 888-313-3532 or at <a href="https://www.elec.state.nj.us">www.elec.state.nj.us</a>.

### J. NJ ONE CALL

By presenting a bid, contractor declares that he is aware of and, if required, will comply with the requirements of the "Underground Facility Protection Act (Public Law 1994, Chapter 118)" prior to commencing any intended excavation. The telephone number to call is 1-800-272-1000. The successful bidder will be required to show compliance with the requirement by submitting to the appropriate project coordinator the confirmation number obtained from ONE-CALL before any excavation is undertaken.

### VIII. METHOD OF CONTRACT AWARD

- A. The length of the contract shall be stated in the technical specifications. Pursuant to requirements of N.J.A.C. 5:30-5.1 et seq., any contract resulting from this bid shall be subject to the availability and appropriation of sufficient funds annually. Please see Section X, Termination of Contract, Sub-section E, for additional information.
- B. If the award is to be made on the basis of a base bid only, it shall be made to that responsible bidder submitting the lowest base bid.
- C. If the award is to be made on the basis of a combination of a base bid with selected options, it shall be made to that responsible bidder submitting the lowest net bid.
- D. The City may also elect to award the contract on the basis of unit prices.
- E. The form of contract shall be submitted by the City to the successful bidder. Terms of the specifications/bid package prevail. Bidder exceptions must be formally accepted by the City.
- F. Choice of Law: The agreement with the successful bidder shall be construed in accordance with the laws of the State of New Jersey. In the event of litigation or other legal proceedings commenced to enforce the terms of the agreement, the venue of such litigation shall be the Superior Court of New Jersey, Cumberland County.

### IX. CAUSES FOR REJECTING BIDS

Bids may be rejected for any of the following reasons:

- A. All bids pursuant to N.J.S.A. 40A:11-13.2;
- B. If more than one bid is received from an individual, firm or partnership, corporation or association under the same name;
- C. Multiple bids from an agent representing competing bidders;
- D. The bid is inappropriately unbalanced;
- E. The bidder is determined to possess, pursuant to N.J.S.A. 40A:11-4b, Prior Negative Experience; or,
- F. If the successful bidder fails to enter into a contract within 21 days, Sundays and holidays excepted, or as otherwise agreed upon by the parties to the contract. In this case at its option, the City may accept the bid of the next lowest responsible bidder. (N.J.S.A. 40A:11-24b)

### X. TERMINATION OF CONTRACT

- A. If, through any cause, the contractor shall fail to fulfill in a timely and proper manner obligations under the contract or if the contractor shall violate any of the requirements of the contract, the City shall there upon have the right to terminate the contract by giving written notice to the contractor of such termination and specifying the effective date of termination. Such termination shall relieve the City of any obligation for balances to the contractor of any sum or sums set forth in the contract. City will pay only for goods and services accepted prior to termination.
- B. Notwithstanding the above, the contractor shall not be relieved of liability to the City for damages sustained by the City by virtue of any breach of the contract by the contractor and the City may withhold any payments to the contractor for the purpose of compensation until such time as the exact amount of the damage due the City from the contractor is determined.
- C. The contractor agrees to indemnify and hold the City harmless from any liability to subcontractors/suppliers concerning payment for work performed or goods supplied arising out of the lawful termination of the contract by the City under this provision.
- D. In case of default by the contractor, the City may procure the goods or services from other sources and hold the contractor responsible for any excess cost.
- E. Continuation of the terms of the contract beyond the fiscal year is contingent on availability of funds in the following year's budget. In the event of unavailability of such funds, the City reserves the right to cancel the contract.
- F. ACQUISITION, MERGER, SALE AND/OR TRANSFER OF BUSINESS, ETC.

It is understood by all parties that if, during the life of the contract, the contractor disposes of his/her business concern by acquisition, merger, sale and or/transfer or by any means convey his/her interest(s) to another party, all obligations are transferred to that new party. In this event, the new City(s) will be required to submit all documentation/legal instruments that were required in the original bid/contract. Any change shall be approved by the City.

- G. The contractor will not assign any interest in the contract and shall not transfer any interest in the same without the prior written consent of the City.
- H. The City may terminate the contract for convenience by providing 60 calendar days advanced notice to the contractor.

### XI. PAYMENT

- A. No payment will be made unless duly authorized by the City's authorized representative and accompanied by proper documentation.
- B. Payment will be made in accordance with the City's policy and procedures.

### XII. W-9

A. Bidder shall complete W-9 form and submit to the City of Vineland Purchasing Department prior to contract award. This form is available at the following link: <a href="http://www.irs.gov/pub/irs-pdf/fw9.pdf?portlet=3">http://www.irs.gov/pub/irs-pdf/fw9.pdf?portlet=3</a>

# XIII. Contract Records

As per N.J.A.C. 17:44-2.2 Vendor shall maintain all documentation related to products, transactions or services under this contract for a period of five years from the date of final payment. Such records shall be made available to the New Jersey Office of the State Comptroller upon request.

### City of Vineland

### Revised Contract Language for BRC Compliance

Good and Services Contracts (including purchase orders)

\*Construction Contracts (including public works related purchase orders)

N.J.S.A 52:32-44 imposes the following requirements on contractors and all subcontractors that knowingly provide goods or perform services for a contractor fulfilling this contract:

- 1. the contractor shall provide written notice to its subcontractors and suppliers to submit proof of business registration to the contractor;
- 2. subcontractors through all tiers of a project must provide written notice to their subcontractors and suppliers to submit proof of business registration and subcontractors shall collect such proofs of business registration and maintain them on file;
- 3. prior to receipt of final payment from a contracting agency, a contractor must submit to the contacting agency an accurate list of all subcontractors and suppliers\* or attest that none was used:
- 4. during the term of this contract, the contractor and its affiliates shall collect and remit, and shall notify all subcontractors and their affiliates that they must collect and remit to the Director, New Jersey Division of Taxation, the use tax due pursuant to the Sales and Use Tax Act, (N.J.S.A> 54:32B-1 et seq.) on all sales of tangible personal property delivered into this State.

Pursuant to N.J.S.A. 54:49-4.1, a business organization that fails to provide a copy of a business registration as required, or that provides false business registration information, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000, for each proof of business registration not properly provided under a contract with a contracting agency. Information on the law and its requirements is available by calling (609) 292-9292.

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### **NEW JERSEY BUSINESS REGISTRATION**

Pursuant to P.L. 2004, c.57, all consultants (both in-state and out-of-state) must obtain a Business Registration Certificate (BRC) from the New Jersey Department of the Treasury, Division of Revenue prior to conducting business with the NJTPA. A consultant or subconsultant who fails to submit a copy of a valid BRC in accordance with the statue will be held liable for monetary penalties in accordance with N.J.S.A. 54-49-4.1. Questions regarding how to obtain a BRC can be directed to the New Jersey Division of Revenue at (609) 292-1730. The business registration form (Form NJ-REG) can be found online at:

http://www.state.nj.us/treasury/revenue/busregcert.shtml, or http://www.state.nj.us/treasury/revenue/gettingregistered.shtml.

### Sample New Jersey Business Registration Certificates:





(REVISED 4/10)

· . · .

# /10) EXHIBIT A MANDATORY EQUAL EMPLOYMENT OPPURTUNITY LANGUAGE N.J.S.A. 10:5-31 et seq. (P.L. 1975, C.127) N.J.A.C.17:27

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union of the contractor's commitments under this chapter and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to make good faith efforts to meet targeted county employment goals established in accordance with N.J.A.C. 17:27-5.2.

The contractor or subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, and labor unions, that it does not discriminate on the basis of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

In conforming with the targeted employment goals, the contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents:

- 1. Letter of Federal Affirmative Action Plan Approval
- 2. Certificate of Employee Information Report
- 3. Employee Information Report Form AA302 (electronically provided by the Division and distributed to the public agency through the Division's website at: <a href="https://www.state.nj.us/treasury/contract">www.state.nj.us/treasury/contract</a> compliance

The contractor and its subcontractors shall furnish such reports or other documents to the Division of Public Contracts Equal Employment Opportunity Compliance as may be requested by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Public Contracts Equal Employment Opportunity Compliance for conducting a compliance investigation pursuant to <u>Subchapter 10 of the Administrative Code at N.J.A.C. 17:27</u>.

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# AMERICANS WITH DISABILITIES ACT OF 1990 Equal Opportunity for Individuals with Disability

The contractor and the City of Vineland, (hereafter "City") do hereby agree that the provisions of title 11of the Americans With Disabilities Act of 1990 (the "Act") (42 U.S.C. S121 01 et seq.). which prohibits discrimination on the basis of disability by public entities in all services, programs, and activities provided or made available by public entities, and the rules and regulations promulgated pursuant there unto, are made a part of this contract. In providing any aid, benefit, or service on behalf of the City of Vineland pursuant to this contract, the contractor agrees that the performance shall be in strict compliance with the Act. In the event that the contractor, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the contractor shall defend the City in any action or administrative proceeding commenced pursuant to this Act The contractor shall indemnity, protect, and save harmless the City, its agents, servants, and employees from and against any and all suits, claims, losses, or damages, of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The contractor shall, at its own expense. appear, defend, and pay any and all charges for legal services and any all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the City's grievance procedure, the contractor agrees to abide by any decision of the City which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the City of Vineland or if the City of Vineland incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the contractor shall satisfy and discharge the same at its own expense.

The City shall, as soon as practicable after a claim bas been made against it, give written notice thereof to the contractor along with full and complete particulars of the claim. If any action or administrative proceedings is brought against the City of Vineland, or any of its agents, servants, and employees, the City shall expeditiously forward or have forwarded to the contractor every demand, complaint, notice, summons, pleading, or other process received by the City or its representatives.

It is expressly agreed and understood that any approval by the City of the services provided by the contractor pursuant to this contract will not relieve the contractor of the obligation to comply with the Act and to defend, indemnify, protect, and save harmless the City pursuant to this paragraph.

It is further agreed and understood that the City of Vineland assumes no obligation to indemnify or save harmless the contractor, its agents, servants, employees and servants, employees and subcontractors for any claim which may arise out of their performance of this Agreement. Furthermore, the contractor expressly understands and agrees that the provisions of this indemnification clause shall in no way limit the contractors obligations assumed in this Agreement, nor shall they be construed to relieve the contractor from any liability, nor preclude the City from taking any other actions available to it under any other provisions of the Agreement or otherwise at law.

### NEW JERSEY ANTI-DISCRIMINATION PROVISIONS NJ.S.A.10:2-1 ET SEQ.

Pursuant to NJ.S.A. 10:2-1, if awarded a contract, the contractor agrees that:

- a. In the hiring of persons for the performance of work under this contract or any subcontract hereunder, or for the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under this contract, no contractor, nor any person acting on behalf of such contractor or subcontractor, shall, by reason of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex, discriminate against any person who is qualified and available to perform the work to which the employment relates:
- b. No contractor, subcontractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee engaged in the performance of work under this contract or any subcontract hereunder, or engaged in the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under such contract, on account of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex:
- c. There may be deducted from the amount payable to the contractor by the contracting public agency, under this contract, a penalty of \$50.00 for each person for each calendar day during which such person is discriminated against or intimidated in violation of the provisions of the contract; and
- d. This contract may be canceled or terminated by the contracting public agency, and all money due or to become due hereunder may be forfeited, for any violation of this section of the contract occurring after notice to the contractor from the contracting public agency of any prior violation of this section of the contract.

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# **Breakers & Switches Specification**

Vineland Municipal Electric Utility

SECTION(S): 337519 & 337733 VMEU Project Code: 25-015

> Revision 0 June 26, 2025

 Project Lead: <u>Tom Dunmore</u>
 Date: <u>06/26/2025</u>

 Prepared by: <u>Will Burns</u>
 Date: <u>06/26/2025</u>

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# SECTION 337519 – GAS HIGH VOLTAGE CIRCUIT BREAKER SECTION 337733 – MEDIUM VOLTAGE UTILITY CUT-OUTS

### PART 1 - GENERAL

### 1.1. Introduction

- A. This specification describes the general and detailed requirements for 69 & 138 kV SF6, dead tank power circuit breakers and 15kV bypass switches for use on Vineland Municipal Electric Utility (VMEU) systems. Minimum order per bid will be specified as initial quantities and will be ordered at the time of award. Additional quantities will be ordered on an as needed basis in quantities of at least the minimum re-order quantity specified for each material type. Materials will be awarded in whole or in part, as best suits VMEU. Seller shall provide only new equipment that conforms to all VMEU Standards and Technical Specifications as well as industry best practices.
- B. VMEU will be responsible for the installation, operation, and regular maintenance of supplied equipment.

#### 1.2. Terms & Conditions

- A. City of Vineland's General Instructions
  - i. It shall be each prospective Bidder's responsibility to read and understand the requirements as outlined and set forth in the document entitled "City of Vineland General Instructions" that precedes this specification. The general conditions outlined in this specification are not intended to duplicate or amend those instructions.
  - ii. See General Instructions Section III.C related to any request for interpretation or clarification of the meanings contained within this specification. Any questions or requests for interpretation or clarification of meanings SHALL go through the City of Vineland's Purchasing Department.
  - iii. See General Instructions Section VI.D related to delivery charges.

### B. Definition of Terms

- i. Whenever the following terms are used in these specifications or pertaining to these specifications, the following definitions shall apply:
  - a. Approved: Having the approval or subject to the approval of the Director of the City of Vineland Electric Utility or his authorized representative.
  - b. City: The City of Vineland, New Jersey, acting for themselves or through their duly empowered representatives.
  - c. Contractor: The successful Bidder to whom a contract is awarded to for the execution of the work and or the providing of materials described herein.
  - Manufacturer: The designer and constructor of the equipment to be supplied herein.
  - e. Suitable, Satisfactory, Proper, Adequate, Acceptable, and terms of like import: Meeting the requirements of the case in the judgment of the City.

 VMEU: The Vineland Municipal Electric Utility, a department of the City of Vineland.

