

ALASKA ENERGY AUTHORITY – REQUEST FOR QUOTE (RFQ) # 24120

Issue Date: April 12, 2024 Due Date: May 30, 2024

Manokotak Power System Upgrade Project Pad Mount Transformer Purchase

Alaska Energy Authority (AEA) is soliciting bids to purchase commodities as indicated in Appendix C - Scope of Work, Appendix D - Bid Schedule, and Appendix E - Specifications. Note that the term Bid is used throughout this RFQ and for the purposes of this solicitation Bid is equivalent to Quote.

<u>IMPORTANT NOTICE:</u> If you received this solicitation from the State of Alaska's "Online Public Notice" web site, or you downloaded this solicitation from AEA's procurement website, you must register on the online Plan Holders List to receive notification of subsequent amendments to the solicitation. Failure to register may result in the rejection of your bid. It is the bidder's responsibility to ensure that they have received all addenda affecting this ITB. To register, go to www.aideaaeaprocurement.org and select the Plan Holders Registration link and complete the Planholders Registration.

BIDDER'S NOTICE: By signature on this form, the bidder certifies that they comply with the following:

- (1) the bidder has a valid Alaska business license or will obtain one prior to award of any contract resulting from this ITB. If the bidder possesses a valid Alaska business license, the license number must be written below or one the following forms of evidence submitted with the bid:
 - a canceled check for the business license fee;
 - a copy of the business license application with a receipt date stamp from the State's business license office;
 - a receipt from the State's business license office for the license fee;
 - a copy of the bidder's valid business license;
 - a sworn notarized affidavit that the bidder has applied and paid for a business license;
- (2) the price(s) submitted was arrived at independently and without collusion, under penalty of perjury, and that the bidder is complying with:
 - the laws of the State of Alaska;
 - the applicable portion of the Federal Civil Rights Act of 1964;
 - the Equal Employment Opportunity Act and the regulations issued thereunder by the state and federal Government;
 - the Americans with Disabilities Act of 1990 and the regulations issued thereunder by the state and federal government;
 - the bid will remain open and valid for at least 30 days;
 - all terms and conditions set out in this Invitation to Bid (ITB).
- (3) the bidder does not have a conflict of interest as described in Section 1.08.

If a bidder does not hold an Alaska Business License (1) at the time designated in the ITB for opening the Authority will disallow the Alaska Bidder Preference. Bids must also be submitted under the name as appearing on the bidder's current Alaska business license in order to receive the Alaska Bidder Preference. If a bidder fails to comply with (2) or (3) of this paragraph, the Authority may reject the bid, terminate the contract, or consider the contractor in default.

Selwin C. Ray Contract Officer	COMPANY SUBMITTING BID	*DOES YOUR BUSINESS QUALIFY FOR THE ALASKA BIDDER'S PREFERENCE? [] YES [] NO
813 West Northern Lights Blvd Anchorage, AK 99503	AUTHORIZED SIGNATURE	*DOES YOUR BUSINESS QUALIFY FOR THE ALASKA VETERAN PREFERENCE? [] YES [] NO
Phone: (907) 771-3035 FAX: (907) 771-3044	PRINTED NAME	*SEE ITB FOR EXPLANATION OF CRITERIA TO QUALIFY
Email: AEAProcurement@akenergyauthority.org	DATE	TELEPHONE NUMBER
ALASKA BUSINESS LICENSE NUMBER	FEDERAL TAX ID NUMBER	E-MAIL ADDRESS

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SECTION 1. INTRODUCTION & INSTRUCTIONS

SEC. 1.01 PURPOSE OF THE ITB

Alaska Energy Authority (AEA) is soliciting bids to purchase commodities as indicated in Appendix C - Scope of Work, Appendix D - Bid Schedule, and Appendix E - Specifications.

SEC. 1.02 DEADLINE FOR RECEIPT OF BIDS

Bids must be received no later than the time and date indicated in the ITB Schedule, Sec. 1.14, at which time they will be publicly opened. Late bids or amendments will be disqualified and not opened or accepted for evaluation. The bid opening will be conducted telephonically. Potential bidders may attend telephonically by calling 1-888-585-9008 and when prompted enter 351 122 943 #.

SEC. 1.03 PRIOR EXPERIENCE

Minimum prior experience, if applicable, is indicated in the attached Specifications. A bidder's failure to meet these minimum prior experience requirements will cause their bid to be considered non-responsive and rejected.

SEC. 1.04 INVITATION TO BID (ITB) REVIEW

Bidders shall carefully review this ITB for defects and questionable or objectionable material. Comments concerning defects and questionable or objectionable material in the ITB should be made in writing and received by the contracting officer at least ten days before the bid opening date. This will allow time for an amendment to be issued if one is required. It will also help prevent the opening of a defective bid, upon which award cannot be made, and the resultant exposure of bidders' prices.

SEC. 1.05 QUESTIONS PRIOR TO DEADLINE FOR RECEIPT OF BIDS

All questions must be in writing and directed to the contracting officer. The interested party must confirm telephone conversations in writing. Two types of questions generally arise. One may be answered by directing the questioner to a specific section of the ITB. These questions may be answered over the telephone. Other questions may be more complex and may require a written amendment to the ITB. The contracting officer will make that decision.

Contract Officer Selwin C. Ray Phone 907-771-3035 Fax 907-771-3044

SEC. 1.06 SITE INSPECTION

Not Applicable

SEC. 1.07 SUBMITTING BIDS

Bids must be either Emailed, Hand Delivered or Mailed as follows:

EMAIL: <u>AEAProcurement@akenergyauthority.org</u>

HAND DELIVERED OR MAILED: The sealed bid package must be addressed as follows:

Alaska Energy Authority
Attention: **Selwin C. Ray**Invitation to Bid (ITB) Number: 24120
ITB Title: **PAD MOUNT TRANSFORMER PURCHASE 813 W NORTHERN LIGHTS BLVD**

ANCHORAGE, AK 99503

It is the bidder's responsibility to contact the issuing agency at **907-771-3035** to confirm that the bid has been received. The Authority is not responsible for unreadable, corrupt, or missing attachments.

SEC. 1.08 BID FORMS

Bidders shall use the front page of this ITB and any other forms identified in this ITB for submitting bids. All bids must be signed by an individual authorized to bind the bidder to the provisions of the ITB.

BIDDER'S CERTIFICATION

By signature on the bid, the bidder certifies that they comply with the following:

- A. the laws of the State of Alaska;
- B. the applicable portion of the Federal Civil Rights Act of 1964;
- C. the Equal Employment Opportunity Act and the regulations issued thereunder by the state and federal government;
- D. the Americans with Disabilities Act of 1990 and the regulations issued thereunder by the state and federal government;
- E. all terms and conditions set out in this ITB;
- F. the price(s) submitted was arrived at independently arrived and without collusion, under penalty of perjury; and
- G. that the bid will remain open and valid for at least 30 days.

If any bidder fails to comply with [a] through [g] of this paragraph, the Authority reserves the right to disregard the bid, terminate the contract, or consider the contractor in default.

CONFLICT OF INTEREST

Each bid shall include a statement indicating whether or not the company or any individuals working on the contract has a possible conflict of interest (e.g., currently employed by the State of Alaska or formerly employed by the State of Alaska within the past two years) and, if so, the nature of that conflict. The contracting officer reserves the right to **consider a bid non-responsive and reject it** or cancel the award if any interest disclosed from any source could either give the appearance of a conflict or cause speculation as to the objectivity of the contract to be performed by the bidder.

