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TELEPHONE (910) 483-1401
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November 30, 2022

MEMO TO: Prospective Vendors

FROM: Trent Ensley TE
Procurement Manager

**SUBJECT: INVITATION TO BID: PWC2223025 - POLE MOUNT, SINGLE PHASE
AND 3 PHASE PAD MOUNT DISTRIBUTION TRANSFORMERS
CONTRACT CALENDAR YEAR 2024**

Pursuant to N.C.G.S. 143-129, Fayetteville Public Works Commission (“PWC”), is seeking competitive bids for the purchase of **Pole Mount, Single Phase and 3 Phase Pad Mount Distribution Transformers for delivery in calendar year 2024**. Bid must be received on and no later than Thursday, January 5, 2023, at 2:00 PM, for the following:

Attached please find the solicitation documents, which may include some or all of the following: Notice To Vendors, Invitation To Bid, Instructions to Vendors, General Terms and Conditions, Definitions, Technical Specifications, Bid Bond, and Addenda, as more specifically identified in the solicitations documents. Please submit your bid on the form provided herein, or an exact copy thereof, and return one copy of the entire bid packet along with any descriptive literature covering the equipment you are bidding.

Bids should be addressed to PWC Procurement Department, Attn: Shelby Lesane, Procurement Advisor, P.O. Box 1089, Fayetteville, NC 28302 (955 Old Wilmington Road, Fayetteville, NC 28301).

Only sealed responses will be accepted for this solicitation.

Should you have any questions regarding the bid process, please contact the PWC Procurement Department by phone at (910) 223-4429 or by e-mail to shelby.lesane@faypwc.com

PWC NOTICE TO VENDORS

Pursuant to N.C.G.S. 143-129, sealed proposals will be accepted by the Fayetteville Public Works Commission (“PWC”) until **2:00 pm Thursday, January 5, 2023** for the following goods and ancillary services, at which time bids will be publicly opened and read aloud outside of the entrance doors of the PWC Administration Building, located at 955 Old Wilmington Road, Fayetteville, North Carolina 28301:

PWC2223025 - POLE MOUNT, SINGLE PHASE AND 3 PHASE PAD MOUNT DISTRIBUTION TRANSFORMERS CONTRACT CALENDAR YEAR 2024

The solicitation documents are attached and/or may be obtained in the Procurement Office of the Public Works Commission, 1st floor, PWC Administration Building, 955 Old Wilmington Road, Fayetteville, North Carolina, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, or by email request to shelby.lesane@faypwc.com.

Vendors are cautioned that this is a request for offers, not an offer or request to contract, and PWC reserves the unqualified right to reject any or all bids and/or waive all informalities concerning bids when PWC deems it to be in its best interest, or to award a contract to the responsible, responsive bid offering the lowest price, taking into consideration, among other things, quality, performance and the time specified in the proposals for the performance of the contract to be awarded.

It shall be Vendor’s responsibility to read this entirety of the solicitation documents, review all enclosures and attachments, and any addenda, and comply with all requirements specified, regardless of whether appearing in the Instructions to Vendors or elsewhere in the solicitation documents.

By submitting your bid or proposal, you are offering to enter into a contract with PWC that represents Vendor’s and PWC’s entire agreement. If your bid is accepted and results in an award of a contract, you will be expected to accept PWC's GENERAL TERMS AND CONDITIONS as part of the contract. Dependent upon the product or service being offered, other terms and conditions may apply.

By submitting a bid, you represent that you have read and understand the solicitation documents and that your offer shall be made in compliance with the solicitation documents. Vendors are expected to examine the solicitation documents thoroughly and should request an explanation of any ambiguities, discrepancies, errors, omissions, or conflicting statements in the solicitation documents. Failure to do so will be at Vendor’s risk. All ambiguities, discrepancies, errors, omissions, or conflicting statements in the solicitation documents shall be interpreted to require the better quality or greater quantity of work and/or materials, unless otherwise directed by amendment. Vendor assumes responsibility for any patent ambiguity in the solicitation documents that Vendor does not bring to the attention of PWC.



FAYETTEVILLE PUBLIC WORKS - INVITATION TO BID:

PWC2223025 - POLE MOUNT, SINGLE PHASE AND 3 PHASE PAD MOUNT DISTRIBUTION TRANSFORMERS CONTRACT CALENDAR YEAR 2024

This solicitation for bids (“SFB”) Fayetteville Public Works Commission (“PWC”) is comprised of the Notice To Vendors, Invitation To Bid, Vendor’s Information Page, Instructions to Vendors, General Terms and Conditions, and the following addenda (collectively):

- Bid Proposal Form – Pole Mount, Single Phase & Three Phase Pad Mount Distribution Transformers Contract Year 2024
- Attachment – Material Specification, Transformer Overhead
- Attachment – Material Specification, Transformer, Pad-Mount, 1-Phase
- Attachment – Material Specification, Transformer, Pad-Mount, 3-Phase, 12KV
- Attachment – Material Specification, Transformer, Pad-Mount, 3-Phase, 12X24KV

In compliance with this SFB from PWC and subject to all the conditions herein, the undersigned Vendor offers and agrees to furnish and deliver any or all items upon which prices are bid, at the prices set opposite each item and within the time specified in the applicable SFB document.

By executing a bid, the undersigned Vendor understands and certifies that:

- this bid is submitted competitively and without collusion,
- that none of its officers, directors, or owners of an unincorporated business entity has been convicted of any violations of Chapter 78A of the North Carolina General Statutes, the Securities Act of 1933, or the Securities Exchange Act of 1934, and
- it is not an ineligible Vendor as set forth in G.S. 143-59.1.

Furthermore, by executing this bid, the undersigned certifies to the best of Vendor’s knowledge and belief, that it and its principals are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal or State department or agency.

The undersigned Vendor certifies that it, and each of its sub-contractors for any contract awarded as a result of this SFB, complies with the requirements of Article 2 of Chapter 64 of the NC General Statutes, including the requirement to verify the work authorization of employees through the federal E-Verify system, to the extent applicable.

G.S. 133-32 and North Carolina Executive Order 24 (2009) prohibit the offer to, or acceptance by, any employee of PWC associated with the preparing plans, specifications, estimates for public contract; or awarding or administering public contracts; or inspecting or supervising delivery of the public contract of any gift from anyone with a contract with PWC, or from any person seeking to do business with PWC. By execution of this bid response to the SFB, the undersigned

certifies, for Vendor's entire organization and its employees or agents, that Vendor are not aware that any such gift has been offered, accepted, or promised by any employees or agents of Vendor's organization.

By executing this bid, Vendor certifies that it has read and agreed to the SFB including without limitation the attached INSTRUCTIONS TO VENDORS and the GENERAL TERMS AND CONDITIONS. Depending upon the goods and ancillary services being offered, other terms and conditions may apply, as mutually agreed.

Failure to execute a bid prior to submittal may render the bid invalid and it MAY BE REJECTED. Late bids will not be accepted.

Vendor's offer shall be valid for at least sixty (60) days from date of bid opening, unless otherwise stated here: _____ days, or if extended by mutual agreement of the parties. Any withdrawal of this offer shall be made in writing as further provided in the GENERAL TERMS AND CONDITIONS.

If your bid is accepted, all documents comprising the SFB, along with the written results of any negotiations, shall constitute the written agreement between the parties ("Contract").

By executing this bid, Vendor certifies that it has read and agreed to all of the solicitation documents comprising the SFB, including without limitation the INSTRUCTIONS TO VENDORS and the GENERAL TERMS AND CONDITIONS.