### C. Codes and Standards

- Any references to standards or codes of local or state authorities, shall be references to the latest approved versions as published at the date of taking bids, unless specifically stated otherwise.
- ii. The equipment covered by these specifications shall be designed, tested, and assembled in accordance with the latest applicable standards as prepared by but not limited to:
  - a. American National Standards Institute (ANSI)
    - ANSI/NETA ATS: Standard for Acceptance Testing Specifications for Electrical Power Equipment and Systems
  - b. American Society of Civil Engineers (ASCE)
  - c. American Society for Testing and Materials (ASTM)
    - i. ASTM D2472: Standard Specification for Sulfur Hexafluoride
  - d. Institute of Electrical and Electronic Engineers (IEEE) including:
    - i. IEEE 100: The IEEE Standard Dictionary of Electrical and Electronic Terms.
    - ii. IEEE C37.2: Electrical Power System Device Function Numbers, Acronyms, and Contact Designations.
    - iii. IEEE C37.04: IEEE Standard Rating Structure for AC High-Voltage Circuit Breakers (ANSI)
    - iv. IEEE C37.06: AC High-Voltage Circuit Breakers Rated on a Symmetrical Basis

       Preferred Ratings and Related Required Capabilities
    - v. IEEE C37.09: IEEE Standard Test Procedure for AC High-Voltage Circuit Breaker Rated on a Symmetrical Current Basis (ANSI)
    - vi. IEEE C37.11: IEEE Standard Requirements for Electrical Control for AC High-Voltage (>1000 V) Circuit Breakers
    - vii. IEEE C37.12: AC High Voltage Circuit Breakers Rated on a Symmetrical Current Basis
    - viii. IEEE C57.13: IEEE Standard Requirements for Instrument Transformers (ANSI).
    - ix. IEEE C37.30.1: IEEE Standard Requirements for AC High-Voltage Air Switches Rated Above 1000 V
    - x. IEEE C37.35: IEEE guide for the Application, Installation, Operation and Maintenance of High-Voltage Air Disconnecting and Load Interrupter Switches
  - e. PJM Interconnection LLC (PJM)
    - PJM Transmission Owner Guidelines Section V.D: Design, Application, Maintenance & Operation Technical Requirements; Circuit Breakers
    - ii. PJM Transmission Owner Guidelines section VI.C: Rating Guides; Circuit Breakers

- f. National Electrical Manufacturers Association (NEMA) including:
  - i. NEMA 250 Enclosures for Electrical Equipment (1000V Maximum).
  - ii. NEMA CC 1: Electric Power Connectors for Substations
  - iii. NEMA SG4: Alternating Current High Voltage Circuit Breakers NEMA
  - iv. NEMA WC 70/ ICEA S-95-658: Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- g. National Fire Protection Association (NFPA)
- h. Occupational Safety and Health Administration (OSHA)
  - OSHA Rule 1910.269-1994, Electric Power Generation, Transmission, and Distribution: Electrical Protective Equipment

### D. Materials and Equipment

i. Unless specifically provided otherwise in each case, all materials and equipment supplied for permanent installation shall conform to applicable standard specifications and shall be new, unused, undamaged and of good quality and workmanship. Proposed materials shall be of the type and manufacturer as specified or an approved equal which meets or exceeds the specified material requirements. Full documentation shall be provided with the proposal for any proposed equals.

### E. Inspection

i. All materials supplied by the Contractor shall be subject to the inspection of VMEU, who shall have the authority to reject any materials which in their judgment, do not conform with the requirements of the specifications, or which in the opinion of VMEU may be unsuitable or unsafe for the purpose for which it is intended.

### F. Ownership

- i. Ownership of all materials shall remain vested in the manufacturer or Contractor until such materials are received and accepted in good condition by VMEU.
- ii. Acceptance by VMEU shall in no way relieve the Contractor of its responsibilities as defined under these specifications.
- iii. Guarantees, when requested, shall be furnished by the Contractor on forms provided or approved by VMEU and shall be signed by the Contractor.

### 1.3. Spare Parts

- A. These Specifications cover the offering, by the Supplier, of supplying a complete set of spare and maintenance parts, which in the opinion of the manufacturer, would be prudent for a customer utilizing equipment of the types and quantities proposed to have on hand for future need rather than ordering on an "as needed" basis. This offering shall be itemized in the bid response.
- B. The intent is to obtain parts and material quantity recommendation and pricing for specialty parts that would be unique to the Power Circuit Breakers proposed. This may include such materials as trip coils, auxiliary relays, mechanical linkages, contacts, and other such items where experience has shown the manufacturer that the stocking of such items would expedite future maintenance.

- C. It is not intended to include such items that would be common to the testing of Power Circuit Breakers in general such as test leads, travel analyzers, meters, hand tools (unless specially fabricated for the equipment proposed), general lubricants and other such items.
- D. Nothing herein shall be construed as a commitment by the Owner to purchase all or any of the spare and maintenance parts recommended by the Supplier. The Owner reserves the right to evaluate the offering as spare and maintenance parts and to determine the type and quantities of such parts to be supplied (if any) as a portion of the overall materials Purchase Order.

### 1.4. Warranty

- A. Circuit Breakers materials and equipment shall be free of any defects or deficiencies.
- B. The seller shall supply a suitable warranty to cover inspection, repair and or replacement of Power Circuit Breakers due to any defects or deficiencies in materials, parts, equipment, design, or workmanship for a period of three years from the date of final acceptance.
- C. The Contractor obligation shall include any and all expense that may be involved in the rectification of manufacturer defects or deficiencies up to and including provide VMEU with a suitable replacement that will be installed by VMEU. They shall, however, not be required to make repairs or replacements that may be necessary as a result of negligence or improper care or operation on the part of the City or the City's employees, or of ordinary wear and tear.
- D. Neither the final payment, nor any other provision of the contract, nor partial or entire use of the equipment as intended, shall relieve the Contractor of liability with respect to the guarantees and warranties referred to in these specifications or any other warranties expressed or implied.

### 1.5. Equipment Delivery

- A. All base bid items as specified for guaranteed purchase ordered upon award of the purchase order contract. Availability (delivery) of materials is an important factor in the evaluation of bids.
- B. Materials and or equipment, shall be delivered Freight Prepaid and Allowed.
- C. Ownership of all materials and equipment shall remain vested with the manufacturer or Contractor until acceptance by VMEU. All claims for recovery of damages shall be the responsibility of the successful Bidder/Contractor
- D. Acceptance of ownership by the City shall in no way relieve the Contractor of its responsibilities under this contract.
- E. Contractor shall require shipper to provide VMEU with a minimum of 24-hour notice of delivery so arrangements for lifting equipment can be made. The Shipper may be responsible for unloading material in the event such notice is not received.
- F. All customs fees, fares, and arrangements are of the responsibility of the Contractor.

#### 1.6. Submittals

A. Submit With Bid

- i. Itemized Equipment Pricing
- ii. Shipping Costs
- iii. Lead Time
- iv. Dimensional Drawings Plan View, Front and Side Elevations
- v. All equipment manufactures
- vi. Technical Specifications (Including "cut-sheets," installation & maintenance manuals, etc.)

### B. After Award

i. All submittals to be provided electronically. Invoices shall be provided in duplicate via email and/or by postal service.

### 1.7. Shop Drawings

- A. Before proceeding with fabrication, approval of shop drawings will be required six weeks after award. The Manufacturer shall supply two (2) hard-copies to VMEU of all shop drawings and email a PDF set, so it may be ascertained that all equipment being furnished meets the specifications. The drawings shall include copies each of the outline, nameplate, elementary and control wiring drawings.
- B. The outline drawing shall show dimensions of equipment, including bushings, mechanism housing, supporting frame and all other important external features. These drawings shall show weights, bushing catalog numbers and ampere ratings, description of top bushing terminals and arrangement of all external accessory devices.
- C. Each drawing submitted shall be clearly marked with the name of the project, the specification title, the specification number, the drawing revision number, the drawing revision date, the equipment nomenclature, and the Supplier's name. If standard drawings are submitted, the applicable equipment and devices furnished shall be clearly marked.
- D. Approval of drawings shall not be held to relieve the Supplier of obligations to meet all requirements of the Specifications, of responsibility for correctness of the drawings, or of responsibility to meet original shipping promise on basis of Owner being allowed one week for approval.
- E. VMEU shall return any comments or modification requirements of the shop drawings within no more than two weeks after WMEU receipt. The manufacturer shall include incorporate any VMEU comments or modifications on the final drawings. VMEU may require a second submittal of shop drawings. If any extension of time is required due to a protracted drawing approval process, the price shall remain as quoted.
- F. Receipt of Approval Drawings by the Manufacturer constitutes authorization for manufacture only, based upon the corrections found thereon.
- G. Shop drawings are to be furnished to VMEU by the Manufacturer before shipment. The drawings shall be provided in both AutoCAD DWG format and PDF format delivered electronically and on a USB drive. Among the drawings to be furnished:
  - Outline and assembly, showing foundation bolt size and locations and all other principal dimensions.

- ii. Control and relay panel front and rear views.
- iii. Nameplate(s)
- iv. Details of bushing and bushing terminal connectors.
- Diagram of bushing current transformers, connection, and number of turns, polarity marking and ratios.
- vi. Details of mechanism housing.
- vii. Wiring control and schematic diagrams.
- viii. Panel Connection Diagram showing exact connection for all components furnished.

### 1.8. Instruction Books

A. The Manufacturer shall furnish two (2) hardcopies to VMEU of applicable instruction books and one softcopy PDF Instructions book on a USB drive with each binder with each breaker. One book and one USB drive shall be shipped prior to delivery of the breaker and one book and one USB drive with the breaker. These books shall provide detailed operation and maintenance instructions and troubleshooting procedure on control and other subsystems for all equipment furnished. These books shall be enclosed in a moisture resistant envelope and a suitable place for storage shall be provided in each breaker such that the instruction book may remain with the breaker at all times. Instruction books are to include one (1) drawing each of the outline, nameplate, bushing, accessory schematics, and accessory detail wiring drawings as listed below under Final Drawings.

### PART 2 — GAS HIGH VOLTAGE CIRCUIT BREAKER TECHNICAL SPECIFICATIONS

### 2.1.69 kV Breaker ratings and configuration

- A. 72.5 kV rated maximum voltage class, 350 kV basic impulse insulation level (BIL), dead tank, SF6 gas insulated
- B. 2,000 amperes continuous current.
- C. 40 kA symmetrical interrupting current rating.
- D. Maximum interrupting time shall be 50 ms (3 cycles). The closing and latching current shall be 83 kA (peak).
- E. Live parts (vertical) clearances shall not be less than 11'-0", from bottom of base/frame.
- F. Standard Power Circuit Breaker Ratings for 69 kV breakers

| Max<br>Class<br>(kV) | Nameplate<br>Continuous<br>Current (A) | Interrupting<br>Time<br>(Cycles) | BIL<br>(kV) | Max RMS<br>Sym Amps<br>(kA) | Control<br>Voltage (V<br>DC) | Op Mech<br>Type                  | Interrupting<br>Medium |
|----------------------|--|----------------------------------|-------------|-----------------------------|------------------------------|----------------------------------|------------------------|
| 72.5                 | 2000                                   | 3                                | 350         | 40                          | 125                          | Spring-Spring /<br>Stored Energy | SF6 Gas                |

### 2.2. 138 kV Breaker Ratings and configuration

A. 145 kV rated maximum voltage class, 650 kV basic impulse insulation level (BIL), dead tank, SF6 gas insulated

- B. 2,000 amperes continuous current.
- C. 40 kA symmetrical interrupting current rating.
- D. Maximum interrupting time shall be 50 ms (3 cycles), and the closing and latching current shall be 83 kA (peak).
- E. Live parts (vertical) clearances shall not be less than 13'-0", from bottom of base/frame.
- F. Standard Power Circuit Breaker Ratings for 138 kV breakers

| Max<br>Class<br>(kV) | Nameplate<br>Continuous<br>Current (A) | Interrupting<br>Time<br>(Cycles) | BIL<br>(kV) | Max RMS<br>Sym Amps<br>(kA) | Control<br>Voltage (V<br>DC) | Op Mech<br>Type                  | Interrupting<br>Medium |
|----------------------|--|----------------------------------|-------------|-----------------------------|------------------------------|----------------------------------|------------------------|
| 145                  | 2000                                   | 3                                | 650         | 40                          | 125                          | Spring-Spring /<br>Stored Energy | SF6 Gas                |

### 2.3. High Voltage Power Circuit Breaker Requirements

### A. General

- i. Quantity, rating, and any other specific requirements shall be provided in the purchase order.
- ii. All breakers shall be 3-pole single throw on a 60 Hz system, effectively grounded system, with corresponding nominal voltages 69 kV, and 138 kV.
- iii. Breakers shall operate over an ambient temperature range of -30°C to 40°C without derating.
- iv. All exposed live parts shall be made of non-corrosive, non-binding material.
- v. Thermal Load Current Capability Ratings
  - a. The thermal continuous current carrying capabilities shall meet PJM TSDS section VI.C Rating Guides "Circuit Breakers". The maximum continuous current carrying capabilities for normal, emergency four hour and load dump operations per PJM guidelines are listed below. These limits do not include the limitations of current transformers, bushings, or external connections, which must be considered separately.

| Rating Duration                     | Winter<br>(% Nameplate Ampacity) | Summer<br>(% Nameplate Ampacity) |
|-------------------------------------|----------------------------------|----------------------------------|
| Normal                              | 123                              | 104                              |
| Emergency, 0 to 4 hours             | 134                              | 116                              |
| Load Dump, 0.25 hours, (15 minutes) | 176                              | 138                              |

### B. Circuit Breaker SF6 Gas & Related Items

- i. SF6 Gas Breakers shall use single pressure SF6 puffer technology interrupters.
- ii. SF6 gas utilized in breakers shall conform to the requirements of the most recent edition of ASTM D2472. SF6 gas shall be tested to meet these requirements before being utilized.

- iii. Overpressure protection shall be provided for the tank assembly holding the pressurized SF6 gas. Overpressure protection shall be fabricated such that gas will not vent towards personnel near the breaker or immediately adjacent substation equipment.
- iv. A gas leak/rupture shall not affect the interrupting capabilities of the breaker, except as described in section vii.f below.
- v. Low gas pressure devices are required for alarming and tripping.
- vi. Pressure settings shall be adjustable.
  - a. Low gas pressure tripping circuits shall trip and block closing of the breaker.
  - b. Trip and close blocking circuits shall be mechanically or electrically latched and designed for manual reset at the breaker.

### vii. Gas Monitoring System

- a. Each gas compartment / tank shall be individually monitored for SF6 gas density.
- b. The gas monitoring system shall consist of temperature compensated devices (e.g.: density switches, relays, etc.)
- c. Each density monitor shall have a visual indicator.
- d. Density monitor shall be capable of being calibrated with the breaker in-service.
- e. All gas piping, fittings, gauges, and other connections shall be made leak tight. Valves used in the gas systems shall have seats designed to ensure a leak-tight breaker with low maintenance requirements.
- f. A gas pressure density device shall be capable of monitoring and relaying the following three different specified density levels:
  - Level 1 Alarm (SF6 gas replenish level): When the gas density / pressure is low, but the breaker still operates satisfactorily a low gas alarm indication is required.
  - ii. Level 2 Trip (Breaker trip & Block close level): When the gas density / pressure drops low enough to reduce fault interrupting capability the breaker is required to trip, and block closing and a low gas alarm indication is required.
  - iii. Level 3 Remote Trip: When the gas density / pressure continues to drop (such as rapid SF6 leakage leading the 3rd stage) and the breaker cannot safely trip at load current, the breaker is required to be isolated by the tripping of surrounding circuit breakers or where applicable other disconnect equipment. A low gas alarm indication is required. The breaker density levels for these conditions shall be specified by the manufacturer in the data sheet.
    - 1. At level 3, a breaker failure protection scheme shall be utilized to achieve the automatic isolation of the breaker that leaks rapidly.
- g. Manufacturer to provide voltage withstand capability for gas density / pressure between levels 2 and 3 and atmospheric pressure.