SEC. 1.09 PRICES

The bidder shall state prices in the units of issue on this ITB. Prices quoted in bids must be exclusive of federal, state, and local taxes. If the bidder believes that certain taxes are payable by the state, the bidder may list such taxes separately, directly below the bid price for the affected item.

SEC. 1.10 PRE-BID CONFERENCE

Not Applicable

SEC. 1.11 ASSISTANCE TO BIDDERS WITH A DISABILITY

Bidders with a disability may receive accommodation regarding the means of communicating this ITB or participating in the procurement process. For more information, contact the contracting officer no later than ten days prior to the deadline for receipt of bids.

SEC. 1.12 AMENDMENTS TO BIDS

Amendments to or withdrawals of bids will only be allowed if acceptable requests are received prior to the deadline that is set for receipt of bids, in accordance with 3 AAC 109.170. No amendments or withdrawals will be accepted after the deadline unless the delay is due to an error of the procurement agency, in accordance with 3 AAC 109.360.

SEC. 1.13 AMENDMENTS TO THE ITB

If an amendment is issued, it will be provided to all who were notified of the ITB and to Planholders who have registered on the ITB Plan Holders Registration at www.aideaaeaprocurement.org.

SEC. 1.14 ITB SCHEDULE

The ITB schedule set out herein represents the Authority's best estimate of the schedule that will be followed. If an Activity of this schedule is changed, the schedule may be adjusted. All times are Alaska Time.

ACTIVITY	TIME	DATE
Issue Date / ITB Released		4/12/2024
Deadline for Protest (10 days prior to Bid Due)	2:00 PM	5/20/2024
Deadline for Comments/Questions (5 days prior to Bid Due)	2:00 PM	5/24/2024
Deadline for Receipt of Bids / Bid Due Date	2:00 PM	5/30/2024

This ITB does not, by itself, obligate the Authority. The Authority's obligation will commence when the contract is approved by the AEA Executive Director, or the Director's designee. Upon written notice to the contractor, the Authority may set a different starting date for the contract. The Authority will not be responsible for any work done by the contractor, even work done in good faith, if it occurs prior to the contract start date set by the Authority.

SEC. 1.15 ALTERNATE BIDS

Bidders may only submit one bid. In accordance with 3 AAC 109.270 alternate bids (bids that offer something different than what is asked for) will be rejected.

SEC. 1.16 SUPPORTING INFORMATION

Bidders shall submit all required technical, specification, and other supporting information with their bid, so that a detailed analysis and determination can be made by the contracting officer that the product offered meets the ITB specifications and that other requirements of the ITB have been met. However, provided a bid meets the requirements for a definite, firm, unqualified, and unconditional offer, the Authority reserves the right to request supplemental information from the bidder, after the bids have been opened, to ensure that the products or services offered completely meet the ITB requirements. The requirement for such supplemental information will be at the reasonable discretion of the Authority and may include the requirement that a bidder will provide a sample product(s) so that the Authority can make a first-hand examination and determination.

A bidder's failure to provide this supplemental information or the product sample(s), within the time set by the Authority, will cause the Authority to consider the offer non-responsive and reject the bid.

SEC. 1.17 FIRM, UNQUALIFIED, AND UNCONDITIONAL OFFER

Bidders must provide enough information with their bid to constitute a definite, firm, unqualified and unconditional offer. To be responsive a bid must constitute a definite, firm, unqualified and unconditional offer to meet all the material terms of the ITB. Material terms are those that could affect the price, quantity, quality, or delivery. Also included as material terms are those which are clearly identified in the ITB and which, for reasons of policy, must be complied with at risk of bid rejection for non-responsiveness.

SECTION 2. CONTRACT INFORMATION

SEC. 2.01 CONTRACT TERM

The length of the contract will be from the date of award until the time of delivery and acceptance at the F.O.B. point.

SEC. 2.02 CONTRACT ADMINISTRATION

The administration of this contract is the responsibility of the contracting officer or person appointed by AEA.

SEC. 2.03 CONTRACT FUNDING

Refer to Appendix A, A.13. AEA estimates a budget of between \$25,000.00 and \$50,000.00 dollars for this contract.

SEC. 2.04 CONTRACT EXTENSION

A month-to-month extension may only be executed by the contracting officer via a written contract amendment. Refer to Appendix A, A.15.

SEC. 2.05 CONTRACT CHANGES – UNANTICIPATED AMENDMENTS

During the course of this contract, the contractor may be required to perform additional work. That work will be within the general scope of the initial contract. When additional work is required, the Authority will provide the contractor a written description of the additional work and request the contractor to submit a firm time schedule for accomplishing the additional work and a firm price for the additional work. Cost and pricing data must be provided to justify the cost of such amendments per 3 AAC 109.540.

The contractor will not commence additional work until the contracting officer has secured required Authority approvals necessary for the amendment and issued a written contract amendment.

SEC. 2.06 SUBCONTRACTORS

Subcontractors will not be allowed.

SEC. 2.07 JOINT VENTURES

Joint ventures will not be allowed.

SEC. 2.08 CONTRACT PERFORMANCE LOCATION

The location(s) the work is to be performed, completed and managed at the vendors place of business.

The Authority will not provide workspace for the contractor. The contractor must provide its own workspace.

By signature on their bid, the bidder certifies that all services provided under this contract by the contractor and all subcontractors shall be performed in the United States.

If the bidder cannot certify that all work will be performed in the United States, the bidder must contact the contracting officer in writing to request a waiver at least 10 days prior to the deadline for receipt of bids.

The request must include a detailed description of the portion of work that will be performed outside the United States, where, by whom, and the reason the waiver is necessary.

Failure to comply with these requirements may cause the Authority to reject the bid as non-responsive, or cancel the contract.

SEC. 2.09 RIGHT TO INSPECT PLACE OF BUSINESS

At reasonable times, the Authority may inspect those areas of the contractor's place of business that are related to the performance of a contract. If the Authority makes such an inspection, the contractor must provide reasonable assistance.

SEC. 2.10 SCOPE OF WORK AND SPECIFICATIONS

Alaska Energy Authority (AEA) is soliciting bids to purchase commodities as indicated in Appendix C - Scope of Work, Appendix D - Bid Schedule, and Appendix E - Specifications.

SEC. 2.11 F.O.B. POINT

The F.O.B. point for all items purchased under this contract is the final destination. Ownership of and title to the ordered items remains with the contractor until the items have been delivered to their final destination and are accepted by the Authority. The F.O.B. point is indicated in Appendix C - Scope of Work.

SEC. 2.12 SHIPPING DAMAGE

The Authority will not accept or pay for damaged goods. The contractor must file all claims against the carrier(s) for damages incurred to items in transit from the point of origin to the ultimate destination. The Authority will provide the contractor with written notice when damaged goods are received. The Authority will deduct the cost of the damaged goods from the invoice prior to payment. The contractor must file all claims against the carrier(s) for reimbursement of the loss.

SEC. 2.13 DELIVERY TIME

The Scope of Work indicates the desired delivery date. In the space provided on the Bid Schedule indicate the earliest firm date. Failure to make an entry in the space provided will be construed as an offer to deliver by the desired delivery. Bids that specify deliveries in excess of the desired delivery may be considered non-responsive and may be rejected.