NAME OF VENDOR: _____

By:
Title:
Its duly authorized signatory

VENDOR'S INFORMATION PAGE FOLLOWS

VENDOR'S INFORMATION PAGE

DATE _____

NAME OF COMPANY _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

PHONE NUMBER _____ FAX NUMBER _____

E-MAIL ADDRESS _____

FEDERAL ID NUMBER _____

MINORITY OR WOMAN OWNED BUSINESS ENTERPRISE _____ YES _____ NO

CONTACT NAME (If different from above) _____

TITLE _____

DATE _____

OTHER COMPANY CONTACTS _____

INSTRUCTIONS TO VENDORS

- 1) The SFB serves to advise potential Vendors of the parameters of the solution being sought by PWC. The use of phrases such as “shall,” “must,” and “requirements” are intended to create enforceable contract conditions.
- 2) Bids must be received no later than 2:00 p.m. on Thursday, January 5, 2023. Late bids, regardless of cause, will be disqualified from further consideration and will be returned to Vendor unopened. Subject to the terms of the General Terms and Conditions, Vendors may submit bids for any or all items shown on the applicable bid proposal form, and may submit bids for quantities less than the quantities shown on the Instructions to Vendors. Do not submit alternate bids unless specifically authorized in the SFB, and then only if each bid has significant differences other than price. Regardless of error or omission, and except as provided in the Instructions to Vendors, a Vendor shall not be permitted to increase its pricing after the deadline for submitting bids.
- 3) Vendors must submit bids only on the Invitation to Bid form(s) provided herein. All bids must be signed by a duly authorized official of Vendor with actual authority to bind Vendor. Bids must be submitted in a sealed opaque envelope providing the bid title, date and time of opening on the front of the envelope. Bids may be delivered in person or by express mail to Fayetteville Public Works Commission, Procurement Department, **Pole Mount, Single Phase and 3 Phase Pad Mount Distribution Transformers Contract Calendar Year 2024**, Attn: Shelby Lesane, 955 Old Wilmington Road, Fayetteville, NC 28301, or may be mailed to Fayetteville Public Works Commission, Attn: Shelby Lesane, P.O. Box 1089, Fayetteville, NC 28302. Except as contemplated in the terms of the General Terms and Conditions, no changes, additions, or deletions will be allowed after a bid is opened.
- 4) Bids should be complete and carefully worded and should convey all of the information requested in the SFB. Bids must be made in the unit of measurement indicated in the Instructions to Vendors. Bids should be prepared simply and economically, providing a straightforward, concise description of Vendor’s capabilities to satisfy the requirements of the SFB. Emphasis should be on completeness and clarity of content. If the bid includes any comment over and above the specific information requested in the SFB, Vendor should include this information as a separate appendix to its bid. Bids which include clarifications or modifications to any of the SFB’s contractual requirements, or a Vendor’s standard terms and conditions, may be deemed non-responsive and not considered for award at PWC’s discretion. Unsolicited bid samples or descriptive literature will not be examined or tested, will not be used to determine responsiveness, and will not be deemed to vary any of the provisions of the SFB. Failure comply with these requirements shall constitute sufficient cause to reject a bid without further consideration. PWC reserves the right to request additional information from Vendors to aid in the evaluation process. This information may include, but shall not be limited to, sketches, descriptive literature, complete specifications covering the goods and ancillary services offered, financial statements, reference lists showing companies currently utilizing the proposed equipment, and the like. PWC reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to award of a Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders the reasons for PWC’s action.

- 5) All questions regarding the Invitation to Bid must be submitted to Shelby Lesane, Procurement Advisor, by e-mail to shelby.lesane@faypwc.com, no later than 5:00 p.m., Thursday, December 9, 2022. Vendors are expressly prohibited from contacting any other PWC official or employee regarding the Invitation to Bid. Violation of the foregoing prohibition may be grounds for the immediate disqualification of Vendor at the discretion of PWC. Any responses to such inquiries will be provided by PWC in writing. Oral statements or representations by any employee or representative of PWC regarding the Invitation to Bid shall not be binding on PWC.
- 6) Bids may be withdrawn by Vendor only in writing and if receipt of such withdrawal is acknowledged by PWC prior to the time for the opening of bids identified on Notice to Vendors (or such later date included in an Addendum). Written withdrawal requests shall be submitted on Vendor's letterhead and signed by an official of Vendor duly authorized to make such request. Any withdrawal request made after bid opening shall be allowed only if the price bid was based upon a mistake which constituted a substantial error, provided the bid was submitted in good faith, and then only pursuant to the terms of N.C.G.S. § 143-129.1.
- 7) Bids will be publicly opened and read near the entrance doors of the PWC Administration Building located at 955 Old Wilmington Road, Fayetteville, North Carolina 28301. Bids will be examined promptly after opening and an award(s) will be made within a reasonable time thereafter.
- 8) An award of a Contract is subject to the approval by the Board of Commissioners of PWC and the Fayetteville, North Carolina City Council. PWC reserves the right to inspect, at a reasonable time, the equipment, item, plant, or other facilities of a prospective Vendor prior to Contract award, and during the Contract term, as PWC deems necessary to determine that such equipment, item, plant, or other facilities conform with the specifications/requirements and are adequate and suitable for the proper and effective performance of the Contract.
- 9) No award shall be made except to a qualified vendor pursuant to the responsive, responsible bid offering the lowest price that meets the specifications set out in the SFB. PWC reserves the right to award one or more Contracts when it is in the best interest of PWC.
- 10) PWC reserves the right to reject any and all bids, in whole or in part, for any reason permitted by applicable law, including without limitation, for failure to comply with any single requirement, or by deeming a bid unsatisfactory as to quality or quantity, delivery, price or service offered, non-compliance with the requirements or intent of this SLB, incompatibility with PWC's existing system lack of competitiveness, error(s) in specifications or indications that revision would be advantageous to PWC, cancellation or other changes in the intended project or any other determination that the proposed requirement is no longer needed, limitation or lack of available funds, circumstances that prevent determination of the best offer, and Vendor's past performance.
- 11) PWC reserves the right to award any combination of bids, or any part of any one bid, to one or more Vendors.

SPECIFIC BID TERMS:

- 12) Any changes or clarifications to the Addenda or other documents comprising the SFB will be made by PWC in writing in the form of an Addendum. No verbal changes or clarifications to any of the solicitation documents comprising the SFB shall be binding on PWC.
- 13) Vendors shall provide a written description of how Vendor intends to meet and implement the following transformer specifications:
 - (i) Standard nameplate including bar coded serial number, PWC company number and PWC stock number.
 - (ii) Installation of PWC-furnished PWC company number decal (3.5" x 9") on lower front of transformer.
 - (iii) Installation of externally viewable, inrush-restrained, primary faulted circuit indicator with sensor, manufactured by Power Delivery Products, per transformer specifications.
 - (iv) Submission of Certified Test Results, in IEEE Standard format, for each transformer ordered. Describe the Certified Test Results format and at what point in the delivery process the files will be submitted to PWC.
- 14) Vendors must electronically submit certified test results, in accordance with IEEE Standard C57.12.37 format (comma delimited or Excel worksheet format) for each transformer ordered pursuant to the Contract before shipment can be considered complete and accepted by PWC. Payments for any shipments will be withheld until certified test results for all transformers associated with a shipment are supplied and accepted by PWC. All test results shall be submitted as indicated in the specifications.
- 15) All transformers shall be designed, manufactured and tested in accordance with written specifications enclosed herein. In addition, each design shall meet the new 2016 DOE efficiency requirements. No transformer supplied shall exceed 10% of quoted average No Load Loss and/or 6% of quoted average Total Load Loss, i.e., No Load + Load Loss. Individual transformers exceeding these requirements will not be accepted and will be returned to the manufacturer and/or distributor freight collect.
- 16) If either the certified test results or PWC's own testing of transformers received reveals values exceeding the quoted average losses, No Load Loss and/or Load Loss, PWC will exercise one of the two options listed below:
 - (i) Return any transformers up to and including all of the shipment, C.O.D., to be replaced by the Vendor with transformers that meet the quoted losses in the bid, or
 - (ii) at PWC's option, invoice or accept a credit memo from Vendor toward the purchase order issued for the bid.
- 17) PWC reserves the right to test the Electrical Characteristics of each unit. If PWC's own tests differ from the certified test results by more than 4% of the measured Total Watts Loss, the transformer(s) in question may be tested by a third-party test facility, to be agreed upon and witnessed by both parties, for verification testing. The expense of the third-party testing will be absorbed by Vendor if the results are more than 4% of the Total Watts Loss.