- h. An amber lamp, or relay target in the breaker cabinet shall indicate that the low gas pressure tripping circuit has operated.
- viii. Two normally open "a" and two normally closed "b" contacts at the alarm level shall be provided for VMEU's use.
- ix. Breakers shall be supplied with DILO gas valve fittings, type DN8.
- x. A blocking valve shall be supplied in the output line of each compressor to allow compressor maintenance without releasing the contents of the receiving vessel.

### C. Operating Mechanism

- i. Mechanism control for operating the breaker shall be designed to meet the functional requirements of the latest revision of IEEE Standard C37.11 "Requirements for Electric Circuit Breaker Control". The breaker shall be provided with all control devices and wiring required for the mechanism. All devices in the closing circuit shall be rated for continuous duty if they can be continuously energized when a closing signal is held on. This requirement shall apply even if the breaker should trip during the continuous application of the closing signal. Control circuit fusing and isolation shall be as per IEEE Standard C37.11-1997 (R2014), Figure 6, Scheme 1. All control functions shall be located in the control cabinet.
- ii. Motor Operated Spring Charged Type Each motor operated spring charged type power circuit breaker shall be furnished with motor, spring, and alarm contacts to detect a partially charged spring. Spring alarm contacts shall be open when the spring is fully charged. All alarm contacts shall be Form "C".
- iii. Hydraulic Type Each hydraulic power circuit breaker shall be furnished with pressure gauge, pump, motor, reservoir, all necessary relays, elapsed time meter to show pump running time, pressure switches for control and a pressure switch to provide remote indication of low pressure.
- iv. Electromagnetic Actuator Type Redundant trip coils shall be furnished by manufacturer. Note: An interposing, high speed, relay (LJ type or similar) is required, when electromagnetic actuators are applied, to allow for standard functionality (LJ type of similar impedance characteristics mimic a standard relay coil) without changes to the relay trip coil monitoring logic. LJ or similar also allows for protection against mis-operation due to control system grounds.
  - a. The breaker shall trip and close within a specified range of voltage as specified in IEEE C37.06.
- v. Guards shall be provided for all compressor belts.
- vi. Breaker shall be designed to prevent main contacts from changing position upon loss of mechanism operating energy.
- vii. The trip current per series set of trip coils shall not exceed 20 amperes at any time during the trip operation. Trip circuits which utilize capacitors are not acceptable. Dual trip coils shall be connected in parallel, with each string not to exceed 20 amperes.
- viii. Redundant trip coils shall be furnished by the manufacturer.

- ix. If pneumatic operating systems are used, a blocking valve shall be supplied at the output of the compressor to allow compressor maintenance without releasing the contents of the receiving vessel.
- x. Each three phase breaker shall be electrically operated via a stored energy mechanism, with weather-proof mechanism housing and operating equipment, all permanently mounted on a painted common, metal framework base.
- xi. The interruption mechanism shall store one O-C-O operating sequence, and its springs shall automatically recharge within 10 seconds by a universal motor.

### D. Bushings and Connectors

- i. Bushings shall be constructed of extra high strength porcelain or composite with appropriate creepage and clearance distances.
- Bushings shall be supplied with a tin-plated aluminum stud and a tin plated NEMA
   4-hold pad suitable for the full load current of the breaker.
- iii. Bushings shall be colored ANSI 70 light gray.
- iv. Bushings shall be interchangeable between circuit breakers from the same manufacturer and of the same voltage and ampere ratings.

### E. Tank

- i. Breaker tanks shall conform to NEMA SG4 and be designed to house three single phase, single throw interrupters. Tank shall be capable of supporting operating mechanism, six bushings and up to twelve bushing current transformers; 2 bushing CTs per bushing. Tank heaters shall be provided with each breaker.
- ii. All gas piping, fittings, gauges, and other connections shall be made leak tight. Valves used in the gas systems shall have seats designed to ensure a leak-tight breaker with low maintenance requirements.
- iii. All pressure gauges, pressure switches, valves, and relays shall be readily accessible and located in suitable outdoor weather tight enclosures.

### F. Current Transformers

- i. Breakers shall have bushing type current transformers furnished on designated bushings per NEMA SG4-3.10 and IEEE C57.13. The quantity and ampere rating shall be as specified on Bid Sheet. The current transformers shall be multi ratio and unless otherwise stated, have a relaying accuracy rating of C800 a burden designation of B-8.0 and a thermal rating factor of 2.0. Excitation curves of the current transformers shall be provided in the instruction book.
- ii. CT terminal blocks shall be the Marathon shorting type or approved equivalent.
- iii. Each set of CT's shall be connected to an exclusive terminal block.
- iv. All current transformers shall have all taps brought out and terminated on marked terminal blocks. Current transformer leads shall be connected to short circuiting type terminal blocks located in the breaker control cabinet. The short-circuiting strips of these blocks shall be grounded. These terminal blocks shall be used exclusively for CT wiring.

v. All taps of the CTs shall be shorted and grounded at the terminal block in the control cabinet for shipping purposes.

### G. Nameplates

- All nameplates shall be permanently affixed with stainless steel self-tapping screws or stainless steel rivets.
- At a minimum, breaker nameplates shall be affixed to the breaker tank and to the interior of the control cabinet door.
- iii. The nameplates shall provide the following information regarding the breaker:
  - a. Manufacturer's name and address
  - b. Breaker type and model number
  - c. Breaker serial number
  - d. Date and location of manufacture
  - e. Rated nominal, maximum, and BIL voltages
  - f. Rated voltage k factor
  - g. Rated continuous current and symmetrical interrupting capacity
  - h. Rated frequency
  - i. Total weight
  - j. Quantity of insulating medium
  - k. Operating ranges of control circuit voltages
  - I. CT ratios and connections
  - m. Drawing numbers of CT saturation, phase angle, and ratio correction factor curves

### H. Breaker Controls

- Incoming AC and DC control power shall terminate at terminal blocks followed immediately by fuses sized appropriately for design of the breaker.
- ii. Charging motors shall be rated for 240 V AC.
- iii. Heaters, and other components requiring AC power shall be rated for 240 V AC.
- iv. Trip, close and other control functions shall be 125 V DC. These functions shall operate properly within the range of 100 V to 140 V, as measured at the breaker.
- v. Fused knife switches for both positive and negative (or line and neutral) shall be used for all control power and heater circuits.
- vi. The breaker shall be equipped with two electrically and mechanically independent trip coils. The failure of one trip coil shall not damage or impair the operation of the other coil. The design shall be such that the simultaneous energization of both trip coils shall not prevent the breaker from tripping.
- vii. Provisions shall be made for two independent red indicating lights at the relay panel to indicate the breaker's closed position. These lights shall be LED and

- operate at 125 V DC. Each red light shall be wired in series with each trip coil in order to provide monitoring of the trip coil's integrity.
- viii. Provisions shall be made for one green indicating light at the relay panel to indicate the breaker's open position. This light shall be LED and operate at 125 V DC.
- ix. The primary breaker control shall be via a push button switch, which shall be mounted on the panel. A red push button shall be utilized for the closed operation, and a green push button shall be utilized for the open operation.
- x. In addition to the contacts required by the manufacturer, the design shall provide a minimum of eight auxiliary "a" and eight auxiliary "b" contacts for VMEU's use.
- xi. A manual emergency trip device (i.e. "push to trip", "pull to trip", etc.) for local control shall be located outside the control cabinet.
  - a. The handle shall be painted red for visibility, and a weather-resistant sign shall clearly identify the manual trip handle.
  - b. The manual trip device shall prevent closing until the device is manually reset.
  - A manual reset switch shall be provided for the manual emergency trip deceive.
     Mechanical protection shall be provided for the manual emergency trip device to prevent accidental tripping.
  - d. Any push to trip device shall require a weatherproof cover.
- xii. Circuit protection shall be with fuses (or links), not with circuit breakers.
- xiii. Spring charging motor MCB trip alarm or loss of AC alarm shall be provided.

### Grounding

- i. All breakers are to be provided with NEMA two-hole ground pads attached to diagonally opposite breaker support legs. Where circuit breaker support legs are bolted on to the housing, the two NEMA two-hole ground pads shall be mounted on opposite sides of the breaker housing.
- ii. Each welded steel supporting framework, single-pole or three-pole as applicable, shall have two (2) ground terminals suitable for 1/0 to 500 kcmil stranded copper grounding cable. Terminals shall be located on diagonal corners of each framework. The frame for 72.5 kV breakers shall accommodate a minimum of 11' 0" vertical clearance from any live part to the foundation. The frame for 145 kV breakers shall accommodate a minimum of 13' 0" vertical clearance from any live part to the foundation.
- iii. The Manufacturer shall extend a ground bus to all breaker parts requiring a ground connection, including the control cabinet, control cabinet doors and hinged panels where applicable. The ground bus and ground connections shall be capable of carrying the rated circuit breaker short circuit current in seconds without overheating: 2 seconds at 69 kV and below and 1 second at 115 kV and above. (See IEEE C37.06-2009, Table 5 & Table 9). Steel bolted connections shall not be used in the ground path.
- iv. The control cabinet shall be intentionally grounded and electrically connected to the breaker tank wall by means of a copper ground conductor/braid. The

- connection to the tank shall be made by brazing or by a mechanical connector.
- Control cabinet swing doors shall be electrically connected to the control cabinet through flexible tinned copper ground braids.

### J. Control Cabinet and Accessories

- The breaker control cabinet shall be an outdoor weatherproof rated design, featuring a rear-sloped roof and drip protection in the front.
- ii. The control cabinet shall include two vertically mounted hinged doors capable of opening a minimum of 90 degrees to provide full access within the cabinet. Provisions shall be included to hold doors in the fully open position.
- iii. Hinged doors shall have a handle with a 3-point latching system and provisions for pad locking.
- iv. The control cabinet shall be installed in an accessible location and mounted at a convenient operating height. Finished mounted height of control cabinet shall be no higher than four (4) feet as measured from the bottom of the cabinet doors to finished grade.
- v. The control cabinet shall have a weatherproof breather.
- vi. A removable plate having spacing for the entrance of four (4) individual four (4) inch conduits shall be provided in the bottom of the compartment where terminal blocks for VMEU's connections are located.
- vii. The bottom compartment shall house all control components and have a conduit entrance suitable for a minimum of three runs of 2" conduit.
- viii. The control cabinet shall be mounted closest to the breaker primary bushing terminals 1 & 2.
- ix. The cabinet shall have provisions for storing an instruction book on the interior of the cabinet door.
- x. Status semaphore (Close/Open), Counter and SF6 gauge shall be visible from outside the cabinet.
- xi. A 120 V AC, 20 A, GFCI duplex receptacle outlet shall be installed in an appropriate weatherproof enclosure on the exterior of the control cabinet.

### xii. Cabinet Heaters

- a. Compartment strip heaters shall be fused, rated 208 / 240 V AC, and wired to operate at 120 V AC. Heaters shall be thermostatically controlled.
- b. Heaters shall have grills to prevent contact with heating elements.
- c. Heater leads shall be nickel-plated copper with Teflon insulation.
- d. Strip heaters shall not be located on the bottom of the control cabinet or on the sides within three inches of the bottom.

### xiii. Cabinet Lights

a. The control cabinet shall be equipped with an internal 120 V AC LED light controlled by a door-actuated switch. The light shall illuminate when the

- cabinet door is opened and shut off when the cabinet door is closed.
- b. The light bulb shall be equipped with a protective guard to prevent breakage.
- The light circuit shall be separately protected by a 20 ampere single pole circuit breaker.

### K. Terminal Blocks and Auxiliary Devices

- i. All Manufacturer wiring for external connections and all spare contacts on devices shall be carried to terminal blocks located in the control cabinet and shall be arranged as indicated in the Schedule of Equipment.
- Device terminal blocks shall not be mounted on a hinged panel.
- All auxiliary relays, contactors, motor control devices, switches, etc. are to be furnished with individual dust tight cases or other specifically approved dust covers.
- iv. All auxiliary devices, contactors, motor starters, etc., rated 600 volts, shall be equipped with inter-phase barriers between their connection terminals. Keepers shall be provided to prevent devices from being loosened by vibration.
- v. All control and auxiliary devices shall be marked inside the cabinets with the same designation used on the wiring diagrams. All control and auxiliary devices shall be labelled with black background and white letters. The label shall be installed in close proximity to the device and visible.
- vi. Gauges shall be arranged so that they can be easily read by a person standing near the base of the circuit breaker.
- vii. Unless otherwise specified, the face of the gauge shall be mounted in the vertical plane for mounting heights of 90 inches or less from the mounting surface (grade).
- viii. For mounting heights, higher than 90 inches the face of the gauge shall be at an angle of 30 degrees from the vertical plane.
- ix. All auxiliary device locations including valves and gauges shall be subject to the VMEU's approval.
- x. All control switches, fuse blocks, etc. shall be installed not more than 60 inches above nor less than 36 inches below the mounting surface (grade).
- xi. All control cabinet devices shall be readily accessible for easy removal.
- xii. Terminal blocks for customer's connection shall be Marathon or equivalent for ring tongue lugs. All terminal blocks shall have screws and metal terminal strips and strips shall remain secured in place when the screws are removed.
- xiii. Terminal blocks using stud and nut configuration are not acceptable.
- xiv. All terminal blocks shall accommodate control cable up to No. 8 AWG and shall have a min. screw size of 10-32. Power supply (AC & DC) and CT Terminal Blocks are required to accommodate #4 AWG connections.
- xv. All wires shall be identified at terminal blocks
- xvi. Terminal blocks used for external connections shall be mounted above the conduit

- entrance plate and away from the operating mechanism in the control cabinet.
- xvii. At least 20% spare positions shall be provided for future wiring.
- xviii. Terminal block positions for cable shield terminations shall be provided for control, power, and current transformer cables. Shield terminals shall be grounded on the cabinet side.
- xix. All alarm contacts and spare auxiliary contacts shall be wired out to terminal blocks for VMEU's use.
- xx. All knife switches shall be Marathon or States.

### L. Control and CT Wires & Cables

- i. All control and CT wire shall be stranded copper type and shall have cross-linked polyethylene insulation type XHHW meeting the most recent edition of NEMA WC70/ICEA S-95-658 Standard for Non-shielded Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy, or VMEU approved equivalent.
- ii. All auxiliary power cables shall have similar insulation or suitable for outdoor use.
- iii. Control and CT wires shall not contain splices between terminal points.
- iv. All control wire shall be a minimum of #12 AWG.
- v. All CT wire shall be a minimum of #10 AWG.
- vi. All circuits shall use ring type crimped terminals. Spade-type terminals are unacceptable.
- vii. Legible sleeve type wire markers shall be used at each end of any wire over 6 inches in length.