SEC. 2.14 INSPECTION & MODIFICATION - REIMBURSEMENT FOR UNACCEPTABLE DELIVERABLES

The contractor is responsible for proving all products or the completion of all work set out in the contract. All products or work is subject to inspection, evaluation, and approval by the Authority. The Authority may employ all reasonable means to ensure that the work is progressing and being performed in compliance with the contract. The Authority may instruct the contractor to make corrections or modifications if needed in order to accomplish the contract's intent. The contractor will not unreasonably withhold such changes.

Substantial failure of the contractor to perform the contract may cause the Authority to terminate the contract. In this event, the Authority may require the contractor to reimburse monies paid (based on the identified portion of unacceptable products or work received) and may seek associated damages.

SEC. 2.15 CONTINUING OBLIGATION OF CONTRACTOR

Refer to Appendix A, A.17.

SEC. 2.16 ESTIMATED QUANTITIES

The quantities in this ITB are indicated in Appendix D - Bid Schedule.

SEC. 2.17 CONTRACT PRICE ADJUSTMENTS

Not Applicable.

SEC. 2.18 INFORMAL DEBRIEFING

When the contract is completed, an informal debriefing may be performed at the discretion of the contracting officer. If performed, the scope of the debriefing will be limited to the products provided or work performed by the contractor.

SEC. 2.19 INDEMNIFICATION

The contractor shall indemnify, hold harmless, and defend the contracting agency from and against any claim of, or liability for error, omission or negligent act of the contractor under this agreement. The contractor shall not be required to indemnify the contracting agency for a claim of, or liability for, the independent negligence of the contracting agency. If there is a claim of, or liability for, the joint negligent error or omission of the contractor and the independent negligence of the contracting agency, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis.

"Contractor" and "contracting agency", as used within this and the following article, include the employees, agents and other contractors who are directly responsible, respectively, to each. The term "independent negligence" is negligence other than in the contracting agency's selection, administration, monitoring, or controlling of the contractor and in approving or accepting the contractor's work.

SEC. 2.20 INSURANCE

Without limiting the contractor's indemnification, it is agreed that the contractor shall purchase at its own expense and maintain in force at all times during the performance of services under this agreement the following policies of insurance. Where specific limits are shown, it is understood that they shall be the minimum acceptable limits. If the contractor's policy contains higher limits, the Authority shall be entitled to coverage to the extent of such higher limits.

Certificates of Insurance must be furnished to the contracting officer prior to contract approval and must provide for a notice of cancellation, non-renewal, or material change of conditions in accordance with policy provisions. Failure to furnish satisfactory evidence of insurance or lapse of the policy is a material breach of this contract and shall be grounds for termination of the contractor's services. All insurance policies shall comply with and be issued by insurers licensed to transact the business of insurance under AS 21.

Proof of insurance is required for the following:

- Workers' Compensation Insurance: The contractor shall provide and maintain, for all employees engaged
 in work under this contract, coverage as required by AS 23.30.045, and; where applicable, any other
 statutory obligations including but not limited to Federal U.S.L. & H. and Jones Act requirements. The
 policy must waive subrogation against the state.
- Commercial General Liability Insurance: covering all business premises and operations used by the
 contractor in the performance of services under this agreement with minimum coverage limits of
 \$300,000 combined single limit per occurrence.
- <u>Commercial Automobile Liability Insurance</u>: covering all vehicles used by the contractor in the
 performance of services under this agreement with minimum coverage limits of \$300,000 combined single
 limit per occurrence.

SEC. 2.21 MANDATORY REPORTING

Not Applicable.

SECTION 3. CONTRACT INVOICING AND PAYMENTS

SEC. 3.01 BILLING INSTRUCTIONS

Invoices must be billed to the ordering agency's address shown on the individual Purchase Order, Contract Award or Delivery Order. The Authority will make payment after it receives the goods or services and the invoice. Questions concerning payment must be addressed to the Authority.

SEC. 3.02 PAYMENT FOR AUTHORITY PURCHASES

Payment for agreements under \$500,000 for the undisputed purchase of goods or services provided to the Authority will be made within 30 days of the receipt of a proper billing or the delivery of the goods or services to the location(s) specified in the agreement, whichever is later.

SEC. 3.03 THIRD-PARTY FINANCING AGREEMENTS NOT ALLOWED

Because of the additional administrative and accounting time required of the Authority when third party financing agreements are permitted, they will not be allowed under this contract.

SECTION 4. EVALUATION AND CONTRACTOR SELECTION

SEC. 4.01 EVALUATION OF BIDS

After bid opening, the contracting officer will evaluate the bids for responsiveness. Bids deemed non-responsive will be eliminated from further consideration. An evaluation may not be based on discrimination due the race, religion, color, national origin, sex, age, marital status, pregnancy, parenthood, disability, or political affiliation of the bidder.

SEC. 4.02 APPLICATION OF PREFERENCES

Certain preferences apply to some Authority contracts, regardless of their dollar value. The Alaska Bidder and Alaska Veteran preferences are the most common preferences involved in the ITB process. Additional preferences that may apply to this procurement are listed below. Guides that contain excerpts from the relevant statutes and codes, explain when the preferences apply and provide examples of how to calculate the preferences are available at the following website:

http://doa.alaska.gov/dgs/pdf/pref1.pdf

- Alaska Products Preference AS 36.30.332
- Recycled Products Preference AS 36.30.337
- Local Agriculture and Fisheries Products Preference AS 36.15.050
- Employment Program Preference AS 36.30.321(b)
- Alaskans with Disabilities Preference AS 36.30.321(d)

The Division of Vocational Rehabilitation in the Department of Labor and Workforce Development keeps a list of qualified employment programs and individuals who qualify as persons with a disability. As evidence of a business' or an individual's right to the Employment Program or Alaskans with Disabilities preferences, the Division of Vocational Rehabilitation will issue a certification letter. To take advantage of these preferences, a business or individual must be on the appropriate Division of Vocational Rehabilitation list prior to the time designated for

receipt of proposals. Bidders must attach a copy of their certification letter to the proposal. A bidder's failure to provide this certification letter with their proposal will cause the Authority to disallow the preference.

SEC. 4.03 ALASKA BIDDER PREFERENCE

An Alaska Bidder Preference of 5% will be applied to the total bid price. The preference will be given to a bidder who:

- 1) holds a current Alaska business license prior to the deadline for receipt of bids;
- 2) submits a bid for goods or services under the name appearing on the bidder's current Alaska business license;
- 3) has maintained a place of business within the state staffed by the bidder, or an employee of the bidder, for a period of six months immediately preceding the date of the bid;
- 4) is incorporated or qualified to do business under the laws of the state, is a sole proprietorship and the proprietor is a resident of the state, is a limited liability company (LLC) organized under AS 10.50 and all members are residents of the state, or is a partnership under AS 32.06 or AS 32.11 and all partners are residents of the state; and
- 5) if a joint venture, is composed entirely of ventures that qualify under (1)-(4) of this subsection.

Alaska Bidder Preference Certification Form

In order to receive the Alaska Bidder Preference, the bid must include the Alaska Bidder Preference Certification Form attached to this ITB. A bidder does not need to complete the Alaska Veteran Preference questions on the form if not claiming the Alaska Veteran Preference. A bidder's failure to provide this completed form with their bid will cause the Authority to disallow the preference.