- 18) The term of the Contract shall extend from the date of execution and delivery of the Contract by all parties through the date of delivery of transformers through December 31, 2023; provided, however, that by written notice by a party not less than 30 days prior to the then existing term, and the receiving party's written acknowledge and agreement to such notice of extension, the Contract may be extended for two (2) additional one-year periods. Delivery of Goods shall take place during the then existing term of the Contract.
- 19) Vendor shall submit pricing for each transformer size. Pricing shall be referenced to one of the following indices (each an "Index"): (a) the BLS index for 'Electric Power and Specialty Transformer Manufacturing: Power and Distribution Transformers, Except Parts (PCU3353113353111); or (b) another verifiable, relevant and nationally recognized pricing index reasonably acceptable to PWC. Each Index shall be verifiable via the website links submitted by Vendor in its bid. The proposed Index shall be noted in the bid and shall be the Index utilized during the term of the Contract.

In the event of a significant price increase or decrease in materials of occurring during the term of the Contract, Vendor's pricing shall be equitably adjusted. For each fiscal quarter during the term of the Contract, Vendor shall update its pricing and submit the same to PWC based on changes in the applicable Index. By submitting such revised pricing, Vendor represents and warrants that such pricing comports to the changes in the applicable Index and such computations are otherwise true and accurate.

- 20) Quantities for each transformer must be noted as either guaranteed or estimated on the Bid Proposal form. During the term of the Contract, PWC reserves the right to request increases or decreases to estimated quantities for Vendor's consideration. PWC also reserves the right to place order quantities in excess of guaranteed amounts should Vendor have production capacity.



GENERAL TERMS & CONDITIONS

1. **PERFORMANCE:**

- a) It is anticipated that the tasks and duties undertaken by Vendor under the contract which results from the SFB in this matter ("Contract") shall include ancillary services, and/or the manufacturing, furnishing, or development of goods and other tangible features or components, as deliverables.
- b) Except as provided herein, and unless otherwise mutually agreed in writing prior to award, any deliverables not subject to an agreed Vendor license and provided by Vendor in performance of this Contract shall be and remain property of PWC. During performance, Vendor may provide proprietary components as part of the deliverables that are identified in this Contract. Vendor grants PWC a personal, permanent, non-transferable license to use such proprietary components of the deliverables and other functionalities, as provided under this Contract. Any technical and business information owned by Vendor or its suppliers or licensors made accessible or furnished to PWC shall be and remain the property of Vendor or such other party, respectively. Vendor agrees to perform under the Contract in at least the same or similar manner provided to comparable users and customers. PWC shall notify Vendor of any defects or deficiencies in performance or failure of deliverables to conform to the standards and specifications provided in this Contract. Vendor agrees to timely remedy defective performance or any nonconforming deliverables on its own or upon such notice provided by PWC.
- c) Vendor has a limited, non-exclusive license to access and use PWC data provided to Vendor, but solely for performing its obligations under and during this Agreement and in confidence as further provided for herein or by law.
- d) Vendor or its suppliers, as specified and agreed in the Contract, shall provide support assistance to PWC related to all ancillary services performed or other deliverables procured hereunder during PWC's normal business hours. Vendor warrants that its support, customer service, and assistance will be performed at a minimum in accordance with generally accepted and applicable industry standards.
- e) PWC may document and take into account in awarding or renewing future procurement contracts the general reputation, performance and performance capabilities of Vendor under this Contract.

2. **DELIVERY AND ACCEPTANCE:**

- a) Delivery of the purchased Goods shall be F.O.B. Destination - PWC Warehouse Facility, 1097 Public Works Drive, Fayetteville, NC 28301, or such other location as may be designated by PWC in the SFB (the "Delivery Point"), with all transportation costs and fees included in the bid price. Time is of the essence as to the timely delivery of the Goods. Vendor bears all risk of loss or damage to the Goods until delivery of the Goods to the Delivery Point.
- b) Performance shall be considered complete when the Goods and ancillary services are approved as acceptable by PWC. PWC has the right to inspect the Goods on or after the delivery date. PWC, at its sole option, may inspect all or a sample of the Goods, and may reject all or any portion of the Goods if it determines the Goods are nonconforming or

defective. If PWC rejects any portion of the Goods, PWC has the right, effective upon written notice to Vendor, to: (a) terminate this Agreement in its entirety and require Vendor to remove the Goods in a commercially reasonable time period or pay the full cost and expense to have the rejected Goods returned to Vendor; or (b) reject the Goods and require replacement of the rejected Goods at Vendor's sole expense. If PWC requires replacement of the Goods, Vendor shall, at its sole expense and in the lesser of ninety (90) days or the number of days between any applicable Purchase Order of PWC and the Delivery Date, replace the nonconforming Goods and pay for all related expenses, including, but not limited to, transportation charges for the return of the defective Goods and the delivery of replacement Goods. Any inspection or other action by PWC under this section shall not reduce or otherwise affect Vendor's obligations under the Contract, including Vendor's warranties, and PWC shall have the right to conduct further inspections after Vendor has carried out its remedial actions. In addition to the foregoing, PWC shall have all other rights and remedies available under North Carolina law and the applicable provisions of the North Carolina Uniform Commercial Code.

3. DEFAULT AND TERMINATION:

- a) In the event of default by Vendor, PWC may, as provided by North Carolina law, procure Goods and ancillary services necessary to complete performance hereunder from other sources and hold Vendor responsible for any excess cost occasioned thereby. In addition, and in the event of default by Vendor under the Contract, Vendor's violation of any applicable laws or regulations, Vendor's disregard of the authority of PWC or any public body having jurisdiction over PWC, or upon Vendor filing a petition for bankruptcy or the entering of a judgment of bankruptcy by or against Vendor, PWC may immediately cease doing business with Vendor, terminate the Contract for cause, and take action to recover relevant damages, and if permitted by applicable law, debar Vendor from doing future business with PWC.
- b) If, through any cause, Vendor shall fail to fulfill in a timely and proper manner the obligations under the Contract, including, without limitation, in these General Terms and Conditions, PWC shall have the right to terminate the Contract by giving thirty days written notice to Vendor and specifying the effective date thereof. In that event, any or all finished or unfinished deliverables that are prepared by Vendor under the Contract shall, at the option of PWC, become the property of PWC (and under any applicable Vendor license to the extent necessary for PWC to use such property), and Vendor shall be entitled to receive just and equitable compensation for any acceptable deliverable completed (or partially completed at PWC's option) as to which such option is exercised. Notwithstanding, Vendor shall not be relieved of liability to PWC for damages sustained by PWC by virtue of any breach of the Contract, and PWC may withhold any payment due Vendor for the purpose of setoff until such time as the exact amount of damages due PWC from such breach can be determined. PWC, if insecure as to receiving proper performance or provision of Goods deliverables, or if documented Vendor ancillary services performance issues exist, under this Contract, may require at any time a performance bond or other alternative performance guarantees from a Vendor without expense to PWC as provided by applicable law.
- c) If this Contract contemplates deliveries or performance over a period of time, PWC may terminate this Contract for convenience at any time by providing thirty (30) days' notice in writing from PWC to Vendor. In that event, any or all finished or unfinished deliverables prepared by Vendor under this Contract shall, at the option of PWC, become its property, and under any applicable Vendor license to the extent necessary for PWC to use such property. If the Contract is terminated by PWC for convenience, PWC shall pay for those items or ancillary services for which such option is exercised, less any payment or compensation previously made.

4. INTERPRETATION, CONFLICT OF TERMS:

- a) Definitions in the SFB are specifically incorporated herein..
- b) If federal funds are involved in the transactions under this Contract, Vendor shall comply with all applicable state and federal requirements and laws, except where State requirements are more restrictive. See the additional federal requirements included in the "Federal Funds Provisions" section below.