### M. Wiring and Conduit Systems

- i. Provisions shall be made to ensure the isolation of each set of CT leads from any other set of CT leads. Each set of CT leads shall be directly routed, in conduit, to separate terminal blocks. Only one set of CT leads per block is permitted. Where two or more CT terminal blocks are in a common junction box, the box shall be compartmentalized.
- ii. Where circuit breaker poles are not mounted on a common base, individual mounted compartmentalized junction boxes shall be used with rigid conduit run between junction boxes and a master CT junction box on the center pole. The CT conduit between poles shall be at least 8 feet above the breaker base. No disconnecting type splicing connectors are permitted in CT leads.
- iii. A minimum of two interconnecting conduits are required between pole and main control cabinets for inter-pole (non-CT) wiring. Where circuit breaker poles are not mounted on a common base, the rigid conduit between poles shall be run underground or if run above ground at least 8 feet above the breaker base. Wiring associated with trip coil #1 and trip coil #2 shall be in separate conduits with maximum feasible separation maintained in the cabinets.
- iv. Wiring associated with the four-independent conduit system described in Section above shall enter the main control cabinet and be terminated in separate areas to

- provide the maximum feasible separation.
- v. The operating ranges of the tripping and control circuits described in this section shall meet the requirements of Table 8 in IEEE Std. C37.06.
- vi. Bushing/terminal numbering shall be 1-3-5 away from left side of outside end of mechanism cabinet, 2-4-6 away from right of same cabinet. Bushing/terminal numbers shall be shown on outline drawing and physically indicated on the breaker.
- vii. All current transformer secondary and circuit breaker accessory and control wiring external to the control housing and boxes shall be run in conduit.
- viii. All conduit and fittings shall be liquid tight with metal insert and of adequate size.

### N. Finish

- i. All steel shall be chemically cleaned and treated. After cleaning, all metal surfaces shall be inspected for rust and scale, and if necessary, further cleaned to remove any remaining rust and scale. Immediately after cleaning and inspection, at least one coat of primer shall be applied to all metal surfaces. The enclosure shall then have at least two coats of ANSI 70 light gray finish applied prior to shipment.
- ii. Manufacturer shall provide two one-pint aerosol spray cans of color-matching paint, per breaker, for field touch-ups.
- iii. All steel support structures shall be hot-dipped galvanized.

### O. Lifting Attachments

i. The breaker frame and/or housing shall have metal tubes securely mounted to the bottom of the unit which allows the unit to be lifted from underneath using a standard set of forks or fork truck. The top of the cabinet shall have attachment points at all four corners, rated for a minimum of 5,000 lbs or 125% of the actual weight, whichever is greater.

### P. Additional Required Accessories

- i. All required interrupting medium to place the breakers in service
- ii. Filling valve(s), a three-way valve for testing, and pressure gauges
- iii. Short-circuiting-type BCT terminal boards in mechanism housing
- iv. Removable maintenance closing device
- v. Provisions for installation of contact travel transducer as applicable. Connection drawings and test procedure shall be included in the breaker documentation.
- vi. Mechanical position indicator
- vii. One (1) latch checking switch
- viii. Tripping device for manually tripping without opening the mechanism housing
- ix. One (1) operation counter
- x. Manual operating devices for maintenance purposes. This shall include any tools required for timing the breaker or to slow close the breaker.

All other specialty tools not listed above required for installing or maintaining the breaker

### Q. Spare Parts

i. The Manufacturer shall supply a list of all materials that the manufacturer has found prudent for the customer to have "On Hand." These materials might include: Bushings, CT's, closing coils, tripping coils, X and Y relays, charging motors, etc. Actual items and their quantities, to be determined by the Supplier, shall be bid, and itemized in the bid.

### R. Optional Input – Output Module

- i. Optionally, and only when specified in the purchase order, the vendor shall furnish a distributed input/output (I/O) module & associated wiring.
- ii. The distributed I/O module shall be an SEL 2440.
- iii. Power supply ratings shall match breaker's rated DC control voltage
- iv. Module input voltage shall match breaker's rated DC control voltage
- v. Fiber connections shall be (unless specified otherwise) 850nm multimode fiber.
- vi. When an input module is not specified the cabinet design shall incorporate provisions and space for a future, customer field installed distributed I/O module.

### PART 3 - 15kV BYPASS SWITCHES TECHINCAL SPECIFICATIONS

### 3.1. 15kV Bypass switches ratings and configuration

- A. Recloser by-pass switch assembly
  - i. Three (3) Siemens 604-30CHT Type B-2 O.C.R. switches (or) equivalent
  - ii. 15kV Maximum Nominal Voltage Rating
  - iii. 110kV BIL (Basic Insulation Level)
  - iv. 900A Continuous Current
  - v. 2.25" D.B.C. Polymer Insulators
  - vi. Load-break hooks
  - vii. Angled By-Pass Blade
  - viii. Extended terminal pads with captive mounting hardware
  - ix. Adjustable pole gain
  - x. Assembly at factory on 101" (or 8ft) fiberglass arm
  - xi. Single removeable lifting hoist bracket

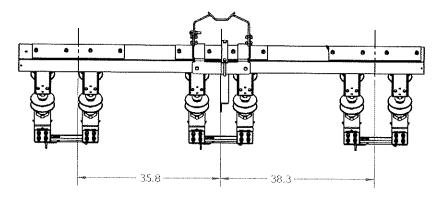
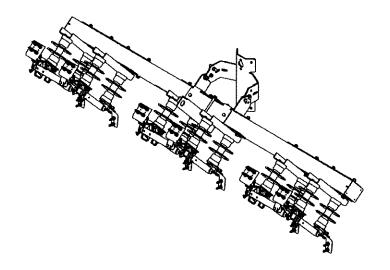


Figure 1: Example Configuration



### PART 4 - EXECUTION

### 4.1. Factory Acceptance Tests and Quality Control

- A. IEEE, ANSI, and NEMA Standard Tests
  - i. The manufacturer shall perform all manufacturer's standard ANSI routine factory tests on the circuit breaker(s) and switch(s) provided.
  - ii. The manufacturer's tests shall ensure successful operation of all parts of the circuit breaker(s) and switch(s).
  - iii. The tests shall include at a minimum all routine tests described in ANSI/IEEE C37.09 and/or IEEE C37.30.1.
  - iv. The manufacturer's tests shall conform to the applicable requirements of ANSI, IEEE, and NEMA standards.

### 4.2. Inspection Upon Delivery

- A. Identification (of material upon delivery)
  - i. Part/Component number verification.
  - ii. Comparison of "received quantity" to "billed quantity" verification.

### B. Material Condition

- Verify no shipping (and/or) handling damage present.
- ii. Verify material is new and did not expire per specific shelf life.

### 4.3. Field Testing (By Others)

- A. All equipment shall be tested and calibrated by an independent third-party testing company per requirements of ANSI/NETA ATS "Standards for Acceptance Testing Specifications for Electrical Power Equipment and Systems," unless these procedures are exceeded by the manufacturer's recommended test and calibration procedures.
- B. Final acceptance testing as witnessed by VMEU or VMEU representative shall be performed in the final configuration of equipment installation to ensure the breaker and associated equipment meet all operational, safety and specification requirements when installed. Equipment must pass final acceptance testing before VMEU acceptance of any equipment.
- C. Any necessary tests, in addition to those herein specified, to determine the strength, tightness, suitability or adequacy of any parts of the construction shall be made in accordance with the direction of VMEU. The expense of such additional tests shall be paid for by the Contractor when the tests show that materials or construction furnished by them are defective or not up to the requirements of the specifications, otherwise by the City. In the event of failed tests, the Contractor shall replace equipment as needed and re-test until all equipment passes required tests.

### 4.4. Shipping

- A. Each breaker shall be supplied with sufficient SF6 gas for shipping purposes. The amount of gas shall be specifically stated on all shipped breakers.
- B. One (1) bottle of clean SF6 gas per breaker to be provided for final fill on-site.
- C. Breakers shall be shipped as a single unit. Breakers shall be supplied with necessary bushings, current transformers, control devices, stored energy operating systems and control cabinets.
- D. Bypass switches shall be shipped each as a single unit; fully assembly on fiberglass cross arms.
- E. Method of packing and loading shall be such as to protect all parts from dampness, corrosion, wreckage, or vibration injury that might reasonably be encountered in transportation and handling.
- A. Manufacturer shall ensure shipping methods are waterproof and provide adequate bracing for equipment. The manufacturer shall design and prepare the equipment for shipment to prevent damage in transit and shall be responsible for all damage during transit to the delivery point. The manufacturer shall bear cost of equipment

replacement due to shipping damage due to improper shipping preparation.

- F. Release for shipment is to be granted by the Owner based upon the manufacturer's compliance with the following:
  - i. Furnishing of the requisite number of copies of the final drawings as called for in the Specifications.
  - ii. Thirty (30) days notification of tentative shipping schedule and two (2) working days notification prior to delivery.
- G. The following mailing addresses shall be used for correspondence:
  - i. For Large Shipments:

Vineland Municipal Electric Utility 415 N. West Avenue Vineland, NJ 08360 Attention: <u>William Burns</u> Phone: (856) 794-4000 Ext 4977

ii. For Other Correspondence:

Vineland Municipal Electric Utility 57 W. Park Avenue Suite A, PO Box 1508 Vineland, NJ 08362 Attention: William Burns

Phone: (856) 794-4000 Ext 4977

### PART 5 - ATTACHMENTS

### 5.1. List of Attachments

| Attachment | Description   |
|------------|---|
| 1          | Attachment 1 - 69kV High Voltage Circuit Breaker Guaranteed Data Sheet  |
| 2          | Attachment 2 - 138kV High Voltage Circuit Breaker Guaranteed Data Sheet |
| 3          | Proposal Sheet  |

### Attachment 1: 69kV High Voltage Circuit Breaker Guaranteed Data Sheet

### FOR VENDOR USE ONLY

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|-----------|-------|--|--|
| Breake    | er Ty | уре  |  |
| )<br>pera | tor T | Гуре   |  |
| •         |       |  |  |
| 1.        | Vo    | ltage  |  |
|           | a.    | Rated nominal system voltage                                 | kV, RMS sym  |
|           | b.    | Rated maximum voltage  | kV, RMS sym  |
|           | c.    | First Pole to Clear Factor (Kpp): confirm = 1.5              |  |
| 2.        | Ra    | ted Continuous Current                                       | A, RMS sym   |
|           | M     | ax. contact temperature rise @ rated current                 | °C   |
| 3.        | Ra    | ted Frequency  | Hz   |
| 4.        | Int   | errupting Capability Rating:                                 |  |
|           | a.    | Three-phase rated short circuit current at:                  |  |
|           |       | i. Rated nominal system voltage                              | kA, RMS sym  |
|           |       | ii. Rated maximum system voltage                             | kA, RMS sym  |
|           | b.    | Ratio of asymmetrical to symmetrical interrupting current    |  |
|           | c.    | Rated short-time current                                     | kA, RMS sym  |
|           | d.    | Rated short-circuit current                                  | kA, RMS sym  |
|           | e.    | Short circuit current @ Atmospheric Conditions               | kA, RMS sym  |
|           | f.    | Close and latching current                                   | kA, peak   |
|           | g.    | Permissible tripping delay                                   | seconds  |
|           | h.    | Interrupting capability per IEEE Std. C37.04-latest revision |  |
|           |       | i. Standard breaker duty cycle of O – 0.3s – CO – 15s – CO   | kA, RMS sym  |
|           |       | ii. CO - 0.5 Sec - CO @ rated nominal voltage                | kA, RMS sym  |
|           |       | iii. Shortest reclose time with no derating                  | kA, RMS sym  |
|           | i.    | Out-of-phase switching                                       | kA, RMS sym  |
|           | j.    | Capacitance switching:                                       |  |
|           | -     | i. Rated line charging current                               | A, RMS   |
|           |       | ii. Rated shunt capacitor bank current (isolated)            | A, RMS   |
|           |       | iii. Rated shunt capacitor bank current (back to back)       | A, RMS   |
|           |       | iv. Voltage range in which each (1,2,3) applies              | kV, RMS sym  |
|           |       | v. Rated transient inrush current                            | A, peak  |
|           |       | vi. Rated frequency of inrush current                        | Hz   |
|           |       | vii. Rated interrupting time                                 | ms   |
|           | k.    | Minimum consecutive CO operations at full interrupting       |  |
|           |       | rating, starting at normal working pressure without          |  |
|           |       | operation of the compressor or pump motor (if provided)      |  |
| 5         | Or    | perating Time (60 Hz basis)                                  | W 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4  |

|    | a.  | Maximum interrupting time - time from energization of trip coil | to extinction of arc on |
|----|-----|---|-------------------------|
|    |     | primary contacts:   |                         |
|    |     | i. 25-100 percent rated short circuit current                   | cycles                  |
|    |     | ii. 0-25 percent rated short circuit current                    | cycles                  |
|    | b.  | Max. opening time - time from energization of trip coil to      |                         |
|    |     | contact parting   | ms                      |
|    | c.  | Min. open time - time from energization of trip coil to         |                         |
|    |     | contact parting.  | ms                      |
|    | d.  | Maximum closing time – time from energization of closing        |                         |
|    |     | coil to contacts touching                                       | cycles                  |
|    | e.  | Minimum allowable reclosing time                                | cycles                  |
|    | f.  | Reclosing time range  | cycles                  |
|    | g.  | Tolerance for timing on contact opening                         | ms                      |
|    | h.  | Tolerance for timing on contact closing                         | ms                      |
|    | i.  | Maximum inter-pole spread during contact closing                | ms                      |
|    | j.  | Maximum inter-pole spread during contact opening                | ms                      |
| 6. | Tei | mperature Range   |                         |
|    | a.  | Maximum ambient temperature                                     | °C                      |
|    | b.  | Minimum ambient temperature                                     | °C                      |
|    | c.  | Maximum contact temperature rise                                | °C                      |
| 7. | Die | electric Withstand  |                         |
|    | a.  | One-minute dry withstand (60 Hz)                                | kV, RMS                 |
|    | b.  |   | kV, RMS                 |
|    | c.  | Full wave impulse withstand (BIL)                               | kV, peak                |
|    | d.  | Two microsecond chopped wave withstand                          | kV, peak                |
|    | e.  | Three microsecond chopped wave withstand                        | kV, peak                |
| 8. | Bre | eaker Dimensions (Including Cabinets)                           |                         |
|    | a.  | Height overall  | inches                  |
|    | b.  | Length overall  | inches                  |
|    | c.  | Width overall   | inches                  |
|    | d.  | Minimum phase spacing   | inches                  |
|    | e.  | Minimum external clearance of live parts to breaker base        | inches                  |
|    | f.  | Minimum external clearance of bottom of porcelain               |                         |
|    |     | to breaker base   | inches                  |
|    | g.  | Minimum external clearance of live parts to ground              | inches                  |
| 9. | Bre | eaker Data  |                         |
|    | a.  | Weight including insulating medium                              | lbs.                    |
|    | b.  | Weight less insulating medium                                   | lbs.                    |
|    | c.  | Weight of insulating medium                                     | lbs.                    |
|    | d.  | Shipping weight   | lbs.                    |
|    | e.  | Impact loading for foundation design                            | lbs.                    |
|    | f.  | Where applicable provide the following:                         |                         |
|    |     | i. Tank diameter  | inches                  |
|    |     | ii. Will all tanks be mounted on a common base?                 | Y/N                     |