SEC. 4.04 ALASKA VETERAN PREFERENCE

An Alaska Veteran Preference of 5%, not to exceed \$5,000, will be applied to the total bid price. The preference will be given to a bidder who qualifies under AS 36.30.990(2) as an Alaska Bidder and is a:

- a) sole proprietorship owned by an Alaska veteran;
- b) partnership under AS 32.06 or AS 32.11 if a majority of the partners are Alaska veterans;
- c) limited liability company organized under AS 10.50 if a majority of the members are Alaska veterans; or
- d) corporation that is wholly owned by individuals, and a majority of the individuals are Alaska veterans.

In accordance with AS 36.30.321(i), the bidder must also add value by actually performing, controlling, managing, and supervising the services provided, or for supplies, the bidder must have sold supplies of the general nature solicited to other state agencies, other government, or the general public.

Alaska Veteran Preference Certification

In order to receive the Alaska Veteran Preference, the bid must include the Alaska Bidder Preference Certification Form attached to this ITB. A bidder's failure to provide this completed form with their bid will cause the Authority to disallow the preference.

SEC. 4.05 USE OF LOCAL FOREST PRODUCTS

Not Applicable.

SEC. 4.06 LOCAL AGRICULTURAL AND FISHERIES PRODUCT PREFERENCE Not Applicable.

SEC. 4.07 ALASKA PRODUCT PREFERENCE

Not Applicable.

SEC. 4.08 EMPLOYMENT PROGRAM PREFERENCE

If a bidder qualifies for the Alaska Bidder Preference and is offering goods or services through an employment program as defined under AS 36.30.990(12), an Employment Program Preference of 15% will be applied to the total bid price.

In accordance with AS 36.30.321(i), the bidder must also add value by actually performing, controlling, managing, and supervising the services provided, or for supplies, the bidder must have sold supplies of the general nature solicited to other state agencies, other government, or the general public.

SEC. 4.09 ALASKANS WITH DISABILITIES PREFERENCE

If a bidder qualifies for the Alaska Bidder Preference and is a qualifying entity as defined in AS 36.30.321(d), an Alaskans with Disabilities Preference of 10% will be applied to the total bid price.

In accordance with AS 36.30.321(i), the bidder must also add value by actually performing, controlling, managing, and supervising the services provided, or for supplies, the bidder must have sold supplies of the general nature solicited to other state agencies, other government, or the general public.

SEC. 4.10 PREFERENCE QUALIFICATION LETTER

Regarding the Employment Program Preference and the Alaskans with Disabilities Preference, the Division of Vocational Rehabilitation in the Department of Labor and Workforce Development maintains lists of companies who qualify for those preferences. As evidence of a company's right to the preferences, the Division of Vocational Rehabilitation will issue a certification letter. To take advantage of the preferences, a bidder must be on the appropriate Division of Vocational Rehabilitation list at the time the bid is opened and must attach a copy of their certification letter to their bid. The bidder's failure to provide this certification letter with their bid will cause the Authority to disallow the preference.

SEC. 4.11 EXTENSION OF PRICES

In case of error in the extension of prices in the bid, the unit prices will govern; in a lot bid, the lot prices will govern.

SEC. 4.12 METHOD OF AWARD

Award will be made to the lowest responsive and responsible bidder. In order to be considered responsive, bidders must bid on all items.

SEC. 4.13 NOTICE OF INTENT TO AWARD

After the responses to this ITB have been opened and evaluated, a tabulation of the bids will be prepared. This tabulation, called a Notice of Intent to Award, serves two purposes. It lists the name of each company or person that offered a bid and the price they bid. It also provides notice of the Authority's intent to award a contract(s) to the bidder(s) indicated. A copy of the Notice of Intent will be emailed to each company or person who responded to the ITB. Bidders identified as the apparent low responsive bidders are instructed not to proceed until a Purchase Order, Contract Award, Lease, or some other form of written notice is given by the contracting officer. A company

or person who proceeds prior to receiving a Purchase Order, Contract Award, Lease, or some other form of written notice from the contracting officer does so without a contract and at their own risk.

SECTION 5. GENERAL PROCESS AND LEGAL INFORMATION

SEC. 5.01 ALASKA BUSINESS LICENSE AND OTHER REQUIRED LICENSES

Prior to the award of a contract, a bidder must hold a valid Alaska business license. However, in order to receive the Alaska Bidder Preference and other related preferences, such as the Alaska Veteran Preference and Alaskans with Disabilities Preference, a bidder must hold a valid Alaska business license prior to the deadline for receipt of bids. Bidders should contact the **Department of Commerce, Community and Economic Development, Division of Corporations, Business, and Professional Licensing, PO Box 110806, Juneau, Alaska 99811-0806,** for information on these licenses. Acceptable evidence that the bidder possesses a valid Alaska business license may consist of any one of the following:

- copy of an Alaska business license;
- certification on the bid that the bidder has a valid Alaska business license and has included the license number in the bid:
- a canceled check for the Alaska business license fee;
- a copy of the Alaska business license application with a receipt stamp from the state's occupational licensing office; or
- a sworn and notarized statement that the bidder has applied and paid for the Alaska business license.

You are not required to hold a valid Alaska business license at the time bids are opened if you possess one of the following licenses and are offering services or supplies under that specific line of business:

- fisheries business licenses issued by Alaska Department of Revenue or Alaska Department of Fish and Game,
- liquor licenses issued by Alaska Department of Revenue for alcohol sales only,
- insurance licenses issued by Alaska Department of Commerce, Community and Economic Development, Division of Insurance, or
- Mining licenses issued by Alaska Department of Revenue.

Prior the deadline for receipt of bids, all bidders must hold any other necessary applicable professional licenses required by Alaska Statute.

SEC. 5.02 AUTHORITY

This ITB is written in accordance with 3 AAC 109 and 2 AAC 12.

SEC. 5.03 COMPLIANCE (Refer to Appendix A, A.9)

SEC. 5.04 SUITABLE MATERIALS, ETC. (Refer to Appendix A, A.2)

SEC. 5.05 SPECIFICATIONS

Unless otherwise specified in this ITB, product brand names or model numbers specified in this ITB are examples of the type and quality of product required, and are not statements of preference. If the specifications describing an item conflict with a brand name or model number describing the item, the specifications govern. Reference to brand name or number does not preclude an offer of a comparable or better product, if full specifications and descriptive literature are provided for the product. Failure to provide such specifications and descriptive literature may be cause for rejection of the offer.

SEC. 5.06 CONTRACTOR SITE INSPECTION

The Authority may conduct on-site visits to evaluate the bidder's capacity to perform the contract. A bidder must agree, at risk of being found non-responsive and having its bid rejected, to provide the Authority reasonable access to relevant portions of its work sites. Individuals designated by the contracting officer at the Authority's expense will make site inspection.

SEC. 5.07 ORDER DOCUMENTS

Except as specifically allowed under this ITB, an ordering agency will not sign any vendor contract. The Authority is not bound by a vendor contract signed by a person who is not specifically authorized to sign for the Authority under this ITB. Unless otherwise specified in this ITB, the Authority Purchase Order, Contract Award and Delivery Order are the only order documents that may be used to place orders against the contract(s) resulting from this ITB.

SEC. 5.08 HUMAN TRAFFICKING

By signature on their bid, the bidder certifies that the bidder is not established and headquartered or incorporated and headquartered in a country recognized as Tier 3 in the most recent United States Department of State's Trafficking in Persons Report.

The most recent United States Department of State's Trafficking in Persons Report can be found at the following website: http://www.state.gov/j/tip/

Failure to comply with this requirement will cause the Authority to reject the bid as non-responsive, or cancel the contract.

