



The New Mexico Institute of Mining and Technology (NMIMT)
Request for Proposal (RFP)

PROJECT NAME: Chillers

PROPOSAL NUMBER: RFP 2305009M

RFP DUE TIME AND DATE: June 14, 2023 at 2:00 PM (Local Time)

PURCHASING CONTACT: Kimela Miller, Chief Procurement Officer
575-835-5881
kimela.miller@nmt.edu

LOCATION: New Mexico Institute of Mining & Technology
Attn: RFP #2305009M
Brown Hall, Rm 100
801 Leroy Place
Socorro, NM 87801

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1. INSTRUCTIONS TO PROPOSERS

1.1 It is the Proposer's responsibility to deliver their offer by the date and time indicated in this Request For Proposal (RFP). The date and time of receipt will be stamped on the offer by the Purchasing Services Office and held in a secure place. Offers received later than the due date and time shall not be considered. Offers submitted by fax or email shall not be considered. Proposers should never leave a offer with any NMIMT office or NMIMT individual for delivery to the Purchasing Services Office.

1.2 This RFP contains specific requests for information. However, in responding, Proposers are encouraged to include in their offers any additional information they believe relevant and valuable. Sales and general promotional material should not be included, specific product literature may be included. The offer must be specific and must be responsive to the criteria set forth in this request. There is no page limit, but please be concise.

1.3 Clarification of instructions, terms and conditions, insurance, and preparation or submission of offers shall be made only by the Purchasing Services Office. No other source within NMIMT is authorized to explain, interpret, or give information concerning this RFP document. Further, no contact between the proposers and the end-users of the goods or services is permitted until an offer is selected and a contract signed. Questions must be submitted in writing and should be restricted to clarification of the RFP. Proposers should reference their questions to specific RFP sections, paragraphs and page numbers. Questions may be faxed to 575-835-5887 or emailed to purchasing@nmt.edu. **All questions must be submitted no later than 5:00 P.M. seven (7) calendar days before the proposal is due.** Questions and their answers will be incorporated into an addendum which will be posted on the Purchasing website at <http://www.nmt.edu/purchasing-services>. Receipt of addenda must be noted on the Proposer's offer confirming the receipt of any and all amendments.

1.4 This RFP implies no obligation on the part of NMIMT, nor does NMIMT's silence imply any acceptance or rejection of any offer. NMIMT reserves the right to accept or reject any or all offers or any part thereof, and to waive any technicalities or informalities in the offer if in the best interests of NMIMT. Incomplete offers may result in dismissal of all or part of the response.

1.5 The offer should be delivered to the Purchasing Services Office at the address shown on page 1. A total of one (1) original with pricing and one (1) thumb drive or other device with a copy of the offer are required. **Please ensure the original has an original signature by using a colored ink pen.** The completed offer must be in a sealed envelope or box marked with "Request for Proposal" and corresponding RFP number. Note: the Purchasing Services Office is closed at lunch M-F from noon until 1:00 p.m. if hand delivering, please time your arrival accordingly.

1.6 Each offer must give the complete mailing address of the Proposer and must be signed by the Proposer with the Proposer's legal authorized signature on the forms included in this RFP, electronic signatures are not acceptable. An offer by partnerships must be signed by one of the members of the partnership or by an authorized representative. Offers by corporations must be signed and sealed in the name of the corporation followed by the signature and title of the president, secretary or other person authorized to bind the corporation in the matter. The names of all signers should be typed or printed below the signature. **Unsigned offers will be considered non-responsive and returned to the Proposer.**

1.7 Offers will not be opened publicly but shall be opened in the presence of the Chief Procurement Officer and one or more NMIMT representatives.

1.8 Offers will be evaluated on their ability to satisfy the requirements stated herein at the best obtainable price. The precise method by which the Proposer shall be evaluated is detailed further in this document.

1.9 If a Proposer has assisted with the development of the proposal or has provided specifications, that Proposer MAY NOT submit an offer.

1.10 Each offer must be typed and legible. Failure to include all information requested in the RFP documents may render the Proposer's offer non-responsive and the offer may be returned to the Proposer. All information must be entered in ink or typed and corrections must be initialed.

1.11 No employee of NMIMT shall have any direct financial interest with any Proposer's company. Any violation of this provision will render the offer void unless it is approved by the Board of Regents after full disclosure by the employee.

1.12 Proposer’s response must be specific and in such form that the evaluation committee may readily compare the response to the appropriate criteria. If invited for an interview or product demonstration regarding this proposal, failure to respond to an invitation to make a presentation to the committee may result in an offer not being considered.

1.13 Proposer’s offer must be bound and indexed and must use, where required, the forms provided in the RFP. Proposers should organize each copy of their offer as follows, with a tab / section for each alpha designation and its title, in order to simplify evaluation. If the required format is not followed, the offer may be eliminated from consideration.

1.14 The Chief Procurement Officer will make every effort to adhere to the following schedule however the schedule is subject to change.

Action	Responsibility	Date
Issuance of Request for Proposal	NMIMT Purchasing	May 11, 2023
Mandatory Pre-Proposal conference via Zoom or in-person and non-mandatory Site Visit *	NMIMT Purchasing Proposer	May 18, 2023 at 9:00 a.m. in person briefing will be on the main campus of NMIMT, ROB Building on South Road and via Zoom https://www.nmt.edu/finance/purchasing/NMT%20
Deadline for Questions	Proposer	June 7, 2023 @5:00 PM (local time)
Deadline for Addendum(s)	NMIMT Purchasing	June 8, 2023 @5:00 PM (local time)
Submission of Offer	Proposers	June 14, 2023 @2:00 PM (local time)

- A mandatory Zoom or in-person meeting will be scheduled for May 18 at 9:00 a.m. for an overview of the project which will be followed by a non-mandatory site visit up to the Magdalena Ridge Observatory. Attendees will be required to drive independently. The road up the mountain is unpaved. Wear closed toed shoes and bring water as you will need it at the higher elevation.

Please RSVP for either event by noon on May 17, 2023 to purchasing@nmt.edu Should there be no attendees for the site visit, it will be cancelled. A Zoom link will be emailed to all who RSVP.

2. MODIFICATION AND WITHDRAWAL OF OFFER

2.1 Any offer may be modified prior to the established due date in accordance with the requirements of the New Mexico Procurement Code 13-1-1 et seq. NMSA 1984 Supp. A late modification of an otherwise successful offer that makes its terms more favorable to NMIMT will be considered at any time it is received.

2.2 If not withdrawn before the proposal opening date and except as otherwise provided in the Procurement Code, no Proposer may withdraw its offer within ninety (90) days after the actual date of the opening. Prior to award, offers may be withdrawn anytime by written notice or in person by Proposer’s authorized representative.

2.2 No Proposer shall be deemed responsible if it has been debarred by NMIMT, if in the preceding twelve months it has failed to perform any contract, or if Proposer’s bonding company has been required to complete the work of a contract for Proposer.