- c) Contracts made in contravention of the applicable provisions of General Statutes, Chapter 143, are void.
 - d) In cases of conflict between specific provisions in this Contract and any other referenced documents, the Order of Precedence shall be (high to low) (1) any special terms and conditions specific to this Contract, including any negotiated terms; (2) requirements, specifications and administrative terms; (3) these GENERAL TERMS AND CONDITIONS; (4) Definitions and other provisions in INSTRUCTIONS TO VENDORS in this solicitation, which is specifically incorporated in this Contract; (5) PRICING, and (6) Vendor's Bid, to the extent specifically and mutually incorporated into this Contract.
5. **GOVERNMENTAL RESTRICTIONS:** In the event any Governmental restrictions are imposed which necessitate alteration of the Goods, material, quality, workmanship, or performance of the ancillary services offered, prior to acceptance, it shall be the responsibility of Vendor to notify PWC at once, in writing, indicating the specific regulation which requires such alterations. PWC reserves the right to accept any such alterations, including any price adjustments occasioned thereby, or to cancel the Contract.
6. **TAXES:** Any applicable taxes shall be invoiced as a separate item. Prices offered are not to include any personal property taxes, nor any sales or use tax (or fees) unless required by the North Carolina Department of Revenue.
7. **SITUS AND GOVERNING LAWS:**
- a) This Contract is made under and shall be governed by and construed in accordance with the laws of the State of North Carolina, without regard to its conflict of laws rules, and within which State all matters, whether sounding in contract, tort or otherwise, relating to its validity, construction, interpretation and enforcement shall be determined.
 - b) The exclusive venue for all mediations and litigation and any other legal proceedings regarding the Agreement shall be the State and Federal Courts serving Cumberland County, North Carolina, and Vendor consents to personal jurisdiction in such courts. Vendor irrevocably waives, to the fullest extent permitted by law, and objection that it may now or hereafter have to the laying of the venue of any such suit, action or proceeding in any such court serving Cumberland County or that any such suit, action or proceeding brought in any such court serving Cumberland County has been brought in an inconvenient forum.
 - c) Vendor shall comply with all laws, ordinances, codes, rules, regulations, and licensing requirements that are applicable to the conduct of its business and its performance in accordance with the Contract, including those of federal, state, and local agencies having jurisdiction and/or authority.
8. **NON-DISCRIMINATION COMPLIANCE:** PWC has an equal opportunity purchasing policy. PWC seeks to ensure that all segments of the business community have access to supplying the Goods and **ancillary services** needed by PWC. PWC encourages utilization of small and minority business enterprises in its procurements. PWC provides opportunities for all businesses and does not discriminate regardless of race, color, religion, age, national origin or disability.
9. **PAYMENT TERMS:** Vendor shall invoice PWC within thirty (30) days after acceptance of the of the Goods. PWC shall pay the undisputed portion of a correct invoice within forty-five (45) calendar days after PWC's receipt of the invoice. All payments from PWC to Vendor shall be transferred electronically to Vendor's designated financial institution, and Vendor shall, prior to delivery of its invoice to PWC, supply the name of Vendor's financial institution, routing number, and account number on the form available from PWC and provide to PWC a completed and signed IRS Form W-9. Vendor has the right to impose a late payment charge of one percent (1%) per month for amounts unpaid by PWC by the date due.

- 10. CONDITION AND PACKAGING:** Unless otherwise expressly provided by special terms and conditions or specifications in the Contract or by express, specific federal law or rule, it is understood and agreed that any item offered or shipped has not been sold or used for any purpose, is newly manufactured, and shall be in first class condition. All containers/packaging shall be suitable for handling, storage or shipment. Vendor shall properly pack, mark, and ship the Goods as instructed by PWC and otherwise in accordance with applicable law and industry standards and shall provide PWC with all shipment documentation showing the quantity of pieces in shipment, the number of cartons or containers in shipment, Vendor's name, the airway bill or bill of lading number, and the state of origin.
- 11. INTELLECTUAL PROPERTY WARRANTY AND INDEMNITY:** Vendor shall hold and save PWC, its officers, agents and employees, harmless from liability of any kind, including costs and expenses, resulting from infringement of the rights of any third party in any ancillary services or copyrighted material, patented or patent-pending invention, article, device or appliance delivered in connection with the Contract.
- 12. WARRANTIES:** Vendor warrants to PWC that for a period of twenty-four (24) months from the Delivery Date, all Goods will: (a) be free from any defects in workmanship, material and design; (b) conform to applicable specifications, drawings, designs, samples and other requirements set forth in the Contract or as specified by PWC and agreed to by Vendor; (c) be fit for their intended purpose and operate as intended; (d) be free and clear of all liens, security interests, or other encumbrances; and (e) not infringe or misappropriate any third party's patent or other intellectual property rights. These warranties survive any delivery, inspection, acceptance or payment of or for the Goods by PWC. These warranties are cumulative and in addition to any other warranty provided by law or equity. Any applicable statute of limitations runs from the date of PWC's discovery of the noncompliance of the Goods with the foregoing warranties. If PWC gives Vendor notice of noncompliance with this Section 9, Vendor shall, at its own cost and expense, within thirty (30) days replace or repair the defective or nonconforming Goods and pay for all related expenses, including, but not limited to, transportation charges for the return of the defective or nonconforming Goods to Vendor and the delivery of repaired or replacement Goods to PWC.
- 13. ADVERTISING:** Vendor agrees not to use the existence of the Contract or the name of Fayetteville Public Works Commission as part of any commercial advertising or marketing of products or ancillary services unless otherwise provided in the SFB.
- 14. ASSIGNMENT OR DELEGATION OF DUTIES:**
- a) As a convenience to Vendor, PWC may include any person or entity designated by Vendor in writing as a joint payee on Vendor's payment check. In no event shall such approval and action obligate PWC to anyone other than Vendor.
 - b) If Vendor requests any assignment, or delegation of duties, Vendor shall remain responsible for fulfillment of all Contract obligations. Upon written request, PWC may, in its unfettered discretion, approve an assignment or delegation to another responsible entity acceptable to PWC, such as the surviving entity of a merger, acquisition or a corporate reorganization if made as part of the transfer of all or substantially all of Vendor's assets. Any purported assignment or delegation made in violation of this provision shall be void and a material breach of the Contract.
- 15. INSURANCE:** During the term of this Agreement and for a period of three (3) years after the date of this Agreement, Vendor shall, at its own expense, maintain and carry insurance in full force and effect that includes, but is not limited to, commercial general liability (including product liability) with limits no less than \$1,000,000 for each occurrence and \$3,000,000 in the aggregate and umbrella liability in a sum no less than \$5,000,000, which insurance shall be placed with insurance companies authorized to do business in the State of North Carolina and rated A minus VII or better by the current edition of Best's Key Rating Guide or otherwise approved in writing by PWC. Prior to delivering any Goods, Vendor shall deliver to PWC certificates of insurance confirming each such coverage, and Vendor shall

direct its insurers to provide annually to PWC certificates confirming each such coverage during the coverage period. PWC shall be named as an additional insured in the insurance policy. Vendor shall not reduce or allow the required insurance coverages to lapse without PWC's prior written approval. All policies for insurance must be endorsed to contain a provision giving PWC a thirty (30) calendar day prior written notice by certified mail of any cancellation of that policy or material reduction in coverage. Should a notice of cancellation be issued for non-payment of premiums or any part thereof, or should Vendor fail to provide and maintain certificates as set forth herein, PWC shall have the right, but not the obligation, to pay such premium to the insurance company or to obtain such coverage and to deduct such payment from any sums that may be due or become due to Vendor, or to seek reimbursement for said payments from Vendor. Any such sums paid by PWC shall be due and payable immediately by Vendor upon notice from PWC. The insurance provisions of this Agreement shall not be construed as a limitation on Vendor's responsibilities and liabilities pursuant to the terms and conditions of this Agreement.