|                 |     | iii. Volume of gas required                               | cubic-ft.                |
|-----------------|-----|---|--------------------------|
|                 | g.  | Operating noise at 10 feet                                | dBA                      |
|                 | h.  | Arcing contact material                                   |                          |
| 10.             | Clo | sing Coil   |                          |
|                 | a.  | Current at rated voltage                                  | A @V DC                  |
|                 | b.  | Current at lowest control voltage allowed by              | _                        |
|                 |     | IEEE C37.06 (latest revision)                             | A @V DC                  |
|                 | c.  | Voltage range   |                          |
|                 |     | i. Minimum  | V                        |
|                 |     | ii. Maximum   | v                        |
| 11.             | Tri | p Coil  | 4                        |
|                 |     | Current at rated voltage                                  | A @V DC                  |
|                 |     | Current at lowest control voltage allowed by              |                          |
|                 |     | IEEE C37.06 (latest revision)                             | A @V DC                  |
|                 | c.  | Voltage range   |                          |
|                 |     | i. Minimum  | V                        |
|                 |     | ii. Maximum   |                          |
| 12.             | Bus | shings  | -                        |
|                 | a.  | Manufacturer  |                          |
|                 | b.  | Insulating medium   |                          |
|                 | c.  | Insulation class (BIL)                                    |                          |
|                 | d.  | Maximum guaranteed R.I.V. level                           |                          |
|                 | e.  | Minimum external creepage distance L-Gnd                  | inches                   |
|                 | f.  | Strike distance   | inches                   |
|                 | g.  | Permissible safe strength of installed bushing:           |                          |
|                 | 0.  | i. Vertical downward (Compression)                        | lbs.                     |
|                 |     | ii. Cantilever (Shear)                                    | lbs.                     |
|                 |     | iii. Tensile  | lbs.                     |
|                 |     | iv. Torsion   | lbs.                     |
|                 | h.  | Height above floor required to remove bushing             | inches                   |
|                 | i.  | Manufacturer's drawing number:                            |                          |
|                 | j.  | Manufacturer's catalog number:                            |                          |
|                 | k.  | Will breaker be shipped with bushings installed?          | Y/N                      |
|                 |     | i. Stud connectors proposed                               |                          |
|                 |     | ii. Manufacturer  |                          |
|                 |     | iii. Manufacturer's catalog number                        |                          |
|                 | I.  | Emergency Short Time Current [6 Mo., 24 Hr., 4Hr., 15 Min | lattach senarate tablell |
|                 | ••  | i. Porcelain  | (accaen separate table)  |
|                 |     | ii. Polymer   |                          |
|                 | m   | Cost for additional spare breaker                         | \$USD                    |
| 12              |     | pe of Operating Mechanism System                          | Y                        |
| , بی            | a.  | Spring, Pneumatic, Pneumo-hydraulic OR Hydraulic          |                          |
| 1/1             |     | xiliary Loads   |                          |
| <del> ,</del> , |     | Compressor or pump motors (where applicable)              |                          |
|                 | a.  | complessor or paint motors (where applicable)             |                          |

|     |     | i. Horsepower @ 1- or 3-phase                                    | HP @ phase |
|-----|-----|--|------------|
|     |     | ii. Running current at rated voltage                             | A @V AC    |
|     |     | iii. Starting current at minimum starting voltage                | A @V AC    |
|     |     | iv. Starting current at rated starting voltage                   | A @V AC    |
|     |     | v. Voltage range   |            |
|     |     | 1) Minimum   | V          |
|     |     | 2) Maximum   |            |
|     |     | vi. Max. pressure withstand without over-pressure relief         | psig       |
|     |     | vii. Over-pressure relief point                                  | psig       |
|     | b.  | Spring charging motor (where applicable)                         |            |
|     |     | i. Horsepower @ 1 or 3 phases                                    | Hp @ phase |
|     |     | ii. Charging time  | seconds    |
|     |     | iii. Starting current at minimum starting voltage                | A @V AC    |
|     |     | iv. Starting current at rated starting voltage                   | A @V AC    |
|     |     | v. Voltage range   |            |
|     |     | 1) Minimum   | V          |
|     |     | 2) Maximum   | V          |
|     | c.  | Heaters  |            |
|     |     | i. Number  |            |
|     |     | ii. Location   |            |
|     |     | iii. Voltage   | V AC       |
|     |     | iv. Load   | <br>kW     |
|     |     | v. Guards provided?  | (Y/N)      |
|     | d.  | Maximum operational kVA/kW auxiliary load required               |            |
|     |     | per breaker  | kVA / kW   |
| L5. | Cur | rent Transformers  |            |
|     | a.  | Maximum number available per bushing                             |            |
|     | b.  |  |            |
|     | c.  | Thermal current rating factor for all taps                       |            |
|     | d.  | Ratios   |            |
| L6. | SF6 | System (where applicable)  | •**        |
|     | a.  | Normal operating pressure at 20o C                               | psig       |
|     | b.  | Minimum operating pressure with full interrupting rating         | psig       |
|     | c.  | Maximum pressure withstand without over-pressure relief          | psig       |
|     | d.  | Over-pressure relief point                                       | psig       |
|     | e.  | Are SF6 gas heaters supplied                                     | (Y/N)      |
|     | f.  | If heaters are not supplied what is highest temperature at which |            |
|     |     | gas will liquefy (condense)?                                     | °C         |
|     | g.  | Breaker SF6 Density level – Stage 1 Alarm                        | psig       |
|     | -   | i. Pressure/Density at Stage 2 trip and block close              | psig       |
|     |     | ii. Pressure/Density at Stage 3 lockout (remote trip)            | psig       |
|     | h.  | Voltage withstand capability between Remote Trip                 |            |
|     |     | & atmospheric pressure   | kV         |
|     |     | •  |            |

| Are | the following Accessories Provided?                              |   |
|-----|--|---|
| a.  | Pre-insertion resistors  | (Y/N)   |
|     | i. If not provided, are resistors available as an option?        | (Y/N)   |
|     | ii. Ohmage   | Ohms  |
| b.  | Voltage grading capacitors                                       | (Y/N)   |
| c.  | TRV control capacitor  | (Y/N)   |
| d.  | Rupture Discs  | (Y/N)   |
|     | i. If yes, maintenance intervals for inspection                  | Ha  |
|     | ii. If yes, maintenance interval for replacement                 |   |
| e.  | Over pressure relief valve                                       |   |
|     | i. If yes, maintenance intervals for inspection                  | <u> </u>  |
|     | ii. If yes, maintenance interval for replacement                 |   |
| Ma  | ntenance Requirements  |   |
| a.  | Number of mechanical operations before overhaul                  |   |
| b.  | Number of rated short circuits before internal maintenance check | Berno   |
| c.  | Number of rated continuous current interruptions before internal |   |
|     | maintenance check  | BOWNSON   |
| Mi  | scellaneous Items  |   |
| a.  | Recommended amount of technical supervision provided             |   |
|     | by manufacturer during equipment installation at substation/site |   |
|     | (Indicate per order or per breaker.)                             | hrs.  |
| b.  | Cost per day for additional factory service. \$                  | USD   |
|     | a.<br>b.<br>c.<br>d.<br>e.<br>Mai<br>a.<br>b.<br>c.              | <ul> <li>i. If not provided, are resistors available as an option?</li> <li>ii. Ohmage</li> <li>b. Voltage grading capacitors</li> <li>c. TRV control capacitor</li> <li>d. Rupture Discs <ol> <li>i. If yes, maintenance intervals for inspection</li> <li>ii. If yes, maintenance interval for replacement</li> </ol> </li> <li>e. Over pressure relief valve <ol> <li>i. If yes, maintenance intervals for inspection</li> <li>ii. If yes, maintenance interval for replacement</li> </ol> </li> <li>Maintenance Requirements <ol> <li>a. Number of mechanical operations before overhaul</li> <li>b. Number of rated short circuits before internal maintenance check</li> <li>c. Number of rated continuous current interruptions before internal maintenance check</li> </ol> </li> <li>Miscellaneous Items <ol> <li>a. Recommended amount of technical supervision provided by manufacturer during equipment installation at substation/site (Indicate per order or per breaker.)</li> </ol> </li> </ul> |

20. Exceptions to this Specification

a. List any exceptions taken to this specification and/or inquiry and attach exception list as part of this completed attachment. Each exception shall reference the appropriate section to this specification.

### Attachment 2: 138kV High Voltage Circuit Breaker Guaranteed Data Sheet

### FOR VENDOR USE ONLY

| Ma  | nufa | actu | rer  |  |
|-----|------|------|--|--|
| Bre | eake | r Ty | pe   | and the second s |
| Ор  | erat | or T | уре  | And and the Association of the Control of the Contr |
|     | 1.   | Vo   | ltage  |  |
|     |      | a.   | Rated nominal system voltage                                 | kV, RMS sym  |
|     |      | b.   | Rated maximum voltage  | kV, RMS sym  |
|     |      | c.   | First Pole to Clear Factor (Kpp): confirm = 1.5              |  |
|     | 2.   | Ra   | ted Continuous Current                                       | A, RMS sym   |
|     |      | Ma   | ax. contact temperature rise @ rated current                 | °C   |
|     | 3.   | Ra   | ted Frequency  | Hz   |
|     | 4.   | Int  | errupting Capability Rating:                                 |  |
|     |      | a.   | Three-phase rated short circuit current at:                  |  |
|     |      |      | i. Rated nominal system voltage                              | kA, RMS sym  |
|     |      |      | ii. Rated maximum system voltage                             | kA, RMS sym  |
|     |      | b.   | Ratio of asymmetrical to symmetrical interrupting current    |  |
|     |      | c.   | Rated short-time current                                     | kA, RMS sym  |
|     |      | d.   | Rated short-circuit current                                  | kA, RMS sym  |
|     |      | e.   | Short circuit current @ Atmospheric Conditions               | kA, RMS sym  |
|     |      | f.   | Close and latching current                                   | kA, peak   |
|     |      | g.   | Permissible tripping delay                                   | seconds  |
|     |      | h.   | Interrupting capability per IEEE Std. C37.04-latest revision |  |
|     |      |      | i. Standard breaker duty cycle of $O - 0.3s - CO - 15s - CO$ | kA, RMS sym  |
|     |      |      | ii. CO - 0.5 Sec - CO @ rated nominal voltage                | kA, RMS sym  |
|     |      |      | iii. Shortest reclose time with no derating                  | kA, RMS sym  |
|     |      | i.   | Out-of-phase switching                                       | kA, RMS sym  |
|     |      | j.   | Capacitance switching:                                       |  |
|     |      |      | i. Rated line charging current                               | A, RMS   |
|     |      |      | ii. Rated shunt capacitor bank current (isolated)            | A, RMS   |
|     |      |      | iii. Rated shunt capacitor bank current (back to back)       | A, RMS   |
|     |      |      | iv. Voltage range in which each (1,2,3) applies              | kV, RMS sym  |
|     |      |      | v. Rated transient inrush current                            | A, peak  |
|     |      |      | vi. Rated frequency of inrush current                        | Hz   |
|     |      |      | vii. Rated interrupting time                                 | ms   |
|     |      | k.   | Minimum consecutive CO operations at full interrupting       |  |
|     |      |      | rating, starting at normal working pressure without          |  |
|     |      |      | operation of the compressor or pump motor (if provided)      |  |
|     | 5.   | Or   | perating Time (60 Hz basis)                                  |  |

|    | a.  | Maximum interrupting time - time from energization of trip coil | to extinction of arc ( |
|----|-----|---|------------------------|
|    |     | primary contacts:   |                        |
|    |     | i. 25-100 percent rated short circuit current                   | cycles                 |
|    |     | ii. 0-25 percent rated short circuit current                    | cycles                 |
|    | b.  | Max. opening time - time from energization of trip coil to      |                        |
|    |     | contact parting   | ms                     |
|    | c.  | Min. open time - time from energization of trip coil to         |                        |
|    |     | contact parting   | ms                     |
|    | d.  | Maximum closing time – time from energization of closing        |                        |
|    |     | coil to contacts touching                                       | cycle:                 |
|    | e.  | Minimum allowable reclosing time                                | cycles                 |
|    | f.  | Reclosing time range  | cycle:                 |
|    | g.  | Tolerance for timing on contact opening                         | m:                     |
|    | h.  | Tolerance for timing on contact closing                         | m:                     |
|    | i.  | Maximum inter-pole spread during contact closing                | ms                     |
|    | j.  | Maximum inter-pole spread during contact opening                | m                      |
| 6. | Tei | mperature Range   |                        |
|    | a.  | Maximum ambient temperature                                     | °(                     |
|    | b.  | Minimum ambient temperature                                     | °(                     |
|    | c.  | Maximum contact temperature rise                                | °(                     |
| 7. | Die | electric Withstand  |                        |
|    | a.  | One-minute dry withstand (60 Hz)                                | kV, RMS                |
|    | b.  | Ten-second wet withstand (60 Hz)                                | kV, RMS                |
|    | c.  | Full wave impulse withstand (BIL)                               | kV, peal               |
|    | d.  | Two microsecond chopped wave withstand                          | kV, peal               |
|    | e.  | Three microsecond chopped wave withstand                        | kV, peal               |
| 8. | Bre | eaker Dimensions (Including Cabinets)                           |                        |
|    | a.  | Height overall  | inche                  |
|    | b.  | Length overall  | inche                  |
|    | c.  | Width overall   | inche                  |
|    | d.  | Minimum phase spacing   | inche                  |
|    | e.  | Minimum external clearance of live parts to breaker base        | inche                  |
|    | f.  | Minimum external clearance of bottom of porcelain               |                        |
|    |     | to breaker base   | inche                  |
|    | g.  | Minimum external clearance of live parts to ground              | inche                  |
| 9. | Bre | eaker Data  |                        |
|    | a.  | Weight including insulating medium                              | lbs                    |
|    | b.  | Weight less insulating medium                                   | lbs                    |
|    | c.  | Weight of insulating medium                                     | lbs                    |
|    | d.  | Shipping weight   | lbs                    |
|    | e.  | Impact loading for foundation design                            | lbs                    |
|    | f.  | Where applicable provide the following:                         |                        |
|    | . • | i. Tank diameter  | inche                  |
|    |     | ii. Will all tanks be mounted on a common base?                 | Y/i                    |
|    |     |   | <del></del> ','        |