3. RFP TERMINATION

3.1 This RFP in no manner obligates NMIMT to the eventual purchase of any services or goods described, implied or which may be offered, until confirmed by a written contract. Progress towards this end is solely at the discretion of NMIMT and may be terminated without penalty or obligation at any time prior to the signing of a contract. NMIMT reserves the right to cancel this RFP at any time, for any reason, and to reject any or all proposals.

4. EVALUATION CRITERIA

4.1 Offers shall be evaluated by a committee comprised solely of three to five (3-5) NMIMT employees. Offers must address each of the following criteria. Each offer may be awarded points up to the numeric value listed. Points will be awarded in compliance with NMSA 13-1-21 for New Mexico In-State Resident Business and Resident Veteran Business. If offer is a Joint

Venture, Proposer shall state in submitted offer the percentage of work that will be performed by Resident Business and / or Resident Veteran Business. Please Note: A Proposer cannot be awarded both a resident preference and a resident veteran business preference. Proposers shall include in their proposal a copy of the certificate issued by State of New Mexico Taxation and Revenue. Offers will be evaluated by NMIMT on the following factors:

Identification Number	Evaluation Criteria	Basis for Evaluation
1.0 Experience and Past Performance		Weight 25%
1.1 Ability to provide consultant services	The Proposers should have experience, the ability, and capacity to provide a custom chiller. Furnish three (3) examples of previous projects similar or unique chillers in terms of capacity and temperature range or both to the requirements stated in NM Tech's SOW and specifications. The information should include the following: <ul style="list-style-type: none"> a. Name and location b. Name, address, email address and telephone number of owner's representative c. Project description 	The previous work experience for the firm will be evaluated for their similarity to the requirements of NM Tech as stated in the SOW. In addition, customer satisfaction will be evaluated.
2.0 Design Conformity		Weight 30%
	Proposals should include design of custom chiller in term of components and parts used to achieve specified temperature range and capacity. State design parameters and expected operational abilities to meet the SOW and specifications	Design conformity will evaluate conformance and functionality given the requirements from the specifications.
3.0 Cost		Weight 30%
	Proposals should include sufficient cost details for both chiller units. Cost assumptions made by the Offeror should be explained in sufficient detail to confirm the Offeror's understanding of the financial risks and cost elements to meet the requirements of the SOW and specifications.	Cost will be considered in the overall evaluation of proposals regarding cost consciousness, cost realism, probable costs, cost reasonableness, financial adequacy, and understanding of the contract requirements as reflected in the cost and financial information. Proposals which do not reflect a reasonable relationship of cost to the work to be performed may be viewed as a failure to comprehend the contract requirements.
4.0 Time line		Weight 15%
	Proposer should include a draft of the project schedule with critical path in the proposal.	The project schedule will be evaluated based on the projected time to installation and the ability to keep the proposed time line.

4.2 The price portion of the offer shall remain sealed until the evaluation committee has completed its evaluation of the technical portions for all Proposers and has prepared technical scores for each. The evaluation committee will evaluate each Proposer's offer and then establish, by consensus, percentage points for each evaluation criteria. Award will be made to the Proposer(s) who receives the highest total score.

5. TERMS AND CONDITIONS

5.1 General

5.1.1 NMIMT's Terms and Conditions are an equal and integral part of this RFP.

5.1.2 This RFP, addenda, and all attachments will be considered to be part of and incorporated into the resultant contract or purchase order by reference.

5.1.3 The Proposer shall include all applicable costs in their proposal, including but not limited to licenses, materials and labor.

5.1.4 The freight terms shall be Freight Prepaid unless otherwise agreed to at the time of award. The F.O.B. will be destination unless otherwise agreed to at the time of award.

5.1.5 This RFP constitutes the entire agreement between the parties with respect to its subject and shall not be modified, altered or amended in any way except as provided for this RFP. This RFP and the resultant contract will be interpreted and governed by the Laws of the State of New Mexico.

5.2 NMIMT reserves the right to select the combination of goods and services that appear best-suited to meet the needs of NMIMT. NMIMT reserves the right to reject any offer outright even if technically superior, if such an offer exceeds NMIMT's available resources.

5.3 In evaluating the responses, the Purchasing Services Office reserves the right to accept or reject all or any part of any response, waive minor technicalities and award the contract to the Proposer that best serves the interests of NMIMT.

5.4 Expenses for developing offers, pre-proposal and site visits, and for demonstrations, if requested, are entirely the responsibility of the Proposer and shall not be chargeable in any manner to NMIMT.

5.5 NMIMT reserves the right to negotiate a change in Proposer's representative if the assigned representative is not supplying NMIMT's needs adequately. The right shall carry forward through the RFP period and the full time during which the service acquired as a result of the Request for Proposal is provided to NMIMT.

5.6 If Proposer's offer is accepted, the offer and appropriate modifications will be incorporated in the contract entered into between NMIMT and Contractor.

5.7 The Purchasing Services Office will contract for the proposed goods and / or services from the selected Contractor. Third-Party Subcontractors to the Contractor will be expected to comply with all terms and conditions of the award. During the term of the agreement, no work is to be performed by the Contractor without the express written consent of the Purchasing Service Office. Any work performed without written authorization shall be at the Contractor's expense. Any resulting agreement will be the exclusive statement of understanding between the parties with respect to its subject matter and shall consist of the following, in order of precedence:

- 1) NMIMT RFP# 2305009M and all addenda
- 2) Proposer's Offer

5.8 NMIMT shall reserve the right to terminate any contract entered into as a result of the RFP at any time by giving thirty (30) days written notice of its intent to cancel. In the event the Contractor fails to carry out and comply with any of the conditions and agreements to be performed under the specifications, NMIMT shall notify the Contractor, in writing, of such failure or default. In the event the necessary corrective action has not been completed within a ten (10) day period, the Contractor must submit, in writing, why such corrective action has not been performed. NMIMT reserves the right to determine whether or not such non-compliance may be construed as a failure of performance of the contract.

5.9 The Proposer must state those standard terms and conditions which the Proposer will expect NMIMT to consider. Any deviation from proposal specifications must be clearly identified by the Proposer. This RFP will prevail in the event of a conflict between the Proposer's offer and the RFP. NMIMT will consider but is not bound by any Proposer's standard terms and conditions. If an impasse occurs, the offer shall be disqualified.

5.9.1 Any proposed changes to the terms and conditions attached to this RFP including the additional terms and conditions must be stated in Offeror's proposal in a Section marked "TERMS AND CONDITIONS." Offerors are cautioned that any changes to the terms and conditions that are NOT stated in the RFP response, will not be entertained by NMIMT at a later date. Any provisions in any proposal, quotation, acknowledgment or other forms or contract documents applicable to the services that are inconsistent, or in conflict, with any provisions of this RFP or the resultant contract, will be ineffective and inapplicable.

5.9.2 NMIMT reserves the right to reject a proposal on the basis the compromising language which cannot be accepted by NMIMT. Any additional terms and conditions which may be the subject of negotiation will be discussed only between NMIMT and the successful Offeror and shall not be deemed an opportunity to amend the Offeror's proposal.