16. GENERAL INDEMNITY:

- a) Vendor shall indemnify, defend and hold and save PWC, its officers, agents, and employees, harmless from liability of any kind, including all claims and losses accruing or resulting to any other person, firm, or corporation furnishing or supplying work, ancillary services, materials, or supplies in connection with the performance of the Contract, and also from any and all claims and losses accruing or resulting to any person, firm, or corporation that may be injured or damaged by Vendor in the performance of the Contract that are attributable to the negligence or intentionally tortious acts of Vendor, provided that Vendor is notified in writing within 30 days from the date that PWC has knowledge of such claims.
- b) Vendor, at its own expense shall defend any action brought against PWC, under this section. Vendor shall have the sole control of the defense of any action on such claim and all negotiations for its settlement or compromise, provided, however, that PWC shall have the option to participate in such action at its own expense.
- c) Vendor represents and warrants that it shall make no claim of any kind or nature against PWC's agents who are involved in the delivery or processing of Vendor deliverables or ancillary services as part of this Contract with PWC.
- d) As part of this provision for General indemnity, if federal funds are involved in this procurement, Vendor warrants that it will comply with all relevant and applicable federal requirements and laws, and will indemnify, defend and hold and save PWC harmless from any claims or losses resulting to PWC from Vendor's noncompliance with such federal requirements or law in the performance of this Contract. The representations and warranties in the preceding two sentences shall survive the termination or expiration of the Contract.
- e) PWC does not participate in indemnification due to Constitutional restrictions, or arbitration, which effectively and unacceptably waives jury trial.

17. SUBCONTRACTING: Performance under the Contract by Vendor shall not be subcontracted without prior written approval of PWC, except to those subcontractors specifically identified by Vendor in its bid. PWC reserves the right, in its discretion, to reject any proposed subcontractor. Unless otherwise agreed in writing, acceptance of a Vendor's proposal shall include approval to use the subcontractor(s) that have been specified therein.

18. CONFIDENTIALITY: Vendor acknowledges and agrees that all Vendor information submitted to PWC in connection with a bid shall be subject to public disclosure unless such information is specifically identified and labeled as a trade secret or confidential information by Vendor, and Vendor provides a written basis for requesting such exemption from disclosure, which shall be acceptable to PWC in its discretion. Blanket assertions of confidentiality will not be honored. Vendors hereby agrees to indemnify and defend PWC for honoring any designation of Vendor information designated as a trade secret or confidential. The failure to identify and label any Vendor information that is released by PWC shall constitute a complete waiver of any and all claims for damages caused by any release of such information.

- 19. CARE OF PWC DATA AND PROPERTY:** Any PWC property, information, data, instruments, documents, studies or reports given to or prepared or assembled by or provided to Vendor under the Contract shall be kept as confidential, used only for the purpose(s) required to perform the Contract and not divulged or made available to any individual or organization without the prior written approval of PWC.

PWC's data and property in the hands of Vendor shall be protected from unauthorized disclosure, loss, damage, destruction by a natural event or another eventuality. Vendor agrees to reimburse PWC for loss or damage of PWC property while in Vendor's custody. Such PWC data shall be returned to PWC in a form acceptable to PWC upon the termination or expiration of this Agreement.

Vendor shall notify PWC of any security breaches within 24 hours. For further information, notice is given to Vendor that the NC Department of Information Technology (DIT) has requirements relating to the security of PWC network, and rules relating to the use of PWC network, IT software and equipment, that Vendor must comply with such requirements, as well as PWC standards.

- 20. ENTIRE AGREEMENT:** The Contract (including any documents mutually incorporated specifically therein) resulting from a relevant solicitation represents the entire agreement between the parties and supersedes all prior oral or written statements or agreements. All promises, requirements, terms, conditions, provisions, representations, guarantees, and warranties contained herein shall survive the Contract expiration or termination date unless specifically provided otherwise herein, or unless superseded by applicable Federal or State statutes of limitation.
- 21. AMENDMENTS:** This Contract may be amended only by a written amendment duly executed by PWC and Vendor.
- 22. NO WAIVER:** Notwithstanding any other language or provision in the Contract or in any Vendor-supplied material, nothing herein is intended nor shall be interpreted as a waiver of any right or remedy otherwise available to PWC under applicable law. The waiver by PWC of any right or remedy on any one occasion or instance shall not constitute or be interpreted as a waiver of that or any other right or remedy on any other occasion or instance.
- 23. FORCE MAJEURE:** Neither party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations as a result of events beyond its reasonable control, including, without limitation, fire, power failures, any act of war, hostile foreign action, nuclear explosion, riot, strikes, civil insurrection, earthquake, hurricane, tornado, other catastrophic epidemic or pandemic, natural event or Act of God.
- 24. SOVEREIGN IMMUNITY:** Notwithstanding any other term or provision in the Contract, nothing herein is intended nor shall be interpreted as waiving any claim or defense based on the principle of sovereign immunity or other state or federal constitutional provision or principle that otherwise would be available to PWC under applicable law.
- 25. COMPLIANCE:** Vendor hereby acknowledges that "E-Verify" is the federal E-Verify program operated by the US Department of Homeland Security and other federal agencies which is used to verify the work authorization of newly hired employees pursuant to federal law and in accordance with Article 2, Chapter 64 of the North Carolina General Statutes. Vendor further acknowledges that all employers, as defined by Article 2, Chapter 64 of the North Carolina General Statutes, must use E-Verify and after hiring an employee to work in the United States, shall verify the work authorization of the employee through E-Verify in accordance with NCGS §64-26(a). Vendor hereby pledges, attests, and warrants through execution of this Agreement that Vendor complies with the requirements of Article 2, Chapter 64 of the North Carolina General Statutes and further pledges, attests, and warrants that all subcontractors currently employed by or subsequently hired by Vendor to provide services for PWC shall comply with all E-Verify requirements. Failure to comply with the above requirements shall be considered a breach of this Agreement. Vendor hereby further acknowledges that the execution and delivery of this Agreement constitutes Vendor's certification to PWC and to the North Carolina State Treasurer that, as of the Effective Date, Vendor is not listed on (a) the Final Divestment List created and maintained by the North Carolina Department of State Treasurer pursuant to the Iran Divestment Act of 2015, Chapter 147, Article 6E of the General Statutes of North

Carolina (the "Iran Divestment Act"); or (b) the list of companies that the North Carolina State Treasurer determines to be engaged in a boycott of Israel in accordance with Article 6G of Chapter 147 of the General Statutes of North Carolina. Vendor represents and warrants to PWC that Vendor, and all persons and entities owning (directly or indirectly) an ownership interest in it: (i) are not, and will not become, a person or entity with whom a party is restricted from doing business with under regulations of the Office of Foreign Asset Control ("OFAC") of the Department of the Treasury (including, but not limited to, those named on OFAC's Specially Designated and Blocked Persons list) or under any statute, executive order (including, but not limited to, the September 24, 2001, Executive Order 13224 Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism), or other governmental action; and (ii) are not knowingly engaged in, and will not knowingly engage in, any dealings or transactions or be otherwise associated with such persons or entities described in clause (i) above. Vendor also shall at all times during the term of this Agreement comply with Executive Order 11246, including but not limited to the Equal Opportunity Clause requirements set forth in 41 C.F.R. § 60-1.4. Vendor shall abide by the requirements of 41 CFR 60-300.5(a) and 60-741.5(a) prohibiting discrimination against qualified individuals on the basis of protected veteran status or disability and requiring affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified protected veterans and individuals with disabilities.