SEC. 5.09 RIGHT OF REJECTION

Bidders must comply with all of the terms of this ITB, 3 AAC 109 (Procurement for Alaska Energy Authority Managed Grants), and all applicable local, state, and federal laws, codes, and regulations. The contracting officer may reject any bid that does not comply with all of the material and substantial terms, conditions, and performance requirements of the ITB.

Bidders may not qualify the bid nor restrict the rights of the Authority. If a bidder does so, the contracting officer may determine the bid to be a non-responsive counter-offer and the bid may be rejected.

Minor informalities that:

- do not affect responsiveness;
- are merely a matter of form or format;
- do not change the relative standing or otherwise prejudice other offers;
- do not change the meaning or scope of the RFP;

- are trivial, negligible, or immaterial in nature;
- do not reflect a material change in the work; or
- do not constitute a substantial reservation against a requirement or provision;

may be waived by the contracting officer.

The Authority reserves the right to refrain from making an award if it determines that to be in its best interest. A bid from a debarred or suspended bidder shall be rejected.

SEC. 5.10 AUTHORITY NOT RESPONSIBLE FOR PREPARATION COSTS

The Authority will not pay any cost associated with the preparation, submittal, presentation, or evaluation of any bid.

SEC. 5.11 DISCLOSURE OF BID CONTENTS

All bid prices become public information at the bid opening. After the deadline for receipt of bids, all other bid material submitted become the property of the State of Alaska and may be returned only at the Authority's option. AAC 109.270 and 3 AAC 109.700 require public records to be open to reasonable inspection. All other bid information will be held in confidence during the evaluation process and prior to the time a Notice of Intent to Award is issued. Thereafter, bids will become public information.

Trade secrets and other proprietary data contained in bids may be held confidential if the bidder requests, in writing, that the contracting officer does so, and if the contracting officer agrees, in writing, to do so. The bidder's request must be included with the bid, must clearly identify the information they wish to be held confidential, and include a statement that sets out the reasons for confidentiality. Unless the contracting officer agrees in writing to hold the requested information confidential, that information will also become public after the Notice of Intent to Award is issued.

SEC. 5.12 ASSIGNMENTS (Refer to Appendix A, A.5)

Bids that are conditioned upon the Authority's approval of an assignment will be rejected as non-responsive.

- SEC. 5.13 FORCE MAJEURE (Refer to Appendix A, A.14)
- SEC. 5.14 DEFAULT (Refer to Appendix A, A.4)
- SEC. 5.15 DISPUTES (Refer to Appendix A, A.3)
- SEC. 5.16 SEVERABILITY (Refer to Appendix A, A.16)

SEC. 5.17 CONTRACT CANCELLATION

The Authority reserves the right to cancel the contract at its convenience upon **30** calendar days written notice to the contractor. The Authority is only liable for payment in accordance with the payment provisions of this contract for supplies or services provided before the effective date of termination.

SEC. 5.18 GOVERNING LAW; FORUM SELECTION (Refer to Appendix A, A.18)

SEC. 5.19 SOLICITATION ADVERTISING

Public notice has been provided in accordance with 3 AAC 109.150.

SEC. 5.20 QUALIFIED BIDDERS

Per 2 AAC 12.875, unless provided for otherwise in the ITB, to qualify as a bidder for award of a contract issued under 3 AAC 109, the bidder must:

- 1) Add value in the contract by actually performing, controlling, managing, or supervising the services to be provided; or
- 2) Be in the business of selling and have actually sold on a regular basis the supplies that are the subject of the ITB.

If the bidder leases services or supplies or acts as a broker or agency in providing the services or supplies in order to meet these requirements, the contracting officer may not accept the bidder as a qualified bidder under 3 AAC 109.

SEC. 5.21 FEDERALLY IMPOSED TARIFFS

Changes in price (increase or decrease) resulting directly from a new or updated federal tariff, excise tax, or duty, imposed after contract award may be adjusted during the contract period or before delivery into the United States via contract amendment.

- Notification of Changes: The contractor must promptly notify the contracting officer in writing of any
 new, increased, or decreased federal excise tax or duty that may result in either an increase or decrease
 in the contact price and shall take appropriate action as directed by the contracting officer.
- After-imposed or Increased Taxes and Duties: Any federal excise tax or duty for goods or services covered
 by this contract that was exempted or excluded on the contract award date but later imposed on the
 contractor during the contract period, as the result of legislative, judicial, or administrative action may
 result in a price increase provided:
 - a) The tax or duty takes effect after the contract award date and isn't otherwise addressed by the contract;
 - b) The contractor warrants, in writing, that no amount of the newly imposed federal excise tax or duty or rate increase was included in the contract price, as a contingency or otherwise.
- After-relieved or Decreased Taxes and Duties: The contract price shall be decreased by the amount of
 any decrease in federal excise tax or duty for goods or services under the contract, except social security
 or other employment taxes, that the contractor is required to pay or bear, or does not obtain a refund of,
 through the contractor's fault, negligence, or failure to follow instructions of the contracting officer.
- Authority's Ability to Make Changes: The Authority reserves the right to request verification of federal
 excise tax or duty amounts on goods or services covered by this contract and increase or decrease the
 contract price accordingly.
- **Price Change Threshold:** No adjustment shall be made in the contract price under this clause unless the amount of the adjustment exceeds \$250.

SEC. 5.22 PROTEST

3 AAC 109.570 provides that an interested party may protest the content of the ITB.

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An interested party is defined in 3 AAC 109.900 (17) as "an actual or prospective bidder or offeror whose economic interest might be affected substantially and directly by the issuance of a contract solicitation, the award of a contract, or the failure to award a contract."

If an interested party wishes to protest the content of a solicitation, the protest must be received, in writing, by the contracting officer at least ten days prior to the deadline for receipt of bids.

3 AAC 109 also provides that an interested party may protest the award of a contract or the proposed award of a contract.

If a bidder wishes to protest the award of a contract or the proposed award of a contract, the protest must be received, in writing, by the contracting officer within 10 days after the date the Notice of Intent to Award for the contract is issued.

A protester must have submitted a bid in order to have sufficient standing to protest the proposed award of a contract. Protests must include the following information:

- the name, address, and telephone number of the protester;
- the signature of the protester or the protester's representative;
- identification of the contracting agency and the solicitation or contract at issue;
- a detailed statement of the legal and factual grounds of the protest including copies of relevant documents; and the form of relief requested.

Protests filed by telex or telegram are not acceptable because they do not contain a signature. Fax copies containing a signature are acceptable.

The contracting officer will issue a written response to the protest. The response will set out the contracting officer's decision and contain the basis of the decision within the statutory time limit in 3 AAC 109.570. A copy of the decision will be furnished to the protester by certified mail, fax or another method that provides evidence of receipt.

All bidders will be notified of any protest. The review of protests, decisions of the contracting officer, appeals, and hearings, will be conducted in accordance with 3 AAC 109 – Procurement for Alaska Energy Authority Managed Grants.)

SECTION 6. APPENDICES

- (a) Appendix A General Conditions
- (b) Appendix B Not Used, No Federal Funding
- (c) Appendix C Scope of Work
- (d) Appendix D Bid Schedule
- (e) Appendix E Specifications

APPENDIX A - GENERAL CONDITIONS

A.1 INSPECTIONS AND REPORTS

The department may inspect, in the manner and at reasonable times it considers appropriate, all of the contractor's facilities and activities under this contract. The contractor shall make progress and other reports in the manner and at the times the department reasonably requires.

A.2 SUITABLE MATERIALS, ETC.