5.10 It shall be each Contractor's responsibility to provide for the safety of workers and public in compliance with the requirements of insurance and public health and safety.

5.11 The selected Contractor(s) shall be required to provide insurance certificates to the Purchasing Services Office as part of the resulting contract. Coverage must be maintained in full force for the duration of the contract, or until complete and successful performance of the contract is acknowledged by NMIMT. The following minimum amounts are required:

WORKER'S COMPENSATION - Minimum by Statute

COMMERCIAL GENERAL LIABILITY - INCLUDING CONTRACTUAL

Single Limit	\$500,000 OR
Bodily Injury Liability	\$100,000 each person and \$500,000 each occurrence
Property Damage Liability	\$100,000 each occurrence

COMPREHENSIVE AUTOMOBILE - Including Owned and Non-owned

Single Limit	\$500,000 OR
Bodily Injury Liability	\$100,000 each person and \$500,000 each occurrence
Property Damage Liability	\$100,000 each occurrence

5.12 Each party will be solely responsible for its liability for bodily injury, including death, or damage to property under the common law or statutory law of New Mexico and for only its own attorney fees and costs arising from the act or failure to act of such party or of its regents, directors, members, shareholders, officers, agents and employees pursuant to this Agreement; provided however, the foregoing obligation is a statement of responsibility pursuant to common and statutory law only and does not constitute an agreement to indemnify. The liability and responsibility of New Mexico Institute of Mining and Technology shall be subject to the immunities and limitations of the New Mexico Tort Claims Act, NMSA 1978, Sections 41-4- through 41-4-27, and of any amendments thereto, and shall be construed and applied in accordance with the laws of the State of New Mexico, irrespective of the conflict of law and choice of law principles of New Mexico or any other jurisdiction.

5.12.1 The Contractor shall adhere to the Federal Occupational Safety and Health Administration (OSHA) regulations and the State of New Mexico Environmental Improvement Board Occupation Health and Safety Regulations, and Radiation Control Bureau regulations that apply to work performed under this proposal. The Contractor shall defend, indemnify, and hold NMIMT free and harmless against any and all claims, loss, liability and expense resulting from any alleged violation(s) of said regulation(s) including but not limited to, fines or penalties, judgments, court costs, and attorney's fees.

5.13 NMIMT is an agency of the State of New Mexico. In accordance with State Statutes, Sections 7-9-13 and 7-9-54, sales of tangible personal property to NMIMT are specifically exempted from New Mexico Gross Receipts Tax. This exemption does not apply to the purchase of services, leases of property, or items purchased for a construction project.

5.13.1 All proposal amounts shall EXCLUDE any applicable Gross Receipts Tax. If the resulting contract is taxable, show the amount of the tax as a separate item on the itemized list.

5.13.2 Federal Registration #: 85-6000-411 New Mexico Identification #: CRS 01-507116-002

5.13.3 A Nontaxable Transaction Certificate (NTTC) can be obtained from NMIMT by sending a request to purchasing@nmt.edu along with company name, address and TIN or NM CRS number.

5.13.4 When appropriate, Contractor agrees to certify to the County of Socorro that all applicable Gross Receipts Taxes ("GRT") have been reported and paid under location code 25-025 in the unincorporated areas of Socorro County. Contractor agrees to certify to the City of Socorro that all applicable Gross Receipts Taxes ("GRT") have been reported and paid under location code 25-125 for work performed in the incorporated areas of Socorro.

5.14 In accordance with NMSA 13-1-129, Proposers are hereby notified that other governmental entities within the State of New Mexico, or as otherwise allowed by their respective governing directives, may contract for services with the awarded Contractor. Contractual engagements accomplished under this provision shall be solely between the awarded Contractor and the contracting entity with no obligation by NMIMT.

5.15 The Immigration Reform and Control Act of 1986, Pub L 99-603 (8 USC 1324a) requires employers to verify the eligibility of individuals for employment to preclude the unlawful hiring, or recruiting or referring for a fee, of aliens who are not authorized to work in the United States. This information will be used by employers as a record of their basis for determining eligibility of an employee to work in the United States. The form will be kept by the employer and made available for inspection by authorized officials of the Department of Homeland Security, Department of Labor, and Office of Special Counsel for Immigration-Related Unfair Employment Practices. Submission of the information required is voluntary. However, an individual may not begin employment unless this form is completed, since employers are subject to civil or criminal penalties if they do not comply with the Immigration Reform and Control Act of 1986. More information regarding the employment requirements can be found at the following website: <http://www.uscis.gov/files/form/i-9.pdf> **NMIMT's E-Verify Company ID Number is 165512**

5.16 Any Contractor and Subcontractor(s) working on a contract(s) entered into subsequent to this RFP shall not discriminate against any employee or applicant for employment, to be employed in the performance of such contract, with respect to its hire, tenure, terms, conditions, or privileges of employment, because of age, color, disability, national origin, race, religion, gender, sexual orientation, or veteran status.

5.17 During the term of this agreement, NMIMT reserves the right to contract with the awarded Contractor for additional services as required. Such services shall be performed by mutual consent of the parties and shall be documented by addendum to the contract.

5.18 NMIMT reserves the right to audit the Contractor's records associated with this contract at any time during the contract period and for a period of up to three (3) years following the expiration or termination of the agreement. Such audit may be conducted by NMIMT personnel or a third party under contract with NMIMT. NMIMT shall give the Contractor reasonable notice prior to the conduct of any audit and upon receiving the notice from NMIMT the Contractor agrees to fully cooperate with the auditors.

5.19 Unless otherwise specifically stated by the Proposer, all equipment, materials, supplies and workmanship furnished or installed is to be free of defects and Proposer shall agree to replace solely at his / her expense any and all defective equipment, parts, etc. within a one (1) year period after the date of acceptance of the items and / or installation unless otherwise agreed to in writing at the time of award. Proposer also warrants the materials, supplies or services furnished to be exactly as specified in the order, free from defects and to be in compliance with any drawings or specifications incorporated herein and with any samples furnished by offeror. All applicable UCC warranties express and implied, are incorporated herein.

5.20 The performance of the Contract by NMIMT is contingent upon availability of sufficient funds and sufficient appropriations and authorizations being made by the funding entity(s) for such performance. NMIMT's decision as to whether sufficient funds are available and whether sufficient appropriations and authorizations have been made shall be made in good faith and in its sole discretion, shall be accepted unconditionally by the Contractor, and shall be final. If NMIMT decides that sufficient funds are not available and / or sufficient appropriations and / or authorizations have not been made, it shall notify the Contractor of its decision in writing and may either terminate the Contract or propose modifications to accommodate the insufficient funds and / or appropriations and / or authorizations. If NMIMT proposes modifications, the Contractor shall within

thirty (30) days after receiving NMIMT's notice give NMIMT written notice that it has elected either to (i) accept the proposed modifications or (ii) terminate the Contract. If the Contractor fails timely to give such notice, it shall be deemed to have accepted the proposed modifications. In no event shall NMIMT be liable for any financial or other penalty on account of any termination or modification of the Contract as a result of insufficient funds, appropriations or authorizations.