1-295-332	CSP	10	14.4	125/30	240/120	30405	15			
1-295-380	CSP	25	14.4	125/30	240/120	30605	15			
1-295-405	CSP	50	14.4	125/30	240/120	30805	6			
1-295-414	CSP	75	14.4	125/30	240/120	30805	3			

Stock Code	Type	KVA	Primary	Pri / Sec	Secondary	Property	Contract	Unit	Approx.	Manufacturer Plant
			(kV)	BIL (kV)	(V)	Type	Quantity	Price	Lead Time	Location
1-295-610	1-PH PAD	25	14.4 X 7.2	125/30	240/120	40608	80			
1-295-630	1-PH PAD	50	14.4 X 7.2	125/30	240/120	40808	240			
1-295-640	1-PH PAD	75	14.4 X 7.2	125/30	240/120	40908	50			
1-295-655	1-PH PAD	100	14.4 X 7.2	125/30	240/120	41008	50			
1-295-695	1-PH PAD	167	14.4 X 7.2	125/30	240/120	41208	10			

Stock Code	Type	KVA	Primary	Pri / Sec	Secondary	Property	Contract	Unit	Approx.	Manufacturer Plant
			(kV)	BIL (kV)	(V)	Type	Quantity	Price	Lead Time	Location
1-295-670	3-PH PAD	150	12.47/7.2 x 24.94/14.4	125/30	208/120	41172	2			
1-295-701	3-PH PAD	300	12.47/7.2 x 24.94/14.4	125/30	208/120	41572	2			
1-295-721	3-PH PAD	500	12.47/7.2 x 24.94/14.4	125/30	208/120	41772	2			
1-295-747	3-PH PAD	750	12.47/7.2 x 24.94/14.4	125/30	208/120	41872	2			
1-295-677	3-PH PAD	150	12.47/7.2 x 24.94/14.4	125/30	480/277	41125	2			
1-295-706	3-PH PAD	300	12.47/7.2 x 24.94/14.4	125/30	480/277	41525	2			
1-295-732	3-PH PAD	500	12.47/7.2 x 24.94/14.4	125/30	480/277	41725	2			
1-295-741	3-PH PAD	750	12.47/7.2 x 24.94/14.4	125/30	480/277	41825	2			
1-295-755	3-PH PAD	1000	12.47/7.2 x 24.94/14.4	125/30	480/277	41925	2			

1-295-770	3-PH PAD	1500	12.47/7.2 x 24.94/14.4	125/30	480/277	42025	2			
1-295-785	3-PH PAD	2500	12.47/7.2 x 24.94/14.4	125/30	480/277	42125	2			

Stock Code	Type	KVA	Primary (kV)	Pri / Sec BIL (kV)	Secondary (V)	Property Type	Contract Quantity	Unit Price	Approx. Lead Time	Manufacturer Plant Location
1-295-660	3-PH PAD	150	12.47/7.2	95/30	208/120	41168	20			
1-295-700	3-PH PAD	300	12.47/7.2	95/30	208/120	41568	15			
1-295-720	3-PH PAD	500	12.47/7.2	95/30	208/120	41768	4			
1-295-737	3-PH PAD	750	12.47/7.2	95/30	208/120	41868	4			
1-295-665	3-PH PAD	150	12.47/7.2	95/30	480/277	71171	2			
1-295-705	3-PH PAD	300	12.47/7.2	95/30	480/277	71571	3			

1-295-725	3-PH PAD	500	12.47/7.2	95/30	480/277	41771	4			
1-295-740	3-PH PAD	750	12.47/7.2	95/30	480/277	41871	6			
1-295-750	3-PH PAD	1000	12.47/7.2 With Taps	95/30	480/277	41971	4			
1-295-765	3-PH PAD	1500	12.47/7.2 With Taps	95/30	480/277	42071	4			
1-295-786	3-PH PAD	2500	12.47/7.2 With Taps	95/30	480/277	42171	4			

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TRANSFORMER, OVERHEAD

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(Reference Table 1 on Page 3 for PWC Stock Codes, Ratings and Property Types)

Efficiency Standard: All transformers supplied shall meet minimum efficiency standards set forth in the Department of Energy (DOE) 2016 Energy Efficiency Standard of the Energy Policy and Conservation Act.

Polarity and Terminal Markings: Per IEEE C57.12.20-6.3

Oil Preservation: Per IEEE C57.12.20-6.4

Tank: Cylindrical carbon steel welded-seam with one-piece removable gasketed insulated cover, support lugs, and tank grounding pad/connector per IEEE C57.12.20-6.5. The height of the tank cannot vary by more than plus or minus six inches from unit to unit.

Tank Finish: Electrostatically applied zinc-rich primer and light gray IEEE No. 70 Munsell Notation 5BG 7.0/0.4 alkyd or baked powder finish coat per IEEE C57.12.31 completely covering exterior of tank and extending down inside the tank to a point well below the marked 25°C oil level.

Performance Standards:

Rated Capacity: KVA as indicated, per IEEE C57.12.20 (Design Test)

Basic Impulse Level: 125/30 or 95/30 kV Primary/Secondary (Design Test) Table 1 on Page 3 of 3

Successful completion of routine tests per IEEE C57.12.00-8.2

Delivery Standards:

Transformers will be securely strapped to pallets in upright position and delivered FOB destination as directed by Warehouse personnel. All transformers shall be supplied with certified test results in IEEE C57.12.37 format (comma delimited or Excel spreadsheet) electronically and sent to Elbert.Norris@faypwc.com in accordance with PWC Apparatus Shop Specifications. Transformers should be shipped on open-body trailers to be unloaded by line trucks or forklift. PWC Warehouse personnel will be notified 24 hours in advance of delivery (910-223-4351).

Note: Bid Proposals should identify manufacturer and product identification for competitive products; in addition, supplier should have complete specifications for proposed unit available.

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TRANSFORMER, OVERHEAD, CSP

(Reference Table 1 on Page 3 for PWC Stock Codes, Ratings and Property Types)

Description:

Single-bushing outdoor single-phase 60 hertz single or dual voltage completely self-protected pole-type non-PCB mineral-oil insulated Class ONAN transformer with interlaced secondary windings for use on 12470GRDY/7200 or 24940GRDY/14400 Volt systems under usual service conditions.

Bushings and Terminals: One top cover-mounted primary bushing and 3 secondary terminals per IEEE C57.12.20-7.1

Accessory Equipment: Transformer shall have a protective link primary fuse, secondary oil immersed circuit breaker, a surge arrester mounting bracket, a 10kV (for 7.2kV primary), or 21kV (for 14.4kV primary), MOV polymer surge arrester, lifting lugs, a pressure relief device per IEEE C57.12.20-6.2.7.1, and a nameplate per IEEE C57.12.00.5.12.2 with bar coded PWC company number, serial number and PWC stock number. Also, install furnished PWC company numbers (3.5" x 9" label) on the lower front. Include two position mounting provisions.

TRANSFORMER, OVERHEAD, CONVENTIONAL

(Reference Table 1 on Page 3 for PWC Stock Codes, Ratings and Property Types)

Description: Two-bushing, outdoor single-phase 60 hertz, single-voltage, conventional pole-mounted, certified non-PCB, mineral-oil insulated, Class ONAN transformer with interlaced secondary windings for use on 12470GRDY/7200 or 24940GRDY/14400 Volt systems under usual service conditions.

Bushings and Terminals: Two top cover-mounted primary bushings and 3 secondary terminals per IEEE C57.12.20-7.1

Accessory Equipment: Transformer shall have lifting lugs, mounting provisions for a surge arrester on H1, a pressure relief device per IEEE C.57.12.20-6.2.7.1, and a nameplate per IEEE C57.12.00.5.12.2 with bar coded PWC company number, serial number and PWC stock number. Also, install furnished PWC company numbers (3.5" x 9" label) on the lower front.