|     |   | iii. Volume of gas required                            |  | cubic-ft.      |
|-----|---|--|--|----------------|
|     | g.                                      | Operating noise at 10 feet                             |  | dBA            |
|     | h.                                      | · .  | -  | <del>-</del>   |
| 10. | Clo                                     | osing Coil   |  |                |
|     |   | Current at rated voltage                               |  | A @V DC        |
|     |   | Current at lowest control voltage allowed by           |  |                |
|     |   | IEEE C37.06 (latest revision)                          |  | A @V DC        |
|     | c.                                      | Voltage range  |  |                |
|     |   | i. Minimum   |  | V              |
|     |   | ii. Maximum  |  | V              |
| 11. | Trij                                    | p Coil   |  |                |
|     |   | Current at rated voltage                               |  | A @V DC        |
|     |   | Current at lowest control voltage allowed by           |  |                |
|     |   | IEEE C37.06 (latest revision)                          |  | A @V DC        |
|     | c.                                      | Voltage range  | ,  |                |
|     |   | i. Minimum   |  | V              |
|     |   | ii. Maximum  | •  | V              |
| 12. | Bus                                     | shings   |  |                |
|     | a.                                      | Manufacturer   |  |                |
|     | b.                                      | Insulating medium                                      |  |                |
|     | c.                                      | Insulation class (BIL)                                 | _  | kV             |
|     | d.                                      | Maximum guaranteed R.I.V. level                        |  |                |
|     | e.                                      | Minimum external creepage distance L-Gnd               |  | inches         |
|     | f.                                      | Strike distance  | <del></del>  | inches         |
|     | g.                                      | Permissible safe strength of installed bushing:        |  |                |
|     |   | i. Vertical downward (Compression)                     |  | lbs.           |
|     |   | ii. Cantilever (Shear)                                 |  | lbs.           |
|     |   | iii. Tensile   |  | lbs.           |
|     |   | iv. Torsion  |  | lbs.           |
|     | h.                                      | Height above floor required to remove bushing          | <del></del>  | inche.         |
|     | i.                                      | Manufacturer's drawing number:                         |  |                |
|     | j.                                      | Manufacturer's catalog number:                         | _  |                |
|     | -                                       | Will breaker be shipped with bushings installed?       | _  | Y/N            |
|     | • | i. Stud connectors proposed                            |  |                |
|     |   | ii. Manufacturer                                       | - Audition of the Control of the Con |                |
|     |   | iii. Manufacturer's catalog number                     | _  |                |
|     | I.                                      | Emergency Short Time Current [6 Mo., 24 Hr., 4Hr., 15] | —<br>Min. (attach se   | narate table)] |
|     | 1.                                      | i. Porcelain   | iviiii (accacii se   | parate table/j |
|     |   | ii. Polymer  |  |                |
|     | m                                       | Cost for additional spare breaker                      | \$   | USD            |
| 10  |   | pe of Operating Mechanism System                       | ¥  | 000            |
| 13. |   |  |  |                |
| 1 / | a.<br>^                                 |  | <del></del>  |                |
| 14. |   | xiliary Loads  |  |                |
|     | a.                                      | Compressor or pump motors (where applicable)           |  |                |

|     |     | i. Horsepower @ 1- or 3-phase                                    | HP @ phase |
|-----|-----|--|------------|
|     |     | ii. Running current at rated voltage                             | A @V AC    |
|     |     | iii. Starting current at minimum starting voltage                | A @V AC    |
|     |     | iv. Starting current at rated starting voltage                   | A @V AC    |
|     |     | v. Voltage range   |            |
|     |     | 1) Minimum   | V          |
|     |     | 2) Maximum   | V          |
|     |     | vi. Max. pressure withstand without over-pressure relief         | psig       |
|     |     | vii. Over-pressure relief point                                  | psig       |
|     | b.  | Spring charging motor (where applicable)                         |            |
|     |     | i. Horsepower @ 1 or 3 phases                                    | Hp @ phase |
|     |     | ii. Charging time  | seconds    |
|     |     | iii. Starting current at minimum starting voltage                | A @V AC    |
|     |     | iv. Starting current at rated starting voltage                   | A @V AC    |
|     |     | v. Voltage range   |            |
|     |     | 1) Minimum   | V          |
|     |     | 2) Maximum   | V          |
|     | с.  | Heaters  |            |
|     |     | i. Number  |            |
|     |     | ii. Location   |            |
|     |     | iii. Voltage   | V AC       |
|     |     | iv. Load   | kW         |
|     |     | v. Guards provided?  | (Y/N)      |
|     | d.  | Maximum operational kVA/kW auxiliary load required               |            |
|     |     | per breaker  | kVA / kW   |
| 15. | Cui | rrent Transformers   |            |
|     | a.  | Maximum number available per bushing                             |            |
|     |     | Accuracy class   |            |
|     | c.  | Thermal current rating factor for all taps                       |            |
|     | d.  | Ratios   |            |
| 16. | SFE | 5 System (where applicable)                                      |            |
|     | a.  | Normal operating pressure at 200 C                               | psig       |
|     |     | Minimum operating pressure with full interrupting rating         | psig       |
|     | c.  | Maximum pressure withstand without over-pressure relief          | psig       |
|     | d.  | Over-pressure relief point                                       | psig       |
|     | e.  | Are SF6 gas heaters supplied                                     | (Y/N)      |
|     | f.  | If heaters are not supplied what is highest temperature at which |            |
|     | •   | gas will liquefy (condense)?                                     | °C         |
|     | g.  | Breaker SF6 Density level – Stage 1 Alarm                        | psig       |
|     | ٥.  | i. Pressure/Density at Stage 2 trip and block close              | psig       |
|     |     | ii. Pressure/Density at Stage 3 lockout (remote trip)            | psig       |
|     | h.  | Voltage withstand capability between Remote Trip                 |            |
|     | ••• | & atmospheric pressure   | kV         |
|     |     |  |            |

| 17. | Are | e the following Accessories Provided?                            |       |
|-----|-----|--|-------|
|     | a.  | Pre-insertion resistors  | (Y/N) |
|     |     | i. If not provided, are resistors available as an option?        | (Y/N) |
|     |     | ii. Ohmage   | Ohms  |
|     | b.  | Voltage grading capacitors                                       | (Y/N) |
|     | c.  | TRV control capacitor  | (Y/N) |
|     | d.  | Rupture Discs  | (Y/N) |
|     |     | i. If yes, maintenance intervals for inspection                  |       |
|     |     | ii. If yes, maintenance interval for replacement                 |       |
|     | e.  | Over pressure relief valve                                       |       |
|     |     | i. If yes, maintenance intervals for inspection                  |       |
|     |     | ii. If yes, maintenance interval for replacement                 |       |
| 18. | Ma  | intenance Requirements   |       |
|     | a.  | Number of mechanical operations before overhaul                  |       |
|     | b.  | Number of rated short circuits before internal maintenance check |       |
|     | c.  | Number of rated continuous current interruptions before internal |       |
|     |     | maintenance check  |       |
| 19. | Mi  | iscellaneous Items   |       |
|     | a.  | Recommended amount of technical supervision provided             |       |
|     |     | by manufacturer during equipment installation at substation/site |       |
|     |     | (Indicate per order or per breaker.)                             | hrs.  |
|     | b.  | Cost per day for additional factory service. \$                  | USD   |
|     |     |  |       |

20. Exceptions to this Specification

a. List any exceptions taken to this specification and/or inquiry and attach exception list as part of this completed attachment. Each exception shall reference the appropriate section to this specification.

# USE THESE DOCUMENTS WHEN SUBMITTING YOUR ORIGINAL BID

# PLEASE PRINT (LEGIBLY) OR TYPE

|  | COMPANY:   |
|--|--|
|  | ADDRESS:   |
|  |  |
|  | TELEPHONE:   |
| WITNESS:   | BY:  |
| The bidder shall state on the line below, if a corporation, the name | (Signature)  |
| of the state in which incorporated.                                  | (Name-please print or type above)  |
| (Contact Person Who Prepared Proposal)                               | (Title):   |
| (Contact i erson who rrepared Proposal)                              | DATE:  |
| (Telephone Number)   |  |
| (Federal I.D. Number)  | Have you attached the required items listed on the Check List? Failure to do so may resulin automatic rejection of this bid. |
| (Email Address)  | (Fax Number)   |

### Proposal COV BID 2025-42 DUE: 8-6-25

To the Purchasing Agent of the City of Vineland,

The undersigned bidder declares he/she has read the Notice to Bidders, Instructions to Bidders and the Specification attached, that he/she has determined the conditions affecting the bid, and agrees, if this proposal is accepted and contract awarded, to furnish and deliver the following:

| Section | Description  | Desired <u>Base</u> Part<br>Number (Siemens) | Proposed<br>Siemens Part<br>Number | Est.<br>Lead<br>Time<br>(wks) | Quantity | Unit<br>Price (\$) | Freight<br>Price<br>(\$) | Total Price<br>(\$) |
|---------|--|--|------------------------------------|-------------------------------|----------|--------------------|--------------------------|---------------------|
| A       | 69kV High Voltage<br>Gas Circuit Breaker<br>w/ Spare Parts     | SPS2-72-40-2000                              |                                    |                               | 4        |                    |                          |                     |
| В       | 138kV High<br>Voltage Gas Circuit<br>Breaker w/ Spare<br>Parts | SPS2S-145-40-2000                            |                                    |                               | 2        |                    |                          |                     |
| С       | 15kV Recloser<br>Bypass Switch<br>Assembly                     | 2913F-604101-ACHT                            |                                    |                               | 7        |                    |                          |                     |

| Total Bid Price:  |
|---|
| [Total Price A + Total Price B + Total Price C = Total Bid Price] |

69kV High Voltage Gas Circuit Breaker Spare Parts List:

| Description | Manufacturer | Cat.# | Quantity | Notes |
|-------------|--------------|-------|----------|-------|
|             |              |       |          |       |
|             |              |       |          |       |
|             |              |       |          |       |
|             |              |       |          |       |
|             |              |       |          |       |

138kV High Voltage Gas Circuit Breaker Spare Parts List:

| Description | Manufacturer | Cat. # | Quantity | Notes |
|-------------|--------------|--------|----------|-------|
|             |              |        |          |       |
|             |              |        |          |       |
|             |              |        |          |       |
|             |              |        |          |       |
|             |              |        |          |       |

| Company Name / Bidder: | Date: |
|------------------------|-------|
| ,,                     | <br>  |

### **BID CHECKLIST**

# Failure by the bidder to submit with their bid all of the MANDATORY Items that are check below shall be cause for rejection of bid.

### PURCHASE OF 69KV BREAKERS & 15KV BYPASS SWITCHES COV BID # 2025-24

### **AUGUST 6, 2025**

|                            |  | REQUIRED<br>WITH BID | INITIAL<br>& SUBMIT             |
|----------------------------|--|----------------------|---------------------------------|
|                            | ruarantee (IN DUPLICATE<br>bond is not a consent of surety)      |                      |                                 |
|                            | icate or Consent of Surety Form UPLICATE)                        |                      |                                 |
|                            | ment of Ownership Disclosure<br>UPLICATE)                        | <u>X</u>             |                                 |
|                            | Affirmative Action Compliance Notice UPLICATE)                   | <u> </u>             |                                 |
| 5. Checl                   | k List (IN DUPLICATE)  | <u>X</u>             |                                 |
| 6. Propo                   | sal (IN DUPLICATE)   | <u>X</u>             |                                 |
|                            | owledgement of Receipt of Addenda UPLICATE)                      | X                    |                                 |
|                            | Subcontractors, if any.<br>le, state so. (IN DUPLICATE)          |                      |                                 |
| The items                  | that are checked below shall be submitted no                     | later than the ti    | ne period indicated.            |
| Required as<br>Conditioned | <u>Item</u>  |                      | Read, Initialed<br>Shall Submit |
|                            | Performance Bond (Due with the executed contract)                |                      |                                 |
| <u> </u>                   | Labor and Material Payment Bond (Due with the executed contract) |                      |                                 |

|  | Maintenance Bond (Due with the executed contract)   |  |  |
|--|---|--|--|
|  | Public Works Contractor Registratic Certificate(s) for the General or Prin Contractor and any Subcontractor s in the bid proposal with a date effect time the proposal is submitted (Due prior to contract award) | ne<br>ubmitted   |  |
| <u>X</u>                                   | New Jersey Business Registration Co<br>(Due prior to contract award)  | ertificate   |  |
| X  | Certificate(s) of Insurance as specific<br>In the Bid Document<br>(Due with executed contract)  | ed   |  |
| <u>X</u>                                   | Disclosure of Investment Activities in (Due prior to contract award)  | ı Iran   | •  |
| <u>X</u>                                   | Prohibited Activities In Russia or Be (Due prior to contract award)   | larus  |  |
|  | The items that are checked below as   | re to be reviewed by the   | bidders.   |
| Review Requi                               | red <u>Item</u>   |  | Read & Initialed   |
| X  | Americans with Disabiliti   | es Act Language  |  |
| <u>X</u>                                   | General Instructions  |  |  |
| <u>X</u>                                   | Technical Specifications  |  |  |
| SUBMITTED PURPOSES O IT SHALL B COMPLETE I | AND/OR FORMS INDICATED WITH YOUR BID. THIS CHECK NLY. ALL REQUIRED DOCUMEN' E THE RESPONSIBILITY OF THE BID PACKAGE, FAMILIARIZE THE D TO SUBMIT WITH THEIR BID ALL   | LIST IS PROVIDED F<br>FATION MAY NOT BE<br>E BIDDER TO CARE<br>EMSELVES WITH THE | OR INFORMATIONAL LISTED ABOVE AND FULLY REVIEW THE REQUIREMENTS OF |
| SIGNATURE                                  |   |  |  |
| The undersign requirements:                | ed hereby acknowledges that they have   | ve submitted and/or rev  | iewed the above listed   |
| (COMPANY)                                  |   | (NAME – PLEASE P   | RINT OR TYPE)  |
| (SIGNATURI                                 | E)  | (DATE)   |  |

### STATEMENT OF OWNERSHIP DISCLOSURE

N.J.S.A. 52:25-24.2 (P.L. 1977, c.33, as amended by P.L. 2016, c.43)