6. DISCUSSIONS WITH PROPOSERS AND AWARD

6.1 The Procurement Code permits, and NMIMT reserve the right to conduct discussions with any or all Proposers, or to make an award of a contract without such discussions based only on evaluation of the written offers. NMIMT likewise reserves the right to designate an Evaluation Committee in evaluating the offers according to the evaluation criteria. NMIMT shall make a written determination showing the basis upon which the award was made and such determination shall be included in the procurement file.

6.2 If NMIMT is unable to negotiate a contract with the one selected as most qualified, negotiations will be terminated at the discretion of NMIMT. Negotiations will then be initiated with the next most qualified, or the procurement process will be terminated and new proposals requested.

7. PROCUREMENT CODE

7.1 This award shall be made pursuant to the provisions of the Procurement Code governing procurement of goods and services. Please note that Sections 13-1-199 NMSA impose civil and criminal penalties for violation of the provisions of the Procurement Code. New Mexico criminal statutes impose felony penalties for illegal bribes, gratuities or kickbacks.

8. RESIDENTIAL PREFERENCE

8.1 A New Mexico resident business shall be awarded the equivalent of five percent (5%) of the total possible points to be awarded based on the resident business possessing a valid resident business certificate in accordance with Section 13-1-21 of the New Mexico Statutes 1978 Annotated, Chapter 13. If applicable, document the residential preference number in the Offer form and attached the certificate to the response. The preference may not be combined with the Veterans Preference. Procurements involving federal funds are excluded from in state preference laws.

9. VETERANS PREFERENCE

9.1 A New Mexico resident veteran contractor, upon providing certification as a resident veteran with their offer, shall be given a preference of ten percent (10%). The preference may not be combined with the residential preference. Procurements involving federal funds are excluded from in state preference laws.

10. TERM

10.1 The terms of this agreement shall be for one year.

11. PUBLIC INSPECTION

11.1 General: After award, the register of offers shall be open to public inspection. Each offer, except those portions for which the Proposer has made a written request for confidentiality, shall also be open to public inspection.

11.2 Confidential Data: If a citizen of this State requests disclosure of data, for which a Proposer has made a written request for confidentiality, the Chief Procurement Officer shall examine the citizen's request and make a written determination that specifies which portions of the offer should be disclosed. Unless the Proposer protests under Section 13-1-172 NMSA 1978, the offer will be so disclosed. The offer shall be open to public inspection subject to any continuing prohibition on the disclosure of confidential data.

12. LICENSES AND PERMITS

12.1 The Contractor must keep himself informed of, and in adherence to, all laws and ordinances governing any matter related to the services to be performed. The Contractor shall obtain all necessary licenses and permits, and shall be aware of all

labor conditions and agreements relating to the work specified in this document and shall make all provisions necessary to avoid any dispute which might arise from those conditions and agreements and shall be responsible for any delays, damages or extra costs caused by such disputes. The Contractor shall be solely engaged in this type of work and service.

13. CONTRACT TERMINATION

13.1 NMIMT reserves the right to terminate the contract with ninety (90) days written notice by the Chief Procurement Officer via certified mail to the address listed on the signature page of the RFP if any of the terms of the proposal and subsequent contract are violated.

13.1.1 If, through any cause and as determined solely by NMIMT, the Contractor shall fail to fulfill in a timely and proper manner its obligation under this agreement or if the Contractor shall violate or fail to meet any of the covenants, agreements or stipulations of this agreement, NMIMT shall thereupon have the right to terminate this agreement by giving five (5) days written notice to the Contractor of such termination and specifying the effective date of such termination. In such event, all finished or unfinished documents, data and reports prepared by the Contractor under this agreement shall, at the option of NMIMT, become the property of NMIMT, and the Contractor shall be entitled to receive just and equitable compensation for any work satisfactorily completed hereunder. Notwithstanding the above, the Contractor shall not be relieved of liability to NMIMT for damages sustained by NMIMT by virtue of any breach of this agreement by the Contractor, and NMIMT may withhold any payments to the Contractor for the purposes of set-off until such time as the exact amount of damages due NMIMT from the contract is determined.

13.1.2 NMIMT may terminate the Contract at any time by giving ninety (90) days written notice to the Contractor. If the Contractor is terminated by NMIMT as provided herein, the Contractor will be paid an amount which bears the same ratio to the total compensation as the services actually performed bear to the total services of the Contractor covered by this agreement, less payments of compensations previously made. If this agreement is terminated due to the fault of the Contractor, the "Termination for Cause" clause will apply.

14. GOVERNMENT FLOW-DOWN PROVISIONS

14.1 The resulting order is subcontracted under a U.S. Government Prime Contract, the applicable clauses listed below are incorporated into, and form a part, of the terms and conditions of the resulting order. In the event of any conflict between previously referenced terms and conditions and the Government Flow-Down Provisions, the Government Flow-Down Provisions take precedence. The clauses contained in the following paragraphs of the Federal Acquisition Regulations (FAR) are incorporated herein by reference. For purposes of this Purchase Order, in the following clauses, the term "contract" shall mean "this order", the term "contractor" shall mean "Seller" and the term "Government" and "Contracting Officer" shall mean "New Mexico Institute of Mining and Technology (NMIMT) and the "Chief Procurement Officer" respectively. The following provisions of the FAR apply at the specified order dollar amounts:

Title	Applicability	FAR Reference
Equal Employment Opportunity	All Orders	52.222-26 (July 1990)
Debarment and Suspension	All Orders	52.209-6 (Oct 2015)
Rights in Data	All R&D Orders	52.227-14 (May 2014)
Anti-Kickback Act	Construction Over \$2K	52.203-7 (May 2014)
Limitations on Payments to Influence Certain Federal Transactions	Construction Over \$2K	52.203-12 (Oct 2010)
Audit & Negotiations Alt II	All Orders Over \$100K	52-215-2 (Oct 2014)
Davis Bacon Act	Construction Over \$2K	52.222-6 (May 2014)
Contract Work Hours & Safety Standards	Construction and Labor Hour Contracts Over \$2.5K	52.222-4 (July 1995)
E-Verification	All Orders	52.222-54 (Oct 2014)
Certification and Disclosure Regarding Payments to Influence Certain Transactions	All Orders Over \$100K	52.203-11 (Sept 2007)
Patent Rights	All Orders	

Ownership by the Contractor		52.227-11 (May2014)
Ownership by the Government		52.227-13 (Dec 2007)
Buy American Act	All Orders over \$3K	52.225-2 (May 2014)
Cause & Convenience Termination	All Orders over \$10K	52.212-4 (May2015)
Energy Efficiency in Energy-Consuming Products	All Orders and Services with Energy Consuming Products	52.223-15 (Dec 2007)
Recovered Material	Biobased products that use USDA designated items	52.223-1 (May 2012)
Recovered Material	Biobased products that do not use USDA designated items	52.223-2 (Sept 2013)
Recovered Material	EPA Designated items except off the shelf Items less than \$150K	52.223-4 (May 2008)
Recovered Material	EPA Designated items except off the shelf Items greater than \$150K	52.223-9 (May 2008)
Recovered Material	EPA-designated items Service and Construction	52.223-17 (May 2008)

15. SCOPE OF WORK

15.1 PROJECT DESCRIPTION

The aim of this project is to have two water chillers designed, installed and functioning to cool three (3) unit telescopes (UT) at the Magdalena Ridge Observatory Interferometer (MROI) <http://www.mro.nmt.edu>.