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Table 1						
Stock Code	Type	KVA	Primary (kV)	Primary/Secondary BIL (kV)	Secondary (V)	Property Type
1-295-066	Conventional	50	14.4 X 7.2	125/30	277	10811
1-295-106	Conventional	100	14.4	125/30	277	11011
1-295-015	Conventional	10	7.2	95/30	240/120	10400
1-295-030	Conventional	25	7.2	95/30	240/120	10600
1-295-080	Conventional	75	7.2	95/30	240/120	10900
1-295-100	Conventional	100	7.2	95/30	240/120	11000
1-295-142	Conventional	167	7.2	95/30	240/120	11200
1-295-046	Conventional	25	7.2	95/30	480/240	10620
1-295-016	Conventional	10	14.4	125/30	240/120	10401
1-295-031	Conventional	25	14.4	125/30	240/120	10601
1-295-061	Conventional	50	14.4	125/30	240/120	10801
1-295-095	Conventional	75	14.4	125/30	240/120	10901
1-295-125	Conventional	100	14.4	125/30	240/120	11001
1-295-143	Conventional	167	14.4	125/30	240/120	11201
1-295-330	CSP	10	7.2	95/30	240/120	30417
1-295-365	CSP	25	7.2	95/30	240/120	30617
1-295-395	CSP	50	7.2	95/30	240/120	30817
1-295-415	CSP	75	7.2	95/30	240/120	30917
1-295-418	CSP	100	7.2	95/30	240/120	31017
1-295-332	CSP	10	14.4	125/30	240/120	30405
1-295-380	CSP	25	14.4	125/30	240/120	30605
1-295-405	CSP	50	14.4	125/30	240/120	30805
1-295-414	CSP	75	14.4	125/30	240/120	30905
1-295-421	CSP	100	14.4	125/30	240/120	31005

Specification reviewed by: _____

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TRANSFORMER,PAD-MOUNT,1-PHASE

Revised: November 14, 2022
Revised By: Glenn Andersen
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(Reference Table 2 on Page 2 for PWC Stock Codes, Ratings and Property Types)

Description: Pad mounted, compartmental-type, loop-feed, ONAN, single-phase 60 hertz dual-voltage distribution transformer for use on 12470GRDY/7200 or 24940GRDY/14400 Volt systems under usual service conditions. Unit will be low-profile (Type 2) configuration with nominal dimensions of 34"W x 24"H x 38"D conforming to dimensional minimums as shown in Figure 2A of the IEEE C57.12.38, Interchangeability Dimensions Drawings, and will be constructed in general accordance with IEEE C57.12.38.

Efficiency Standard: All transformers supplied shall meet minimum efficiency standards set forth in the Department of Energy (DOE) 2016 Energy Efficiency Standard of the Energy Policy and Conservation Act.

Bushings and Terminals: Two primary bushing wells (H1A, H1B) connected internally per IEEE C57.12.38.13 to accept separable insulated connector bushings/accessories conforming to ANSI/IEEE Standard 386; One single-accessory parking stand; three low-voltage threaded-stud-terminals (X1, X2, X3) per IEEE C57.12.38.8.3.1 Figure 4, Diagram C; and tank grounding pad/connector for primary and neutral per IEEE C57.12.38.12.1.

Accessory Equipment: Transformer will have the following:

- a gasketed dual voltage switch within the primary compartment for de-energized selection of 14,400 or 7,200 primary voltage,
- lifting provisions per IEEE C57.12.38.7.6,
- a weak link primary fuse to remove the transformer from the line in case of internal faults,
- a hot stick-operated thermally sensitive 240 Volt circuit breaker to provide secondary overcurrent/overload protection,
- a pressure relief device per IEEE C57.12.38.11,
- an upper left front door mounted, externally viewable inrush-restrained primary faulted circuit indicator with sensor for 1.61" diameter cable featuring a 200 A trip curve with a current/automatic reset -PDP #29-6114-OFO, or SGS #FI-3CS04BAM-FAY.
- a standard nameplate with bar coded serial number, PWC company number, and PWC stock number.
- a PWC furnished PWC company number (3.5" x 9" label) on the lower front enclosure door.

Polarity and Terminal Markings: Per IEEE C57.12.70

Oil Preservation: Per IEEE C57.12.38.10

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Tank and Door: Domed or peak-roofed, carbon steel welded-seam door and tank with primary and secondary compartments, per IEEE C57.12.38.7, and conforming to enclosure security requirements per IEEE C57.12.28.4.

Tank and Door Finish: Wash, primer, and Munsell 7GY 3.29/1.5 Green baked powder finish coat(s) to be formulated and applied to satisfy IEEE C57.12.28.

Performance Standards: (Per IEEE C57.13.6)

Rated capacity: Per IEEE C57.12.3 (Design Test)
Basic Impulse Level: 125/30 kV Primary/Secondary (Design Test)
Successful completion of routine tests per IEEE C57.12.00.8.2

Delivery Standards:

Transformers will be securely strapped to pallets and delivered FOB destination as directed by PWC Warehouse personnel. All transformers shall be accompanied by certified test results in IEEE C57.12.37 format (comma delimited or Excel spreadsheet) electronically and sent to Elbert.Norris@faypwc.com in accordance with PWC Apparatus Shop Specifications. Transformers shall be shipped on open-body trailers to be unloaded by crane, line truck or forklift from trailer side. PWC Warehouse personnel will be notified 24 hours in advance of delivery (910-223-4351).

Table 2						
Stock Code	Type	KVA	Primary Voltage (kV)	Primary/Secondary BIL (kV)	Secondary Voltage (V)	Property Type
1-295-610	1-PHASE, PAD	25	14.4 X 7.2	125/30	240/120	40608
1-295-630	1-PHASE, PAD	50	14.4 X 7.2	125/30	240/120	40808
1-295-640	1-PHASE, PAD	75	14.4 X 7.2	125/30	240/120	40908
1-295-655	1-PHASE, PAD	100	14.4 X 7.2	125/30	240/120	41008
1-295-695	1-PHASE, PAD	167	14.4 X 7.2	125/30	240/120	41208
1-295-613	1-PHASE, PAD	25	14.4 X 7.2	125/30	480/240	40674
1-295-621	1-PHASE, PAD	50	14.4 X 7.2	125/30	480/240	40874
1-295-656	1-PHASE, PAD	100	14.4 X 7.2	125/30	480/240	41074

Specification reviewed by: _____

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TRANSFORMER,PAD-MOUNT,3-PHASE,12KV

Revision Date: November 14, 2022
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(Reference Table 4 on Page 2 for PWC Stock Codes, Ratings and Property Types)

Description: Pad mounted, compartmental-type, loop-feed, ONAN, three-phase 60 hertz dual primary voltage Y-Y secondary voltage distribution transformer for use on 12470GRDY/7200 systems under usual service conditions. Unit will be standard side-by-side, primary/ secondary configuration with inside dimensions according to IEEE C57.12.34-Figures 5(c) with base dimensions of 50"-70" wide and 48"-70" deep and will be constructed in general accordance with IEEE C57.12.34.

Efficiency Standard: All transformers supplied shall meet minimum efficiency standards set forth in the Department of Energy (DOE) 2016 Energy Efficiency Standard of the Energy Policy and Conservation Act.

Bushings and Terminals: Six primary bushing wells (H1A,2A,3A) and (H1B,2B,3B) connected internally per IEEE C57.12.34 to accept separable insulated connector bushings/accessories conforming to ANSI/IEEE Standard 386; and conforming to dimension specifics as shown in Figure 5(a) of the IEEE C57.12.34 Dimension Drawings; six single-accessory parking stands; Four low-voltage externally clamped spade type terminals (X0,1,2,3) capable of carrying 150 % of full load current and two (2) 2-hole NEMA tank grounding pads/connectors per IEEE C57.12.34.

Accessory Equipment: Transformer will have a gasketed three-phase dual voltage switch within the primary compartment for de-energized selection of 12470GRDY/7200 primary voltage, lifting provisions per IEEE C57.12.34, three oil-immersed rated load break hook-stick operated Bay-O-Net type fuses sized to remove the transformer from the line in case of severe overload and internal faults, a pressure relief device per IEEE C57.12.34, an oil level indicator, oil drain (located in the lower left corner of the primary compartment), fill and sampling provisions, and a standard diagrammatic nameplate with bar coded serial number, PWC Company number and PWC stock number. A duplicate nameplate shall be placed on the outside rear corner of the transformer. Also, install furnished PWC Company number (3.5" x 9" label) on the lower middle of the primary compartment door. A minimum of one (1) handhole large enough to allow replacement of all primary and secondary bushings, or a bolted cover shall be included.