Unless otherwise specified, all materials, supplies or equipment offered by the contractor shall be new, unused, and of the latest edition, version, model or crop and of recent manufacture.

A.3 DISPUTES

If the contractor has a claim arising in connection with the contract that it cannot resolve with the Authority by mutual agreement, it shall pursue the claim, if at all, in accordance with the provisions of 2 AAC 108.915.

A.4 DEFAULT

In case of default by the contractor, for any reason whatsoever, the Authority may procure the goods or services from another source and hold the contractor responsible for any resulting excess cost and may seek other remedies under law or equity.

A.5 NO ASSIGNMENT OR DELEGATION

The contractor may not assign or delegate this contract, or any part of it, or any right to any of the money to be paid under it, except with the written consent of the Contracting Officer.

A.6 NO ADDITIONAL WORK OR MATERIAL

No claim for additional supplies or services, not specifically provided in this contract, performed or furnished by the contractor, will be allowed, nor may the contractor do any work or furnish any material not covered by the contract unless the work or material is ordered in writing by the Contracting Officer.

A.7 INDEPENDENT CONTRACTOR

The contractor and any agents and employees of the contractor act in an independent capacity and are not officers or employees or agents of the Authority in the performance of this contract.

A.8 PAYMENT OF TAXES

As a condition of performance of this contract, the contractor shall pay all federal, State, and local taxes incurred by the contractor and shall require their payment by any subcontractor or any other persons in the performance of this contract. Satisfactory performance of this paragraph is a condition precedent to payment by the Authority under this contract.

A.9 COMPLIANCE

In the performance of this contract, the contractor must comply with all applicable federal, state, and borough regulations, codes, and laws, and be liable for all required insurance, licenses, permits and bonds.

A.10 CONFLICTING PROVISIONS

Unless specifically amended and approved by the Department of Law, the terms of this contract supersede any provisions the contractor may seek to add. The contractor may not add additional or different terms to this contract; AS 45.02.207(b)(1). The contractor specifically acknowledges and agrees that, among other things, provisions in any documents it sees to append hereto that purport to (1) waive the State of Alaska's sovereign immunity, (2) impose indemnification obligations on the Authority, or (3) seek to limit liability of the contractor for acts of contractor negligence, are expressly superseded by this contract and are void.

A.11 OFFICIALS NOT TO BENEFIT

Contractor must comply with all applicable federal or State laws regulating ethical conduct of public officers and employees.

A.12 CONTRACT PRICES

Contract prices for commodities must be in U.S. funds and include applicable federal duty, brokerage fees, packaging, and transportation cost to the FOB point so that upon transfer of title the commodity can be utilized without further cost. Prices for services must be in U.S. funds and include applicable federal duty, brokerage fee, packaging, and transportation cost so that the services can be provided without further cost.

A.13 CONTRACT FUNDING

Contractors are advised that funds are available for the initial purchase and/or the first term of the contract. Payment and performance obligations for succeeding purchases and/or additional terms of the contract are subject to the availability and appropriation of funds.

A.14 FORCE MAJEURE

The parties to this contract are not liable for the consequences of any failure to perform, or default in performing, any of their obligations under this Agreement, if that failure or default is caused by any unforeseeable Force Majeure, beyond the control of, and without the fault or negligence of, the respective party. For the purposes of this Agreement, Force Majeure will mean war (whether declared or not); revolution; invasion; insurrection; riot; civil commotion; sabotage; military or usurped power; lightning; explosion; fire; storm; drought; flood; earthquake; epidemic; quarantine; strikes; acts or restraints of governmental authorities affecting the project or directly or indirectly prohibiting or restricting the furnishing or use of materials or labor required; inability to secure materials, machinery, equipment or labor because of priority, allocation or other regulations of any governmental authorities.

A.15 CONTRACT EXTENSION

Unless otherwise provided, the Authority and the contractor agree: (1) that any holding over of the contract excluding any exercised renewal options, will be considered as a month-to-month extension, and all other terms and conditions shall remain in full force and effect, and (2) to provide written notice to the other party of the intent to cancel such month-to-month extension at least thirty (30) days before the desired date of cancellation.

A.16 SEVERABILITY

If any provision of the contract is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions will not be affected; and, the rights and obligations of the parties will be construed and enforced as if the contract did not contain the particular provision held to be invalid.

A.17 CONTINUING OBLIGATION OF CONTRACTOR

Notwithstanding the expiration date of this contract, the contractor is obligated to fulfill its responsibilities until warranty, guarantee, maintenance and parts availability requirements have completely expired.

A.18 GOVERNING LAW; FORUM SELECTION

This contract is governed by the laws of the State of Alaska. To the extent not otherwise governed by Article 3 of this Appendix, any claim concerning this contract shall be brought only in the Superior Court of the State of Alaska and not elsewhere.

SCOPE OF WORK

- 1. **Scope** Furnish a pad mount transformer as indicated in Appendix D Bid Schedule and in accordance with Appendix E Specifications.
- 2. **Submittals** Provide Submittals in accordance with Appendix E Specifications. Preliminary submittals shall be provided to the Authority within 14 days of contract award.
- 3. **Testing** Test transformer and provide certified test report in accordance with Appendix E Specifications.
- 4. **Packaging** Prepare, package, and label transformer in accordance with Appendix E Specifications.
- 5. **F.O.B. Point** Deliver transformer to: Alaska Energy Authority, 2601 Commercial Drive, Anchorage, AK 99501.
- 6. **Delivery Date** Delivery of transformer to the F.O.B. Point is desired no later than: **April 15, 2025**. On the Bid Schedule provide a firm delivery date where indicated.

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Item No.	Item Description	Phase	Primary Voltage (kV)	Secondary Voltage	Quan	Cost
1	300 kVA Three Phase Transformer for Step Up Service	Three	12.47/7.2 Grounded Wye	480/277 Grounded Wye	1	
	Total Price \$					
Firm Delivery Date						

NOTES:

- 1) See Appendix E for equipment specifications 33 73 13.
- 2) See Appendix C for scope of work including requirements for submittals, equipment packaging, etc.
- 3) See Appendix C for F.O.B. point and required delivery. Note that a firm delivery significantly later than the required delivery date may cause a bid to be declared non-responsive.
- 4) Provide unit cost and total cost as listed above.
- 5) Provide a firm delivery in calendar weeks for each category indicated.
- 6) For a bid to be considered responsive it must include the following:
 - a) This Bid Schedule completed as indicated.
 - b) The completed ITB response (page 1 of the ITB).

SECTION 33 73 13

PADMOUNT LIQUID-FILLED UTILITY TRANSFORMERS

PART 1 - GENERAL

1.1 SCOPE

- A. This specification covers electrical characteristics and mechanical safety features of mineral-oil immersed, self-cooled, padmounted transformers with separable insulated high voltage bushings. All characteristics, voltage designations and tests shall be in accordance with the latest editions of the standards specified herein.
- B. Transformers shall be designed in accordance with RUS requirements and shall be of new construction.
- C. The transformers will be non-evaluated units but shall be provided with minimum efficiencies as specified herein.
- D. Quantities and ratings shall be as indicated on the Bid Schedule.
- E. Transformers shall be suitable for step-up service as indicated on the Bid Schedule.

1.2 **RELATED REQUIREMENTS – not used this specification**

1.3 STANDARDS

C57.12.91:

All characteristics, definitions, and terminology, except as specifically covered in this specification, shall be in accordance with the latest edition of the following ANSI, IEEE, Department of Energy and NEMA standards.