Two chillers units shall be procured and installed as outlined in the Specifications.

- One chiller shall be a package unit (Package Unit) that meets the demand for use in cooling the electrical equipment within the UT during nighttime observations.
- The second chiller shall be a custom unit (Custom Unit) designed and tested to meets the demand for use in cooling the UT.

Details for each unit are attached in Specification 15627 Reciprocating Water Chillers with details in 15074 Vibration and Seismic Controls for HVAC Piping and Equipment.

Contractor is responsible to coordinate with the Owner on details to ensure installation and startup is timely, including anchorage points, and connections of power, signal, and control. Two week notice is required, for timely installation, before delivery of chillers and status reports not to exceed 4 weeks in time.

Contractor is to draft the project schedule with critical path in the proposal. Within two weeks of issuance of Notice to Precede, the contractor is to refine and detail the project schedule with critical path identified. Refined schedule shall not deviate by more than six (6) weeks from proposed.

Attached Documents

Specifications:

- 15627 Reciprocating Water Chillers
- 15074 Vibration and Seismic Controls for HVAC Piping and Equipment

Intent of Custom Chiller Unit

Use of the chiller is to cool the UT to a projected night time ambient temperatures during the day and reduced demand during the night. Process fluid temperatures are to be Owner determined and controlled. Chiller is to be able to function at the extremes of weather conditions and also in between. It is anticipated the designed chiller

will operate with set-points chilled fluid tank, variable speed drive, or all of the above. Process fluid temperature required is dependent on weather. The difference of temperature across the UT from inlet to outlet is anticipated to be 10F gain with an associated pressure drop of 30 psi (2 bar). A -4F is a 15 year night time low. The chiller unit is expected to chill process fluid down to -4F to meet the demand of a +4F nighttime low; thus, truncating the low end of the temperature range.

Responsibilities of Owner

Owner is Responsible for:

- Concrete equipment pad with coordination from the manufacture for size, connection points or anchorage, stubs for power signal and control.
- Electrical power: 480 v, 3 phase, cable to equipment pad.
- Signal and Control lines to concrete equipment pad.
- Stainless steel piping between UT and chiller skid (Contractor responsible for connection from stainless steel pipe to skip).
- Review of submittals within four weeks
- Review and response of requests for information within one week.
- Review and response of other inquires within one week.

15.3 SECTION 15074- RECIPROCATING WATER CHILLERS

PART 1 – General

1. RELATED DOCUMENTS

- A. Scope of Work
- B. Specifications

2. SUMMARY

- A. This Section includes the following:
 - 1. Restrained spring isolators.
 - 2. Inertia, vibration isolation equipment bases.

B. Buna-N (also known as Nitrile) shall not be used on the Site.

3. Submittals (to be included in proposal)

- A. Product Data: For the following:
 - 1. Include rated load, rated deflection, and overload capacity for each vibration isolation device.

PART 2 – Products

1. VIBRATION ISOLATORS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

- 1. Ace Mountings Co., Inc.
- 2. Amber/Booth Company, Inc.
- 3. California Dynamics Corporation.
- 4. Isolation Technology, Inc.
- 5. Kinetics Noise Control.
- 6. Mason Industries.
- 7. Vibration Eliminator Co., Inc.
- 8. Vibration Isolation.

9. Vibration Mountings & Controls, Inc.

B. Restrained Spring Isolators: Freestanding, steel, open-spring isolators with limit-stop restraint.

1. Housing: Steel with resilient vertical-limit stops to prevent spring extension due to weight being removed; factory-drilled baseplate bonded to 1/4-inch- (6-mm-) thick, neoprene or rubber isolator pad attached to baseplate underside; and adjustable equipment mounting and leveling bolt that acts as blocking during installation.
2. Restraint: Limit stop.
3. Outside Spring Diameter: Not less than 80 percent of the compressed height of the spring at rated load.
4. Minimum Additional Travel: 50 percent of the required deflection at rated load.
5. Lateral Stiffness: More than 80 percent of rated vertical stiffness.
6. Overload Capacity: Support 200 percent of rated load, fully compressed, without deformation or failure.

2. VIBRATION ISOLATION EQUIPMENT BASES

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Amber/Booth Company, Inc.
2. California Dynamics Corporation.
3. Isolation Technology, Inc.
4. Kinetics Noise Control.
5. Mason Industries.
6. Vibration Eliminator Co., Inc.
7. Vibration Isolation.
8. Vibration Mountings & Controls, Inc.

B. Inertia Base: Factory-fabricated, welded, structural-steel bases and rails ready for placement of cast-in-place concrete.

1. Design Requirements: Lowest possible mounting height with not less than 1-inch (25-mm) clearance above the slab. Include equipment anchor bolts and auxiliary motor slide bases or rails.
 - a. Include supports for suction and discharge elbows for pumps.
2. Structural Steel: Steel shapes, plates, and bars complying with ASTM A 36/ A 36M. Bases shall have shape to accommodate supported equipment.
3. Support Brackets: Factory-welded steel brackets on frame for outrigger isolation mountings and to provide for anchor bolts and equipment support.
4. Fabrication: Fabricate steel templates to hold equipment anchor-bolt sleeves and anchors in place during placement of concrete. Obtain anchor-bolt templates from supported equipment manufacturer.

3. Factory Finishes

A. Finish: Manufacturer's standard prime-coat finish ready for field painting.

B. Finish: Manufacturer's standard paint applied to factory-assembled and -tested equipment before shipping.

1. Powder coating on springs and housings.
2. All hardware shall be hot-dip galvanized metal components for exterior use.
3. Color-code or otherwise mark vibration isolation-control devices to indicate capacity range.

Part 3 EXECUTION

1. EXAMINATION

- A. Examine areas and equipment to receive vibration isolation-control devices for compliance with requirements for installation tolerances and other conditions affecting performance.
- B. Examine roughing-in of reinforcement and cast-in-place anchors to verify actual locations before installation
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

2. VIBRATION-CONTROL RESTRAINT DEVICE INSTALLATION

A. Drilled-in Anchors:

- 1. Identify position of reinforcing steel and other embedded items prior to drilling holes for anchors. Do not damage existing reinforcing or embedded items during coring or drilling. Notify the structural engineer if reinforcing steel or other embedded items are encountered during drilling. Locate and avoid prestressed tendons, electrical and telecommunications conduit, and gas lines.
- 2. Do not drill holes in concrete or masonry until concrete, mortar, or grout has achieved full design strength.
- 3. Wedge Anchors: Protect threads from damage during anchor installation. Heavy-duty sleeve anchors shall be installed with sleeve fully engaged in the structural element to which anchor is to be fastened.
- 4. Adhesive Anchors: Clean holes to remove loose material and drilling dust prior to installation of adhesive. Place adhesive in holes proceeding from the bottom of the hole and progressing toward the surface in such a manner as to avoid introduction of air pockets in the adhesive.
- 5. Set anchors to manufacturer's recommended torque, using a torque wrench.
- 6. Install zinc-coated steel anchors for interior and stainless-steel anchors for exterior applications.