Taps: 1000kVA, 1500kVA, and 2500kVA Transformers shall have straddle taps, two (2) 2.5% above nominal, and two (2) 2.5% below nominal voltage.

Polarity and Terminal Markings: Per IEEE C57.12.70

Oil Preservation: Per IEEE C57.12.34.

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Tank: Domed or peak-roofed carbon steel welded-seam door and tank with primary and secondary compartments, per IEEE C57.12.34, and conforming to enclosure security requirements per IEEE C57.12.28.

Finish: Wash, primer, and Munsell 7GY 3.29/1.5 Green baked powder finish coat(s) to be formulated and applied to satisfy IEEE C57.12.28.

Performance Standards: (Per IEEE C57.13.6)

Rated capacity: Per IEEE C57.12.00 (Design Test)
Basic Impulse Level: 125/30 kV Primary/Secondary (Design Test)
Tests: Successful completion of routine tests per IEEE C57.12.00

Delivery Standards: Transformers will be securely strapped to pallets and delivered FOB destination as directed by PWC Warehouse personnel. All transformers shall be accompanied by certified test results in IEEE C57.12.37 format (comma delimited or Excel spreadsheet) electronically and sent to Elbert.Norris@faypwc.com in accordance with PWC Apparatus Shop Specifications. Transformers should be shipped on open-body trailers to be unloaded by crane, line truck or forklift from trailer side. PWC Warehouse personnel will be notified 24 hours in advance of delivery (910-223-4351)

Table 4						
Stock Code	Type	KVA	Primary (kV)	Primary/Secondary BIL (kV)	Secondary (V)	PROPERTY TYPE
1-295-660	3-PHASE, PAD	150	12.47	95/30	208/120	41168
1-295-700	3-PHASE, PAD	300	12.47	95/30	208/120	41568
1-295-720	3-PHASE, PAD	500	12.47	95/30	208/120	41768
1-295-737	3-PHASE, PAD	750	12.47	95/30	208/120	41868
1-295-665	3-PHASE, PAD	150	12.47	95/30	480/277	41171
1-295-705	3-PHASE, PAD	300	12.47	95/30	480/277	41571
1-295-725	3-PHASE, PAD	500	12.47	95/30	480/277	41771
1-295-740	3-PHASE, PAD	750	12.47	95/30	480/277	41871
1-295-750	3-PHASE, PAD	1000	12.47 w/Taps	95/30	480/277	41971
1-295-765	3-PHASE, PAD	1500	12.47 w/Taps	95/30	480/277	42071
1-295-786	3-PHASE, PAD	2500	12.47 w/Taps	95/30	480/277	42171

Specification reviewed by: _____

Public Works Commission
Fayetteville, NC
Electric Systems Division
Material Specification

TRANSFORMER,PAD-MOUNT,3-PHASE,12X24KV

Revision Date: November 14, 2022
Revised By: Glenn Andersen
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(Reference Table 3 on Page 2 for PWC Stock Codes, Ratings and Property Types)

Description: Pad mounted, compartmental-type, loop-feed, ONAN, three-phase 60 hertz dual primary voltage Y-Y secondary voltage distribution transformer for use on 12470GRDY/7200 or 24940GRDY/14400 Volt systems under usual service conditions. Unit will be standard side-by-side, primary/secondary configuration with inside dimensions according to IEEE C57.12.34-Figures 5(c) with base dimensions of 50"-70" wide and 48"-70" deep and will be constructed in general accordance with IEEE C57.12.34.

Efficiency Standard: All transformers supplied shall meet minimum efficiency standards set forth in the Department of Energy (DOE) 2016 Energy Efficiency Standard of the Energy Policy and Conservation Act.

Bushings and Terminals: Six primary bushing wells (H1A,2A,3A) and (H1B,2B,3B) connected internally per IEEE C57.12.34 to accept separable insulated connector bushings/accessories conforming to ANSI/IEEE Standard 386; and conforming to dimension specifics as shown in Figure 5(a) of the IEEE C57.12.34 Dimension Drawings; six single-accessory parking stands; Four low-voltage externally clamped spade type terminals (X0,1,2,3) capable of carrying 150 % of full load current and two (2) 2-hole NEMA tank grounding pads/connectors per IEEE C57.12.34.

Accessory Equipment: Transformer will have a gasketed three-phase dual voltage switch within the primary compartment for de-energized selection of 12470GRDY/7200 or 24940GRDY/14400 primary voltage, lifting provisions per IEEE C57.12.34, three oil-immersed rated load break hook-stick operated Bay-O-Net type fuses sized to remove the transformer from the line in case of severe overload and internal faults, a pressure relief device per IEEE C57.12.34, an oil level indicator, oil drain(located in the lower left corner of the primary compartment), fill and sampling provisions, and a standard diagrammatic nameplate with bar coded serial number, PWC Company number and PWC stock number. A duplicate nameplate shall be placed on the outside rear corner of the transformer. Also, install furnished PWC Company number (3.5" x 9" label) on the lower middle of the primary compartment door. A minimum of either one (1) handhole large enough to allow replacement of all primary and secondary bushings, or a bolted cover shall be included.

Polarity and Terminal Markings: Per IEEE C57.12.70

Oil Preservation: Per IEEE C57.12.34.

Tank: Domed or peak-roofed carbon steel welded-seam door and tank with primary and secondary compartments, per IEEE C57.12.34, and conforming to enclosure security requirements per IEEE C57.12.28.

**Public Works Commission
Fayetteville, NC
Electric Systems Division
Material Specification**

TRANSFORMER, PAD-MOUNT, 3-PHASE, 12X24KV

**Revision Date: November 14, 2022
Revised By: Glenn Andersen
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Finish: Wash, primer, and Munsell 7GY 3.29/1.5 Green baked powder finish coat(s) to be formulated and applied to satisfy IEEE C57.12.28.

Performance Standards: (Per IEEE C57.13.6)

Rated capacity: Per IEEE C57.12.00 (Design Test)
Basic Impulse Level: 125/30 kV Primary/Secondary (Design Test)
Tests: Successful completion of routine tests per IEEE C57.12.00

Delivery Standards: Transformers will be securely strapped to pallets and delivered FOB destination as directed by PWC Warehouse personnel. All transformers shall be accompanied by certified test results in IEEE C57.12.37 format (comma delimited or Excel spreadsheet) electronically and sent to Elbert.Norris@faypwc.com in accordance with PWC Apparatus Shop Specifications. Transformers should be shipped on open-body trailers to be unloaded by crane, line truck or forklift from trailer side. PWC Warehouse personnel will be notified 24 hours in advance of delivery (910-223-4351)

Table 3						
Stock Code	Type	KVA	Primary (kV)	Primary/Secondary BIL (kV)	Secondary (V)	PROPERTY TYPE
1-295-670	3-PHASE, PAD	150	12.47 X 24.94	125/30	208/120	41172
1-295-701	3-PHASE, PAD	300	12.47 X 24.94	125/30	208/120	41572
1-295-721	3-PHASE, PAD	500	12.47 X 24.94	125/30	208/120	41772
1-295-747	3-PHASE, PAD	750	12.47 X 24.94	125/30	208/120	41872
1-295-677	3-PHASE, PAD	150	12.47 X 24.94	125/30	480/277	41125
1-295-706	3-PHASE, PAD	300	12.47 X 24.94	125/30	480/277	41525
1-295-732	3-PHASE, PAD	500	12.47 X 24.94	125/30	480/277	41725
1-295-741	3-PHASE, PAD	750	12.47 X 24.94	125/30	480/277	41825
1-295-755	3-PHASE, PAD	1000	12.47 X 24.94	125/30	480/277	41925
1-295-770	3-PHASE, PAD	1500	12.47 X 24.94	125/30	480/277	42025
1-295-785	3-PHASE, PAD	2500	12.47 X 24.94	125/30	480/277	42125

Specification reviewed by: _____