This statement shall be completed, certified to, and included with all bid and proposal submissions. Failure to submit the required information is cause for automatic rejection of the bid or proposal.

| Failure to submit the required infor                                 | nation is cause for automatic rejection of the bid or proposal.  |  |  |
|--|--|--|--|
| Name of Organization:  |  |  |  |
|  |  |  |  |
| Part I:  |  |  |  |
| Check the box that represents the t                                  | ype of business organization:  |  |  |
| Sole Proprietorship (skip  | Parts II and III, execute certification in Part IV)  |  |  |
| Non-Profit Corporation (sl   | rip Parts II and III, execute certification in Part IV)  |  |  |
| For-Profit Corporation (an   | y type)  |  |  |
| Limited Liability Company  | (LLC)  |  |  |
| Limited Partnership  |  |  |  |
| ■ Limited Liability Partnersh  | ip (LLP)   |  |  |
| Other (be specific):   |  |  |  |
| Part II:   |  |  |  |
| 10 percent or more of its stock, or a 10 percent or greater interest | les and addresses of all stockholders in the corporation who own of any class, or of all individual partners in the partnership who own therein, or of all members in the limited liability company who own therein, as the case may be. (COMPLETE THE LIST BELOW IN |  |  |
|  | OR   |  |  |
| individual partner in the partners                                   | oration owns 10 percent or more of its stock, of any class, or no hip owns a 10 percent or greater interest therein, or no member in ns a 10 percent or greater interest therein, as the case may be.  |  |  |
| (Please attach additional sheets if more space is needed):           |  |  |  |
| Name of Individual or Business                                       |  |  |  |
| Name of individual or Business                                       | Entity Address   |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Part III DISCLOSURE OF 10% OR GREATER OWNERSHIP IN THE STOCKHOLDERS, PARTNERS OR LLC MEMBERS LISTED IN PART II

If a bidder has a direct or indirect parent entity which is publicly traded, and any person holds a 10 percent or greater beneficial interest in the publicly traded parent entity as of the last annual federal Security and Exchange Commission (SEC) or foreign equivalent filing, ownership disclosure can be met by providing links to the website(s) containing the last annual filing(s) with the federal Securities and Exchange Commission (or foreign equivalent) that contain the name and address of each person holding a 10% or greater beneficial interest in the publicly traded parent entity, along with the relevant page numbers of the filing(s) that contain the information on each such person. Attach additional sheets if more space is needed.

| Website (URL) containing the last annual SEC (or foreign equivalent) filing | Page #'s |
|---|----------|
|   |          |
|   |          |
|   |          |

Please list the names and addresses of each stockholder, partner or member owning a 10 percent or greater interest in any corresponding corporation, partnership and/or limited liability company (LLC) listed in Part II other than for any publicly traded parent entities referenced above. The disclosure shall be continued until names and addresses of every non-corporate stockholder, and individual partner, and member exceeding the 10 percent ownership criteria established pursuant to N.J.S.A. 52:25-24.2 has been listed. Attach additional sheets if more space is needed.

| Stockholder/Partner/Member and<br>Corresponding Entity Listed in Part II | Address |  |  |
|--|---------|--|--|
|  |         |  |  |
|  |         |  |  |
|  |         |  |  |

### Part IV Certification

I, being duly sworn upon my oath, hereby represent that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I acknowledge: that I am authorized to execute this certification on behalf of the bidder/proposer; that the <name of contracting unit> is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the completion of any contracts with <type of contracting unit> to notify the <type of contracting unit> in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the, permitting the <type of contracting unit> to declare any contract(s) resulting from this certification void and unenforceable.

| Full Name (Print): | Title : |
|--------------------|---------|
| Signature :        | Date :  |

### AFFIRMATIVE ACTION COMPLIANCE NOTICE

### N.J.S.A. 10:5-31 and N.J.A.C. 17:27

### **GOODS AND SERVICES CONTRACTS**

### (INCLUDING PROFESSIONAL SERVICES)

This form is a summary of the successful bidder's requirement to comply with the requirements of N.J.S.A. 10:5-31 and N.J.A.C. 17:27-1 et seq.

The successful bidder shall submit to the public agency, after notification of award but prior to execution of this contract, one of the following three documents as forms of evidence:

(a) A photocopy of a valid letter that the contractor is operating under an existing Federally approved or sanctioned affirmative action program (good for one year from the date of the letter);

### OR

(b) A photocopy of a Certificate of Employee Information Report approval, issued in accordance with N.J.A.C. 17:27-4;

### OR

(c) A photocopy of an Employee Information Report (Form AA302) provided by the Division and distributed to the public agency to be completed by the contractor in accordance with N.J.A.C. 17:27-4.

The successful vendor may obtain the Affirmative Action Employee Information Report (AA302) from the contracting unit during normal business hours.

The successful vendor(s) must submit the copies of the AA302 Report to the Division of Contract Compliance and Equal Employment Opportunity in Public Contracts (Division). The Public Agency copy is submitted to the public agency, and the vendor copy is retained by the vendor.

The undersigned vendor certifies that he/she is aware of the commitment to comply with the requirements of N.J.S.A. 10:5-31 and N.J.A.C. 17:27.1 et seq. and agrees to furnish the required forms of evidence.

The undersigned vendor further understands that his/her bid shall be rejected as non-responsive if said contractor fails to comply with the requirements of N.J.S.A. 10:5-31 and N.J.A.C. 17:27-1 et seq.

| COMPANY:    | SIGNATURE: |
|-------------|------------|
| PRINT NAME: |            |
| DATE:       | _          |

# CITY OF VINELAND ACKNOWLEDGMENT OF RECEIPT OF ADDENDA

Pursuant to N.J.S.A. 40A:11-23.1a, the undersigned bidder hereby acknowledges receipt of the following notices, revisions, or addenda to the bid advertisement, specifications or bid documents. By indicating date of receipt, bidder acknowledges the submitted bid takes into account the provisions of the notice, revision or addendum. Note that the local unit's record of notice to bidders shall take precedence and that failure to include provisions of changes in a bid proposal may be subject for rejection of the bid.

| Addendum Number   | Dated   | Acknowledge Receipt<br>(Initial) |
|-------------------|---|----------------------------------|
|                   | **************************************  |                                  |
|                   | With the state of |                                  |
| No addenda        | received.   |                                  |
| Acknowledged for: | (Name of Bido   | der)                             |
| Dv:               | (Manie of Bide  | 10t y                            |
| By:(S             | ignature of Authorized F  | Representative)                  |
| Name:             |   |                                  |
|                   | (Please type or   | Print)                           |
| Title:            |   |                                  |
| Date <sup>.</sup> |   |                                  |



# City of Vineland - Division of Purchasing DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN FORM

STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY - DIVISION OF PURCHASE AND
PROPERTY 33 WEST STATE STREET, P.O. BOX 230 TRENTON, NEW
JERSEY 08625-0230

| BID SOLICITATION # AND TITLE:  |   |
|--|---|
| VENDOR NAME:   |   |
| contract must certify that neither the person nor entity, nor any of its para as a person or entity engaged in investment activities in Iran. The Ch. Vendors/Bidders must review this list prior to completing the below cer                        | c.4) any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a rents, subsidiaries, or affiliates, is identified on the New Jersey Department of the Treasury's Chapter 25 List paper 25 list is found on the Division's website at: <a href="https://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf">https://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf</a> . ertification. If the Director of the Division of Purchase and Property finds a person or entity to be in violation by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering pension of the party. |
|  | IECK THE APPROPRIATE BOX  |
| I certify, pursuant to N.J.S.A. 52:32-57, et seq. (P.L. 2012, c.29 or affiliates is listed on the New Jersey Department of the Treatment                        | 25 and P.L. 2021, c.4), that neither the Vendor/Bidder listed above nor any of its parents, subsidiaries, easury's Chapter 25 List of entities determined to be engaged in prohibited activities in Iran.   |
| OR   |   |
| the Treasury's Chapter 25 List. I will provide a detailed, accur   | nd/or one or more of its parents, subsidiaries, or affiliates is listed on the New Jersey Department of rate and precise description of the activities of the Vendor/Bidder, or one of its parents, nent activities in Iran by completing the information requested below.  |
| Entity Engaged in Investment<br>Activities<br>Relationship to Vendor/ Bidder<br>Description of Activities  |   |
| Duration of Engagement Anticipated Cessation Date *Attach Additional Sheets If Necessary.  |   |
|  | CERTIFICATION   |
| hereto, to the best of my knowledge are true and complete. that the Vendor is under a continuing obligation from the da City in writing of any changes to the information contained misrepresentation in this certification. If I do so, I may be su | is certification on behalf of the Vendor, that the foregoing information and any attachments I acknowledge that the City of Vineland is relying on the information contained herein, and ate of this certification through the completion of any contract(s) with the City to notify the ed herein; that I am aware that it is a criminal offense to make a false statement or ubject to criminal prosecution under the law, and it will constitute a material breach of my contract(s) resulting from this certification void and unenforceable.   |
| Signature  | Date  |
| Full Name (Print) and Title  |   |



Vendor's Address (City/State/Zip Code)

# CERTIFICATION OF NON-INVOLVEMENT IN PROHIBITED ACTIVITIES IN RUSSIA OR BELARUS

Pursuant to N.J.S.A. 52:32-60.1, et seq. (L. 2022, c. 3) any person or entity (hereinafter "Vendori") that seeks to enter into or renew a contract with a State agency for the provision of goods or services, or the purchase of bonds or other obligations, must complete the certification below indicating whether or not the Vendor is identified on the Office of Foreign Assets Control (OFAC) Specially Designated Nationals and Blocked Persons list. available https://sanctionssearch.ofac.treas.gov/. If the Department of the Treasury finds that a Vendor has made a certification in violation of the law, it shall take any action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

I, the undersigned, certify that I have read the definition of "Vendor" below, and have reviewed the Office of Foreign Assets Control (OFAC) Specially Designated Nationals and Blocked Persons list, and having done so certify:

(Check the Appropriate Box)

That the Vendor is not identified on the OFAC Specially Designated Nationals and Blocked Persons list on account of activity related to Russia and/or Belarus. OR That I am unable to certify as to "A" above, because the Vendor is identified on the OFAC Specially Designated Nationals and Blocked Persons list on account of activity related to Russia and/or Belarus. OR That I am unable to certify as to "A" above, because the Vendor is identified on the OFAC Specially Designated Nationals and Blocked Persons list. However, the Vendor is engaged in activity related to Russia and/or Belarus consistent with federal law, regulation, license or exemption. A detailed description of how the Vendor's activity related to Russia and/or Belarus is consistent with federal law is set forth below. (Attach Additional Sheets If Necessary.) Signature of Vendor's Authorized Representative Date Print Name and Title of Vendor's Authorized Representative Vendor's FEIN Vendor's Name Vendor's Phone Number Vendor's Address (Street Address) Vendor's Fax Number

Vendor's Email Address

<sup>&</sup>lt;sup>1</sup> Vendor means: (1) A natural person, corporation, company, limited partnership, limited liability partnership, limited liability company, business association, sole proprietorship, joint venture, partnership, society, trust, or any other nongovernmental entity, organization, or group; (2) Any governmental entity or instrumentality of a government, including a multilateral development institution, as defined in Section 1701(c)(3) of the International Financial Institutions Act, 22 U.S.C. 262r(c)(3); or (3) Any parent, successor, subunit, direct or indirect subsidiary, or any entity under common ownership or control with, any entity described in paragraph (1) or (2).

# USE THESE DOCUMENTS WHEN SUBMITTING YOUR DUPLICATE BID

## PLEASE PRINT (LEGIBLY) OR TYPE

|  | COMPANY;   |
|--|--|
|  | ADDRESS:   |
|  |  |
|  | TELEPHONE:   |
| WITNESS:   | BY:  |
| The bidder shall state on the line below, if a corporation, the name | (Signature)  |
| of the state in which incorporated.                                  | (Name-please print or type above)  |
| Contact Person Who Prepared Proposal)                                | (Title):   |
| Contact reison who Frepared Proposal)                                | DATE:  |
| Telephone Number)  | •.   |
| Federal I.D. Number)   | Have you attached the required items listed on the Check List? Failure to do so may result in automatic rejection of this bid. |
| (Email Address)  | (Fax Number)   |

### Proposal COV BID 2025-42 DUE: 8-6-25

To the Purchasing Agent of the City of Vineland,

The undersigned bidder declares he/she has read the Notice to Bidders, Instructions to Bidders and the Specification attached, that he/she has determined the conditions affecting the bid, and agrees, if this proposal is accepted and contract awarded, to furnish and deliver the following:

| Section | Description  | Desired <u>Base</u> Part<br>Number (Siemens) | Proposed<br>Siemens Part<br>Number | Est.<br>Lead<br>Time<br>(wks) | Quantity | Unit<br>Price (\$) | Freight<br>Price<br>(\$) | Total Price<br>(\$) |
|---------|--|--|------------------------------------|-------------------------------|----------|--------------------|--------------------------|---------------------|
| А       | 69kV High Voltage<br>Gas Circuit Breaker<br>w/ Spare Parts     | SPS2-72-40-2000                              |                                    |                               | 4        |                    |                          |                     |
| В       | 138kV High<br>Voltage Gas Circuit<br>Breaker w/ Spare<br>Parts | SPS2S-145-40-2000                            |                                    |                               | 2        |                    |                          |                     |
| C       | 15kV Recloser<br>Bypass Switch<br>Assembly                     | 2913F-604101-ACHT                            |                                    |                               | 7        |                    |                          |                     |

| Total Bid Price:  |
|---|
| [Total Price A + Total Price B + Total Price C = Total Bid Price] |

69kV High Voltage Gas Circuit Breaker Spare Parts List:

| Description | Manufacturer | Cat. # | Quantity | Notes |
|-------------|--------------|--------|----------|-------|
|             |              |        |          |       |
|             |              |        |          |       |
|             |              |        |          |       |
|             |              |        |          |       |
|             |              |        |          |       |

138kV High Voltage Gas Circuit Breaker Spare Parts List:

| Description | Manufacturer | Cat. # | Quantity | Notes |
|-------------|--------------|--------|----------|-------|
|             |              |        |          |       |
|             |              |        |          |       |
|             |              |        |          |       |
|             |              |        |          |       |
|             |              |        |          |       |

| C N / Diald            | D-1 | <b>L</b> |
|------------------------|-----|----------|
| Company Name / Bidder: | Dat | te:      |

### **BID CHECKLIST**

Failure by the bidder to submit with their bid all of the MANDATORY

Items that are check below shall be cause for rejection of bid.