3. ADJUSTING

- A. Adjust isolators after piping system is at operating weight.
- B. Adjust limit stops on restrained spring isolators to mount equipment at normal operating height. After equipment installation is complete, adjust limit stops so they are out of contact during normal operation.
- C. Adjust restraints to permit free movement of equipment within normal mode of operation.

END OF SECTION 15074

SECTION 15627- RECIPROCATING WATER CHILLERS PART 1 – General

1. RELATED DOCUMENTS A. Scope of Work B. Specifications

2. SUMMARY

A. Section Includes

1. Two Chiller Units

- a. Packaged, air-cooled, electric-motor-drive, reciprocating drive. All specifications below apply to the package unit excluding items indicated with §.
- b. Custom designed and manufactured chiller: air-cooled, electric-motor drive. Manufacturer is to include brief explanations or rationale why the custom unit cannot conform to portion and part thereof to this specification.

B. Buna-N (also known as Nitrile) shall not be used on the Site.

C. Related Sections:

- 1. Specification 15074 vibration and seismic controls for HVAC piping and equipment

3. SITE

A. Site: Location of Observatory (33.978624, -107.187027)

B. Working at altitude

- 1. All site workers should ensure that employees and drivers are able to work safely at altitudes up to 10,600 ft (3,200 m).

C. Access Road

1. The access road (Water Canyon Rd.) to Magdalena Ridge is an unsurfaced single track forest road that is 8 miles long and climbs through some 4,000 to 5,000 ft in altitude with maximum gradients up to 14%. All on-site workers should ensure that all drivers are capable of negotiating this road. On-site workers should also evaluate the road in terms of suitability for wide or long vehicles. Particular attention should be paid to evaluating the road in terms of suitability for vehicles over 30 ft. long and large turning radii. Semi-truck cabs and trailers should be as short as possible.

D. Health and Safety

1. Contractor is required to comply with the MRO/NMT Transportation & Safety Plan. Copies of which can be obtained from NMT Facilities Management. Contractors should submit copies of their Health and Safety plans as well as their 12 month safety/accident record. All on-site workers are required to submit a job hazard analysis (specifically including altitude sickness) for the work they are going to be performing.

2. On-site workers shall be responsible for submitting written data information, MSDS information of any type of chemical that they will be bringing onto the site.

4. §Action Submittals (to be included in proposal)

A. Product data: Include refrigerant, rated capacities, operating characteristics, furnished specialties, and accessories.

1. Performance at AHRI standard conditions and at conditions indicated.
2. Performance at AHRI standard unloading conditions.
3. Minimum evaporator flow rate.
4. Refrigerant capacity of water chiller.
5. Oil capacity of water chiller.
6. Fluid capacity of evaporator.
7. Characteristics of safety relief valves.
8. Minimum entering condenser-air temperature.
9. Performance at varying capacity with constant design entering condenser-air temperature. Repeat performance at varying capacity for different entering condenser-air temperatures from design requirements.

B. Shop Drawings: Complete set of manufacturer's prints of water chiller assemblies, control panels, sections and elevations, and unit isolation for both units. Include the following:

1. Assembled unit dimensions.
2. Weight and load distributions.
3. Contact points and connection points for bolt locations.
4. Required clearances for maintenance and operation.
5. Sizes and locations of piping and wiring connections.
6. Wiring Diagrams: For power, signal, and control wiring.

5. §Information Submittals

A. Certificates: For certification required in "Quality Assurance" Article.

B. Source quality-control test reports.

C. Startup service reports.

D. Warranty: Sample of special warranty.

E. Operations and Maintenance Data: For each water chiller to include in emergency, operation, and maintenance manuals.

6. §Quality Assurance

A. AHRI Certification: Certify chiller according to AHRI 590 certification program.

B. AHRI Rating: Rate water chiller performance according to requirements in AHRI 550/590, "Water Chilling Packages Using the Vapor Compression Cycle."

C. ASHRAE Compliance: ASHRAE 15 for safety code for mechanical refrigeration.

- D. ASME Compliance: Fabricate and stamp water chiller heat exchangers to comply with ASME Boiler and Pressure Vessel Code.
- E. Comply with NFPA 70

7. Delivery, Storage, Handling

- A. Ship water chillers from the factory fully charged with refrigerant and filled with oil.
- B. Ship on trailer 40 ft or less for the final route from US Hwy 60 to Site on Water Canyon Rd.

8. Coordination

- A. Coordinate sizes and locations of concrete bases where applicable with actual equipment provided.
- B. Coordinate sizes, locations, and anchoring attachments of structural-steel support structures where applicable.

9. Warranty

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of water chillers that fail in materials or workmanship within 1 year of completed installation and startup.
- B. Compressor Warranty Period: Five years from date of Installation and Startup Completion.

PART 2 – Products

1. Unit Demand

A. Package unit:

- 1. Tonnage (BTu/hr, kW): 2.9 tons (34,800 BTu/hr, 10.2 kW). Tonnage shall be increased to account for efficiency at altitude and Entering-Air Temperatures.
- 2. Maximum flow rate, gpm (m³/h): 11.5 gpm (2.62 m³/h)
- 3. Pressure at Unit Telescope (UT) inlet: 35±7 psi (4.5± 0.5 bar)
- 4. Expected Pressure drop through UT: 30 psi (2 bar)
- 5. Process fluid temperature to UT intel: 34F (+1C)

B. Custom unit

- 1. Maximum flow rate, gpm (m³/h): 52.8 gpm (4 m³/h)
- 2. Pressure at Unit Telescope (UT) inlet: 80 ± 7 psi (5.5± 0.5 bar)
- 3. Expected Pressure drop through UT: 30 psi (2 bar)
- 4. Process fluid temperature range to UT inlet: 60F to -4F (+15C to -20C)
- 5. Tonnage (BTu/hr, kW) dependent on season (Tonnage shall be increased to account for efficiency at altitude and Entering-Air Temperatures.):
 - a. Summer High Demand: 7.8 tons (93,400 BTu/hr, 27.4 kW)
 - b. Winter High Demand: 3.3 tons (39,600 BTu/hr, 11.6 kW)
 - c. Chiller is intended to operate with a fluid temperature 10 degrees F (5C) below night time ambient, thus 60F (+15C) corresponds to the summer load and -4F (-20C) corresponds to the winter load.
 - d. Condenser Entering-Air Temperature Range (15-year high and low):
 - a. Summer daytime high 86F
 - b. Winter night time low -4F

2. Packaged air-cooled water chillers

- A. Manufacturers: Subjects to compliance with requirements, available manufacturers offering products that may be incorporated into the work include but are not limited to the following:
 - 1. Carrier corporations: A United Technologies company.
 - 2. Trane Inc an Ingersoll Rand company.
 - 3. RAE Corporation.