C57.12.00:	IEEE Standard General Requirements for Liquid-Immersed Distribution, Power, and Regulating Transformers.
C57.12.28:	IEEE Standard Pad-Mounted Equipment–Enclosure Integrity.
C57.12.34:	IEEE Standard Requirements for Pad-Mounted, Compartmental-Type, Self-Cooled, Three-Phase Distribution Transformers (2500 kVA and Smaller) - High Voltage: 34500GrdY/19920 Volts and Below; Low-Voltage: 480 Volt 2500 kVA and Smaller.
C57.12.35:	IEEE Standard Bar Coding for Distribution Transformers and Step-Voltage Regulators.
C57.12.37:	IEEE Standard for the Electronic Reporting of Distribution Transformer Test Data.
C57.12.38:	IEEE Standard for Pad-Mounted-Type, Self-Cooled, Single-Phase Distribution Transformers 250kVA and Smaller: High Voltage, 34,500 GrdY/19920V and Below; Low Voltage, 480/240V and Below.
C57.12.90:	IEEE Standard Test Code for Liquid-Immersed Distribution, Power, and Regulating Transformers.

IEEE Guide for Loading Mineral-Oil-Immersed Transformers and

Step-Voltage Regulators.

C57.12.154: IEEE Standard for the Design, Testing, and Application of Liquid-

Immersed Distribution, Power, and Regulating Transformers using High-Temperature Insulation Systems and Operating at Elevated

Temperatures.

NEMA TR-1: Transformers, Regulators and Reactors, Audible Sound Levels for

Liquid-Immersed Power Transformers.

NEMA TP-1: Guide for Determining Energy Efficiency for Distribution

Transformers

NEMA TP-3: Standard for Labeling of Distribution Transformer Efficiency.

NEMA 260: Safety Labels for Pad-Mounted Switchgear and Transformers Sited

in Public Areas.

DOE: 10 CFR Part 431 – Department of Energy – Energy Conservation

Program for Commercial Equipment: Distribution Transformers

Energy Conservation Standards; Final Rule.

IEEE Std. 386: IEEE Standard for Separable Insulated Connector Systems for

Power Distribution Systems Above 600 Volts,

1.4 SUBMITTALS

Shop Drawings and Product Data: Provide complete submittals in PDF format. At a minimum, submit the following:

- A. Prior to beginning fabrication submit the following for approval:
 - 1. Complete transformer electrical data, mechanical and layout drawings, and wiring and connection diagrams for each type of transformer provided.
 - 2. Drawings shall indicate the kVA rating, transformer impedance, voltage (both primary and secondary), phase of the transformer, winding connection, and tap changers.
 - 3. Nameplate for each size transformer.
- B. Upon completion of fabrication and prior to shipping submit:
 - 1. Provide certified test reports prior to shipment of the transformers. Test reports shall indicate the impedance, no load, and full load loss of each transformer, by serial number, and shall include the transformer efficiency, expressed in percent, of the transformer based on the test procedures required by DOE 10 CFR Part 431. Provide sound level of the transformer in dBA.
 - 2. A statement identifying the amount of PCB in the insulating oil.

1.5 WARRANTY

The failure of any transformer due to defective design, material and/or workmanship within 12 months after being energized or eighteen months after being delivered, whichever comes first, shall be repaired or replaced without cost. Any defect in design, material and/or construction discovered within this period shall be corrected at the manufacturer's expense, either by repair or replacement.

PART 2 – PRODUCTS

2.1 RATINGS

A. General:

1. Primary Voltage Rating: As indicated on the Bid Schedule.

2. Secondary Voltage Rating: As indicated on the Bid Schedule.

3. Frequency: 60 Hz.

4. Phase: Three-phase, as indicated on the Bid

Schedule.

5. Impedance: NEMA Standard.

6. kVA Rating: As indicated on the Bid Schedule.

7. BIL Rating: 7.2/12.47 kV: 95 kV.

600 Volt and lower: 30 kV.

8. Temperature Rating: Self-cooled, 65° C above a 30° C

ambient.

2.2 ACCEPTABLE MANUFACTURERS

Acceptable manufactures shall be as follows.

- A. ABB.
- B. Cooper Power.
- C. Ermco.
- D. G. E. Prolec.
- E. Howard Transformers.
- F. Approved equal.

2.3 TRANSFORMER VOLTAGES

- A. Transformer primary voltage shall be as indicated on the Bid Schedule.
- B. Transformer secondary voltage shall be as indicated on the Bid Schedule.

2.4 EFFICIENCY

The efficiency requirement of DOE 10 CFR part 431.196, for liquid filled transformers, is provided below. Transformers shall meet or exceed the efficiency requirements listed.

Single-phase		Three-phase		
kVA	Efficiency (%)	kVA	Efficiency (%)	
10	98.70	15	98.65	
15	98.82	30	98.83	

25	98.95	45	98.92
37.5	99.05	75	99.03
50	99.11	112.5	99.11
75	99.19	150	99.16
100	99.25	225	99.23
167	99.33	300	99.27
250	99.39	500	99.35
333	99.43	750	99.40
500	99.49	1000	99.43
667	99.52	1500	99.48
833	99.55	2000	99.51
		2500	99.53

Note: All efficiency values shall be at 50 percent of nameplate-rated load, determined according to the DOE Test-Procedure. 10 CFR Part 431, Subpart K, Appendix A.

2.5 TRANSFORMER LOSSES

A. Transformer no load and load losses shall be quoted with the transformer bid and shall be guaranteed by the manufacturer. Transformer losses determined by the factory tests on the individual transformers shall not exceed the guaranteed bid losses by more than the following:

Tolerance for Transformer Losses

No-Load Losses (%)	Total Losses (%)
10	6

No individual unit shall be shipped that exceeds guaranteed no load losses by more than 10%.

2.6 TRANSFORMER TAPS

Transformers shall be furnished with four each 2-1/2% full capacity high-voltage taps, 2 above and 2 below rated nominal voltage. The tap changer shall be clearly labeled to reflect that the transformer must be de-energized before operating the tap changer as required in Section 4.3 of IEEE Std C57.12.34.

2.7 THREE-PHASE TRANSFORMER TERMINAL ARRANGEMENTS

- A. Primary bushings shall consist of 200-amp loadbreak inserts in accordance with the following.
 - 1. High voltage bushings shall be installed in the high voltage termination compartment located on the front left of the transformer and requiring access via the low voltage termination compartment on the front right.
 - 2. The high voltage bushings shall be 15 kV 200A bushing wells with bushing well inserts installed. The bushings shall be externally removable and be supplied with a removable stud.
 - 3. The transformer shall be provided with six (6) high voltage bushings in accordance Figure 2 dimensions of IEEE Std C57.12.34 standard for loop feed configurations. The bushing heights shall be in accordance with Figure 3 minimum dimensions of IEEE Std C57.12.34 standard.
 - 4. A cable accessory parking stand shall be provided and shall be located such that the separable insulated connectors can be operated with hot-line tools.

B. Secondary terminals:

- 1. On three-phase transformers with 600 volt, or less, rated secondary windings the secondary terminals shall be provided with tin-plated spade-type bushings for vertical takeoff. The spacing of the connection holes shall be 1.75" on center, per ANSI C57.12.34 Figure 13a. Provide six connection holes.
- C. On transformers provided with a wye-wye connection, the primary neutral connection shall be brought out as a fully insulated H0 bushing in the primary compartment and the low voltage neutral connection shall be brought out as a fully insulated X0 bushing in the secondary compartment. A single H0/X0 bushing will not be acceptable. Provide each bushing with a removable external ground strap connected to a ground pad.