### PURCHASE OF 69KV BREAKERS & 15KV BYPASS SWITCHES COV BID # 2025-24

### **AUGUST 6, 2025**

|                         |  | REQUIRED<br>WITH BID | INITIAL<br><u>&amp; SUBMIT</u>             |
|-------------------------|--|----------------------|--|
|                         | Guarantee (IN DUPLICATE) I bond is not a consent of surety)      |                      |  |
|                         | ficate or Consent of Surety Form  UPLICATE)                      |                      | **************************************     |
|                         | ment of Ownership Disclosure<br><b>UPLICATE)</b>                 | X                    |  |
| •                       | Affirmative Action Compliance Notice UPLICATE)                   | <u>X</u>             |  |
| 5. Chec                 | k List (IN DUPLICATE)  | X                    | -81-3-1-100-100-100-100-100-100-100-100-10 |
| 6. Propo                | osal (IN DUPLICATE)  | X                    |  |
|                         | owledgement of Receipt of Addenda <b>UPLICATE)</b>               | <u>X</u>             |  |
|                         | f Subcontractors, if any.<br>ne, state so. (IN DUPLICATE)        |                      |  |
| The items               | that are checked below shall be submitted no                     | later than the ti    | me period indicated.                       |
| Required as Conditioned | <u>Item</u>  |                      | Read, Initialed<br>Shall Submit            |
|                         | Performance Bond (Due with the executed contract)                |                      | <del></del>                                |
|                         | Labor and Material Payment Bond (Due with the executed contract) |                      |  |

|  | Maintenance Bond (Due with the execute   | d contract)   |   |
|--|--|---|---|
|  | -  | Seneral or Prime<br>ubcontractor submitted  |   |
|  | in the bid proposal wi<br>time the proposal is so  | th a date effective at the  |   |
|  | (Due prior to contract   |   |   |
| X  | New Jersey Business I<br>(Due prior to contract  | Registration Certificate<br>t award)  |   |
| <u>X</u>   | Certificate(s) of Insur  | ance as specified   | Attacher  |
|  | In the Bid Document (Due with executed co  | entract)  |   |
| <u> X</u>  | Disclosure of Investm<br>(Due prior to contract  |   |   |
| X  | Prohibited Activities I<br>(Due prior to contract  |   |   |
|  | The items that are ch  | ecked below are to be reviewed by   | the bidders.  |
| Review Requir  | red <u>Item</u>  |   | Read & Initialed  |
| X  | Americans  | with Disabilities Act Language  |   |
| <u>X</u>   | General In   | structions  |   |
| <u>X</u>   | Technical S  | Specifications  | <del> </del>  |
| SUBMITTED<br>PURPOSES OF<br>IT SHALL B<br>COMPLETE F | WITH YOUR BID.<br>NLY. ALL REQUIRE<br>E THE RESPONSIBI<br>BID PACKAGE, FAM   | INDICATED ABOVE SHALL INDICATED ABOVE SHALL IN THIS CHECKLIST IS PROVIDED DOCUMENTATION MAY NOT LITY OF THE BIDDER TO CAULIARIZE THEMSELVES WITH THEIR BID ALL REQUIRED DOCUMENTS | D FOR INFORMATIONAL BE LISTED ABOVE AND AREFULLY REVIEW THE THE REQUIREMENTS OF |
| SIGNATURE  |  |   |   |
| The undersign requirements:                          | ed hereby acknowledg   | es that they have submitted and/or  | reviewed the above listed   |
| (COMPANY)  | To the second se | (NAME – PLEAS)  | E PRINT OR TYPE)  |
| (SIGNATURE   | )  | (DATE)  |   |

### STATEMENT OF OWNERSHIP DISCLOSURE

N.J.S.A. 52:25-24.2 (P.L. 1977, c.33, as amended by P.L. 2016, c.43)

This statement shall be completed, certified to, and included with all bid and proposal submissions. Failure to submit the required information is cause for automatic rejection of the bid or proposal.

| Failure t                               | o submit the required information                                       | is cause for automatic rejection of the bid or proposal.  |
|---|---|---|
| Name of                                 | f Organization:   |   |
|   |   |   |
| Part I:                                 |   |   |
| Check th                                | ne box that represents the type of                                      | business organization:  |
|   | Sole Proprietorship (skip Parts II                                      | and III, execute certification in Part IV)  |
|   | Non-Profit Corporation (skip Part                                       | ts II and III, execute certification in Part IV)  |
|   | For-Profit Corporation (any type)                                       |   |
|   | Limited Liability Company (LLC)   |   |
| <b>3</b>                                | Limited Partnership   |   |
|   | Limited Liability Partnership (LLF                                      | P)  |
|   | Other (be specific):  |   |
| Part II:                                |   |   |
| 10 per<br>a 10 p<br>a 10 p              | rcent or more of its stock, of any opercent or greater interest therein | d addresses of all stockholders in the corporation who own class, or of all individual partners in the partnership who own a, or of all members in the limited liability company who own a, as the case may be. (COMPLETE THE LIST BELOW IN |
|   | OR  |   |
| individ                                 | lual partner in the partnership ow                                      | owns 10 percent or more of its stock, of any class, or no<br>ns a 10 percent or greater interest therein, or no member in<br>0 percent or greater interest therein, as the case may be.   |
| (Please                                 | attach additional sheets if more  | e space is needed):   |
| Namo                                    | of Individual or Business Entity  | Address   |
| Name                                    | of malvidual of Busiless Ellity   | Aduress   |
| *************************************** |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |

# <u>Part III</u> DISCLOSURE OF 10% OR GREATER OWNERSHIP IN THE STOCKHOLDERS, PARTNERS OR LLC MEMBERS LISTED IN PART II

If a bidder has a direct or indirect parent entity which is publicly traded, and any person holds a 10 percent or greater beneficial interest in the publicly traded parent entity as of the last annual federal Security and Exchange Commission (SEC) or foreign equivalent filing, ownership disclosure can be met by providing links to the website(s) containing the last annual filing(s) with the federal Securities and Exchange Commission (or foreign equivalent) that contain the name and address of each person holding a 10% or greater beneficial interest in the publicly traded parent entity, along with the relevant page numbers of the filing(s) that contain the information on each such person. Attach additional sheets if more space is needed.

| Website (URL) containing the last annual SEC (or foreign equivalent) filing | Page #'s |
|---|----------|
|   |          |
|   |          |
|   |          |

Please list the names and addresses of each stockholder, partner or member owning a 10 percent or greater interest in any corresponding corporation, partnership and/or limited liability company (LLC) listed in Part II other than for any publicly traded parent entities referenced above. The disclosure shall be continued until names and addresses of every non-corporate stockholder, and individual partner, and member exceeding the 10 percent ownership criteria established pursuant to N.J.S.A. 52:25-24.2 has been listed. Attach additional sheets if more space is needed.

| Stockholder/Partner/Member and<br>Corresponding Entity Listed in Part II | Address |  |
|--|---------|--|
|  |         |  |
|  |         |  |
|  |         |  |

### Part IV Certification

I, being duly sworn upon my oath, hereby represent that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I acknowledge: that I am authorized to execute this certification on behalf of the bidder/proposer; that the <name of contracting unit> is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the completion of any contracts with <type of contracting unit> to notify the <type of contracting unit> in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the, permitting the <type of contracting unit> to declare any contract(s) resulting from this certification void and unenforceable.

| Full Name (Print): | Title : |
|--------------------|---------|
| Signature :        | Date :  |

### AFFIRMATIVE ACTION COMPLIANCE NOTICE

### N.J.S.A. 10:5-31 and N.J.A.C. 17:27

### GOODS AND SERVICES CONTRACTS

### (INCLUDING PROFESSIONAL SERVICES)

This form is a summary of the successful bidder's requirement to comply with the requirements of N.J.S.A. 10:5-31 and N.J.A.C. 17:27-1 et seq.

The successful bidder shall submit to the public agency, after notification of award but prior to execution of this contract, one of the following three documents as forms of evidence:

(a) A photocopy of a valid letter that the contractor is operating under an existing Federally approved or sanctioned affirmative action program (good for one year from the date of the letter);

### OR

(b) A photocopy of a Certificate of Employee Information Report approval, issued in accordance with N.J.A.C. 17:27-4;

### OR

(c) A photocopy of an Employee Information Report (Form AA302) provided by the Division and distributed to the public agency to be completed by the contractor in accordance with N.J.A.C. 17:27-4.

The successful vendor may obtain the Affirmative Action Employee Information Report (AA302) from the contracting unit during normal business hours.

The successful vendor(s) must submit the copies of the AA302 Report to the Division of Contract Compliance and Equal Employment Opportunity in Public Contracts (Division). The Public Agency copy is submitted to the public agency, and the vendor copy is retained by the vendor.

The undersigned vendor certifies that he/she is aware of the commitment to comply with the requirements of N.J.S.A. 10:5-31 and N.J.A.C. 17:27.1 et seq. and agrees to furnish the required forms of evidence.

The undersigned vendor further understands that his/her bid shall be rejected as non-responsive if said contractor fails to comply with the requirements of N.J.S.A. 10:5-31 and N.J.A.C. 17:27-1 et seq.

| COMPANY:    | SIGNATURE: |
|-------------|------------|
| PRINT NAME: | TITLE:     |
| DATE:       | _          |

# CITY OF VINELAND ACKNOWLEDGMENT OF RECEIPT OF ADDENDA

Pursuant to N.J.S.A. 40A:11-23.1a, the undersigned bidder hereby acknowledges receipt of the following notices, revisions, or addenda to the bid advertisement, specifications or bid documents. By indicating date of receipt, bidder acknowledges the submitted bid takes into account the provisions of the notice, revision or addendum. Note that the local unit's record of notice to bidders shall take precedence and that failure to include provisions of changes in a bid proposal may be subject for rejection of the bid.

| Addendum Number   | Dated                    | Acknowledge Receipt<br>(Initial) |
|-------------------|--------------------------|----------------------------------|
|                   |                          | 100000                           |
|                   |                          |                                  |
| No addanda        |                          |                                  |
| No addenda r      | eceived.                 |                                  |
| Acknowledged for: |                          |                                  |
|                   | (Name of Bidde           | er)                              |
| Ву:               |                          |                                  |
| By:(Si            | gnature of Authorized Re | epresentative)                   |
| Name:             |                          |                                  |
|                   | (Please type or P        | rint)                            |
| Title:            |                          |                                  |
| Date:             |                          |                                  |



# City of Vineland - Division of Purchasing DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN FORM

STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY - DIVISION OF PURCHASE AND
PROPERTY 33 WEST STATE STREET, P.O. BOX 230 TRENTON, NEW
JERSEY 08625-0230

| BID SOLICITATION # AND TITLE:   |   |
|---|---|
| VENDOR NAME:  |   |
| contract must certify that heither the person nor entity, nor any of its parer  | .4) any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a nts, subsidiaries, or affiliates, is identified on the New Jersey Department of the Treasury's Chapter 25 List oter 25 list is found on the Division's website at: https://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf.  |
| Vendors/Bidders must review this list prior to completing the below certi-  | fication. If the Director of the Division of Purchase and Property finds a person or entity to be in violation  |
| CHE   | CK THE APPROPRIATE BOX  |
| I certify, pursuant to N.J.S.A. 52:32-57, et seq. (P.L. 2012, c.25 or affiliates is listed on the New Jersey Department of the Treas  | and P.L. 2021, c.4), that neither the Vendor/Bidder listed above nor any of its parents, subsidiaries, sury's Chapter 25 List of entities determined to be engaged in prohibited activities in Iran.  |
| OR  |   |
| the freasury's Chapter 25 List, I will provide a detailed, accurat  | or one or more of its parents, subsidiaries, or affiliates is listed on the New Jersey Department of<br>the and precise description of the activities of the Vendor/Bidder, or one of its parents,<br>nt activities in Iran by completing the information requested below.  |
| Entity Engaged in Investment<br>Activities<br>Relationship to Vendor/ Bidder<br>Description of Activities   |   |
| Duration of Engagement Anticipated Cessation Date *Attach Additional Sheets If Necessary.   |   |
|   | CERTIFICATION   |
| that the Vendor is under a continuing obligation from the date City in writing of any changes to the information contained misrepresentation in this certification, If I do so, I may be sub- | certification on behalf of the Vendor, that the foregoing information and any attachments acknowledge that the City of Vineland is relying on the information contained herein, and e of this certification through the completion of any contract(s) with the City to notify the herein; that I am aware that it is a criminal offense to make a false statement or ject to criminal prosecution under the law, and it will constitute a material breach of my ntract(s) resulting from this certification void and unenforceable. |
| Signature   | Date  |
| Full Name (Print) and Title   |   |



# CERTIFICATION OF NON-INVOLVEMENT IN PROHIBITED ACTIVITIES IN RUSSIA OR BELARUS

Pursuant to N.J.S.A. 52:32-60.1, et seq. (L. 2022, c. 3) any person or entity (hereinafter "Vendori") that seeks to enter into or renew a contract with a State agency for the provision of goods or services, or the purchase of bonds or other obligations, must complete the certification below indicating whether or not the Vendor is identified on the Office of Foreign Assets Control (OFAC) Specially Designated Nationals and Blocked Persons list, https://sanctionssearch.ofac.treas.gov/. If the Department of the Treasury finds that a Vendor has made a certification in violation of the law, it shall take any action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

I, the undersigned, certify that I have read the definition of "Vendor" below, and have reviewed the Office of Foreign Assets Control (OFAC) Specially Designated Nationals and Blocked Persons list, and having done so certify:

(Check the Appropriate Box)

That the Vendor is not identified on the OFAC Specially Designated Nationals and Blocked Persons list on account of activity related to Russia and/or Belarus. OR That I am unable to certify as to "A" above, because the Vendor is identified on the OFAC Specially В. Designated Nationals and Blocked Persons list on account of activity related to Russia and/or Belarus. OR That I am unable to certify as to "A" above, because the Vendor is identified on the OFAC Specially Designated Nationals and Blocked Persons list. However, the Vendor is engaged in activity related to Russia and/or Belarus consistent with federal law, regulation, license or exemption. A detailed description of how the Vendor's activity related to Russia and/or Belarus is consistent with federal law is set forth below. (Attach Additional Sheets If Necessary.) Signature of Vendor's Authorized Representative Date Print Name and Title of Vendor's Authorized Representative Vendor's FEIN Vendor's Name Vendor's Phone Number Vendor's Address (Street Address) Vendor's Fax Number Vendor's Address (City/State/Zip Code) Vendor's Email Address

<sup>&</sup>lt;sup>1</sup> Vendor means: (1) A natural person, corporation, company, limited partnership, limited liability partnership, limited liability company, business association, sole proprietorship, joint venture, partnership, society, trust, or any other nongovernmental entity, organization, or group; (2) Any governmental entity or instrumentality of a government, including a multilateral development institution, as defined in Section 1701(c)(3) of the International Financial Institutions Act, 22 U.S.C. 262r(c)(3); or (3) Any parent, successor, subunit, direct or indirect subsidiary, or any entity under common ownership or control with, any entity described in paragraph (1) or (2).