2.8 PROTECTION

A. Bayonet with current limiting fuses. The high-voltage overcurrent protection scheme provided with the transformer shall be an externally removable loadbreak expulsion Bay-O-Net fuse assembly with a flapper valve to minimize oil spillage. The bayonet fuses shall be in series with ELSP under-oil partial-range current-limiting back-up fuses with an interrupting rating of 50,000 RMS symmetrical amperes interrupting with minimum melting current approximately 200% of transformer nameplate rating.

2.9 CORE AND COIL

- A. Windings shall be copper or aluminum. All windings shall meet with the guaranteed temperature rise requirements.
- B. The core shall be manufactured from burr-free, grain-oriented silicon steel and shall be precisely stacked to eliminate gaps in the corner joints. The coil shall be insulated with B-stage, epoxy coated, diamond pattern, insulating paper, which

- shall be thermally cured under pressure to ensure proper bonding of conductor and paper.
- C. The core and coil shall be vacuum processed to ensure maximum penetration of insulating fluid into the coil insulation system. While under vacuum the transformer shall be filled with preheated filtered degassed insulating fluid.

2.10 TANK AND CABINET

A. The enclosure integrity of the tank and cabinet shall meet the requirements for tamper resistance set forth in the latest edition of IEEE Std. C57.12.28 including but not limited to the pry test, pull test, and wire probe test.

B. Enclosures:

- 1. Three-phase transformers shall be compartmental type with dual compartment and barrier between high and low voltage compartments. The high-voltage and low-voltage compartments, separated by a metal barrier, shall be located side-by-side on one side of the transformer tank. When viewed from the front, the low-voltage compartment shall be on the right. Each compartment shall have a door that is constructed so as to provide access to the high-voltage compartment only after the door to the low-voltage compartment has been opened. There shall be one or more additional fastening devices that must be removed before the high-voltage door can be opened. Where the low-voltage compartment door is of a flat panel design, the compartment door shall have three-point latching with a handle provided for a locking device. Hinge pins and associated barrels shall be constructed of corrosion-resistant material, passivated AISI Type 304.
- 2. A recessed, captive, silicone bronze or stainless steel penta-head bolt that meets the dimensions per IEEE Std C57.12.28 standard shall secure all access doors. Handles and doors shall be provided with provisions for padlocking.
- 3. The compartment depth shall be in accordance with IEEE STD C57.12.34 standard, unless additional depth is specified.
- 4. Transformer enclosures shall be provided with a 304 stainless steel cabinet, door, & sill.
- 5. All hardware, handles, and hinges shall be 304 stainless steel.
- 6. Enclosures shall meet ANSI C57.12.28 for enclosure integrity.

C. TANK

- 1. The transformer tank shall be carbon steel with a 304 stainless steel base. Note that at Bidders option the transformer tank may also be 304 stainless steel.
- 2. Bolted main tank cover, where applicable.
- 3. The tank base shall be designed to allow skidding or rolling in any direction. Lifting provisions shall consist of four lifting lugs welded to the tank.

- 4. The transformer shall be of sealed tank construction of sufficient strength to withstand a pressure of 7 psig without permanent distortion, and 15 psig without rupturing or affecting cabinet security.
- 5. The tank shall include a pressure relief device as a means to relieve pressure in excess of pressure resulting from normal operation. The venting and sealing characteristics shall be as follows:
 - a. Cracking pressure: $10psig \pm 2psig$.
 - b. Resealing pressure: 6psig minimum.
 - c. Zero leakage from reseal pressure to -8psig.
 - d. Flow at 15 psig: 35 SCFM minimum.

2.11 PAINTING

- A. The transformer unit shall be painted Munsell 7GY3.29/1.5 green. All parts of the transformer shall be painted.
- B. The tank and cabinet coating shall meet all the requirements of the latest edition of IEEE Stud C57.12.28 including:
 - 1. Salt spray.
 - 2. Crosshatch Adhesion Test.
 - 3. Humidity Test.
 - 4. Impact Test.
 - 5. Oil Resistance Test
 - 6. Ultraviolet Accelerated Weathering Test.
 - 7. Abrasion Resistance Taber Abraser.

2.12 INSULATING OIL

The dielectric coolant in the transformer shall be highly refined Type II inhibited new mineral oil and meet the minimum requirements as specified in Table 1, "Functional Property Requirements," of ASTM D3487 and ANSI C57.106.

2.13 NAMEPLATES & LABELS

- A. Diagrammatic nameplate that conforms to the latest edition of ANSI C57.12.00. Impedance of the transformer shall be included on the nameplate. The nameplate shall be etched and black-filled aluminum or stainless steel. Affix to the enclosure with rivets.
- B. Safety labels shall be provided with each transformer. Safety labels shall meet the latest edition of NEMA Standard No. 260. Labels shall be made of weather resistant material per the latest edition of NEMA Standard 9.15 and UL969.
- C. In addition to warning labels, provide a label indicating the transformer kVA rating on the front of the transformer, in minimum 2-1/2" black letters.

2.14 ACCESSORIES

Provide the following accessories:

- A. Three-Phase Transformers:
 - 1. Bolted main tank cover.
 - 2. 1.0" upper fill plug.
 - 3. 1.0" drain valve with sampling device in LV compartment.
 - 4. Tank anchoring.
 - 5. Automatic pressure relief valve.
 - 6. Metal drip shield.
 - 7. Ground provisions per C57.12.34 section 9.11.
 - 8. Meet NEMA TR-1 sound levels.
 - 9. Liquid level gauge.
 - 10. Dial-type thermometer gauge.
 - 11. Pressure vacuum gauge.
 - 12. 24" deep cabinet.
- B. Single-Phase Transformers:
 - 1. Oil site gauge (glass window with ball float).
 - 2. 0.5" drain plug in LV compartment.
 - 3. Upper oil fill plug.
 - 4. Tank anchoring
 - 5. Lifting bolts.
 - 6. Ground pads.

PART 3 – EXECUTION

3.1 TESTING AND LOSSES

- A. All units shall be tested for the following:
 - 1. No Load (Core) Losses at 20°C.
 - 2. Load Losses at 85°C and rated current.
 - 3. Total Losses at 85°C.
 - 4. Percent Impedance at 85°C and rated current.
 - 5. Excitation current (100% voltage) test.
 - 6. Efficiency.
 - 7. Ratio tests using all tap settings.
 - 8. Polarity and phase relation tests.

- 9. Induced potential tests.
- 10. Full wave and reduced wave impulse test.
- B. The manufacturer shall provide certification for all design and other tests listed in Table 17 of ANSI C57.12.00 including verification that the design has passed Short Circuit Criteria per ANSI C57.12.00 and C57.12.90.
- C. One PDF copy of the factory Certified Test Report of each test, in ANSI C57.12.37 format, shall be delivered to the Engineer for review and acceptance prior to shipment of the transformers.

3.2 SHIPPING

- A. The transformer shall be shipped complete and fully assembled.
- B. The transformer shall be packaged to protect from damage during shipment, handling and storage. Each transformer shall be fastened to a pallet to allow loading and unloading with a forklift.
- C. The exterior of each shipping unit shall clearly list the transformer kVA rating and the community name "MANOKOTAK."

END OF SECTION