- B. Description: Factory assembled and run-tested run water chiller complete with base and frame, condenser casing, compressors, compressor motors and motor controllers, evaporator, condenser coils, condenser fans and motors, electrical power, controls, and accessories.
- C. Fabricated base, frame, and attachments to water chiller components strong enough to resist movement during a seismic event when water chilled base is anchored to field support structure.

3. Skid

- A. Skid length is not to exceed 28 ft.

4. Cabinet:

- A. Base: Galvanized-steel base extending the perimeter of the water chiller. Secure frame, compressors, and evaporator to base to provide single-piece unit. Base shall be designed to limit deflection to L/200 and shall be in minimum of 4 in high.
- B. Frame: Rigid galvanized-steel frame secured to base and designed to support cabinet, condenser, control panel, and other chiller components not directly supported from base.
- C. Casing: Galvanized steel.
- D. Finish: Coat base, frame, and casing with corrosion-resistant coating capable of withstanding a 500 hour salt-spray test according to ASTM B 117.

5. Compressor:

- A. Description: Positive-displacement direct drive with semi-hermetically sealed and accessible bolted casings.
- B. Each compressor provided with suction and discharge service valves, crankcase oil heater, and suction strainer.
- C. Operating speed: Up to 3600 RPM for 60 Hz applications.
- D. Capacity control: Combinations of cylinder unloading and on-off compressor cycling of multiple compressors, plus hot-gas bypass. Compressor shall be capable of operating at part-load conditions without increased vibration over normal vibration at full-load operation and shall be capable of continuous operation as its lowest step of unloading.
- E. Oil Lubrication System: Automatically reversible, positive-displacement pumps with strainers, sight glass, filling connection, filter with magnetic plug, and initial oil charge.
- F. Vibration Isolation: Mount individually compressors on spring isolators with an isolation efficiency of 95%.

6. Compression Motors

- A. Hermetically sealed and cooled by refrigerant suction gas.
- B. High-torque, four-pole induction type with inherent thermal-overload protection on each phase.

7. Compressor Motor Control

- A. Part-wind Start: NEMA ICS 2, Class A, reduced voltage, nonreversing.

8. Refrigeration

- A. Refrigerant: R449a Classified as Safety Group A1 according to ASHRAE 34 or submit alternative for approval.
- B. Refrigerant Compatibility: Parts exposed to refrigerants shall be compatible with refrigerants, and pressure components shall be rated for refrigerants pressures.
- C. Refrigerant Circuit: Each circuit shall include expansion valve, refrigerant charging connections, a hot-gas muffler, compressor suction and discharge shutoff valves, a liquid-line shutoff valve, a replaceable-core filter-dryer, a sight glass with moisture indicator, a liquid-line solenoid valve, and an insulated suction line.

9. Evaporator:

- A. Code Compliance: Tested and stamped according to ASME Boiler and Pressure Vessel Code.

B. Heater: Factory-installed and wired electric heater with integral controls designed to protect the evaporator to minus 20 deg F (minus 29 deg C).

10. Air-Cooled Condenser:

A. Plate-fin coil with integral subcooling circuit, leak tested at 150 psig (1034 kPa).

1. Construct coils of copper tubes mechanically bonded to copper fins.
2. Coat coils with a baked epoxy corrosion-resistant coating after fabrication.
3. Hail Protection: Provide condenser coils with louvers, baffles, or hoods to protect against hail damage.

B. Fans: Direct-drive propeller type with statically and dynamically balanced fan blades, arranged for vertical air discharge.

C. Fan Motors: Totally enclosed air over (TEAO) enclosure, with permanently lubricated bearings, and having built-in overcurrent- and thermal-overload protection.

D. Fan Guards: Steel safety guards with corrosion-resistant coating.

11. Electrical Power:

A. Factory-installed and-wired stitched motors controllers, transformers, and other electrical devices necessary shall provide a single point field power connection to water chiller.

B. House in a unit-mounted, NEMA 250 type 4 enclosure with hinged access door with lock and key or padlock and key

C. Wiring shall be numbered and color-coded to match wiring diagram.

D. Install factory wiring outside of an enclosure in a raceway.

E. Field power interface shall be to wire lugs.

F. Provide branch power circuit to each motor and controls with one of the following disconnecting means:

1. NEMA AB 1, motor-circuit protector (circuit breaker) with field-adjusted, short-circuit trip coordinated with motor locked-rotor amperes.

G. Provide each motor with overcurrent protection.

H. Overload relay sized according to UR 1995, or integral component of water chiller control microprocessor.

I. Phase-Failure and Undervoltage: solid-state sensing with adjustable settings.

J. Transformer: Unit-Mounted transformer with primary and secondary fuses and sized with enough capacity to operate electrical load plus spare capacity.

K. Control Relays: Auxiliary and adjustable time-delay relays.

L. Indicate the following for water chiller electrical power supply:

1. Current, phase to phase, for all three phases.
2. Voltage, phase two phase and phase to neutral for all three phases.
3. Three-phase real power (kilowatts)
4. Three-phase reactive power (kilovolt amperes reactive).
5. Power factor.
6. Running log of total power versus time (kilowatt hours)
7. Fault log, with time and date of each.

12. Controls: Controls for both units can be combined into a single unit provided functionality is not impeded.

A. Stand-alone, microprocessor based.

B. Enclosure:

C. Operator Interface: Keypad or pressure sensor touch screen. Multiple-character backlit liquid-crystal display or light-emitting diodes or better. Display the following:

1. Date and time.
2. Operating or alarm status.
3. Operating hours.

4. Outside air temperature if required for chilling water reset.
 5. Temperature and pressure of operating set points.
 6. Entering and leaving temperatures of chilled water.
 7. Refrigerant pressure in evaporator and condenser.
 8. Saturation temperature in evaporator and condenser.
 9. No cooling load condition.
 10. Elapsed time meter (compressor run status).
 11. Pump status.
 12. Anti-recycling time status.
 13. Percent of maximum motor amperage.
 14. Current-limit set point.
 15. Number of compressor starts.
- D. Control Functions:
1. Manual or automatic startup and shutdown time schedule
 2. Entering and leaving chilled-water temperature, control set points, and motor load limit.
 3. Current-limit and demand limit.
 4. External water chiller emergency stop.
 5. Anti-recycling timer.
 6. Automatic lead-lag switching.
- E. Manual-Reset Safety Controls: The following conditions that shall shut down water chiller and require manual reset:
1. Low evaporative pressure or high condenser pressure.
 2. Low chilled-water temperature.
 3. Refrigerant high pressure
 4. High or low oil pressure.
 5. High oil temperature.
 6. Loss of chilled-water flow
 7. Control device failure.
- F. Building Automation System Interface: Factory-installed hardware and software to enable owner's building automation system to monitor, control, and display and reset water chiller status and alarms at user preferences
1. ASHRAE 135 (BACnet) communication interface with building automation system shall enable building automation system operator to control and monitor the water chiller from a remote operator workstation. Control features and monitoring points displayed locally at water chiller control panel shall be available through building automation system.
- G. Piping connections
1. Connection pipe size is 1-¼ inch NPT.
 2. Non-corrosive connection to stainless steel.
13. Insulation:
- A. Material: Closed-cell flexible elastomeric, thermal insulation complying with ASTM C 534 Type I, for tubular materials and type II, for sheet materials.
 - B. Thickness: 3/4 inch (19mm) minimum.
 - C. Factory-applied installation over cold surfaces of water chiller components.
 1. Adhesive: As recommended by insulation manufacturer and apply to 100% of installation contact surface. Seal seams and joints.
 - D. Apply protective coating to expand exposed surfaces of insulation. Insulation exposed to direct sunlight shall have metal jackets for UV protection.
14. Accessories:
- A. Factory-finished, chilled-water flow switches for field installation.
 - B. Individual compressor suction and discharge pressure gauges with shutoff valves.
 - C. Factory-finished spring isolators for field installation.

15. Capacity and Characteristics

- A. Low ambient operation chiller design for operation in -20°F (- 29°C)
- B. Evaporator pressure rating: 300 psig (2068 kPa)
- C. Evaporator fluid Type 50% propylene glycol/water brine.
- D. Controls Power Connection: Fed through integral transformer.
- E. Chiller Electrical Characteristics: 480 -V AC, three phase, 60 Hz.

16. Source Quality Control

- A. Perform functional test of water chillers before shipping
- B. Factory performance test water chillers, before shipping, according to ARI 550/590, "Water Chilling Packages Using the Vapor Compression Cycle."
 - 1. Allow Owner's representative access to place where water chillers are being tested with 2 weeks notice in advance of testing.
- C. Factory test and inspect evaporator according ASME Boiler and Pressure Vessel Code: Section VIII, Division 1. Stamp with ASME label.
- D. For water chillers located outdoors, rate sound power level according to ARI 370 procedure.

Part 3 EXECUTION

3.1 EXAMINATION

1. Before water chiller installation, examine and verify roughing-in for equipment support anchor-both sizes and locations, piping, signal, control wiring, and electrical connections to verify actual locations, sizes, and other conditions affecting water chiller performance, maintenance, and operations.

2. Proceed with insulation only after unsatisfactory conditions have been corrected.

3. Water chiller installation

- A. Equipment Mounting: install water chiller on concrete base using restrained spring isolators.
 - 1. Minimum Deflection 1 inch.
 - 2. Installed our rods to connect concrete base to concrete floor. Unless otherwise indicated, install dowel rods on 18-inch (450-mm) centers around the full perimeter of concrete base.
 - 3. Full supported equipment, install epoxy-coated anchor bolts that extended through concrete base and anchor into structural concrete.
 - 4. Place and secure anchor devices. Use setting drawings, template, diagrams, instrumentation, and directions furnished with items to be embedded.
 - 5. Install anchor bolts to elevation required for proper attachment to support equipment.
- B. Equipment Mounting: Install water chiller on steel support frame using restrained spring isolators. Comply with requirements for vibration isolated specified in the supplied document "15074 vibration and seismic controls for HVAC piping and equipment."
 - 1. Minimum deflection: 1 inch (25-mm)
- C. Equipment Mounting: install water chiller on vibration isolation inertia bases. Comply with requirements specified in division 15 section vibration and seismic controls for HVAC piping and equipment.
- D. Maintain manufacturer's recommended clearances for service and maintenance.
- E. Charge water chiller with refrigerant if not factory charged and fill with oil if not factory installed.
- F. Install separate devices furnished by manufacturer and not factory installed.

4. Connections

- A. Ensure pipes, connections, wires and cables adjacent to chillers to allow service and maintenance.
- B. Evaporative Fluid Connections: Connect to evaporator inlet with shut off valve, strainer, flexible connector, thermometer, and plugged tee with pressure gauge. Connect to evaporator outlet with shutoff

valve, balancing valve, flexible connector, flow switch, thermometer, plugged tee with pressure gauge, and drain connection with valve. Make connection to water chiller with a union, flange, or mechanical coupling.

5. Startup Service

A. Engage a factory-authorized service representative to perform startup service.

B. Inspect field-assembled components, equipment installation, and piping and electrical connections for proper assemblage, installations and connections.

C. Complete installation with startup checks according to manufacturer's written instructions and perform the following:

1. Verify that refrigerant charge is sufficient and water chiller has been leak tested.

2. Verify the pumps are installed and functional.

3. Verify the thermometer and gauges are installed.

4. Operate water chiller for run-in period.

5. Check bearing lubrication and oil levels.

6. Verify that refrigerant pressure relief for chillers installed indoors or ventilated outdoors.

7. Verify proper motor rotation.

8. Verify status of vibration isolation, include deflection during water chillers startup and shutdown.

9. Verify and record performance of water chiller protection devices.

10. Test and adjust controls and safeties. Replace damage or malfunctioning controls and equipment.

D. Prepare a written startup report that records results of test inspections. Submit report within two (2) weeks of testing.

6. Demonstration

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain water chillers. Video record the training sessions. Coordinate with the Owner.

7. Wages

A. All wages, wage rates, and fringes for work performed in Socorro County (On Site) are to conform to Davis Bacon wages for Socorro County, New Mexico.

Compliance with Regulatory Agencies

Please fill out this form to document and submit your response to the evaluation criteria listed in the Instruction to Proposers.

Has your firm during the past five (5) years been free of any determination by a court or administrative agency of laws and/or regulations pertaining to the payment of prevailing wages or employment of apprentices on public works projects? Yes No

If "no" please explain: _____

Has your firm during the past five (5) years been free of any determinations by a court or administrative agency of violations or notice of violation pertaining to the Occupational Safety and Health Administration (OSHA), Department of Transportation (DOT), or Environmental Protection Agency (EPA) requirement on a job site? Yes No

If "no" please explain: _____

Has your firm during the past five (5) years been free of any determinations by a court or administrative agency of violations pertaining to Construction Industry Division requirements pertaining to projects? Yes No

If "no" please explain: _____

Is your firm free of any Subcontractor Fair Practices Act violations for the past five (5) years?
 Yes No

If "no" please explain: _____

Has your firm been free of violation of any Federal, State or Local Agency requirement on a jobsite that has resulted in a fine because violations? Yes No

If "no" please explain: _____

The undersigned hereby state under penalty of perjury that the above statements are true and accurate.

Name

Title

Signature

Date

PROPOSAL FORMS

(ALL FORMS TO BE COMPLETED, SIGNED AND INCLUDED IN OFFER)

OFFER

To: New Mexico Institute of Mining and Technology
801 Leroy Place
Socorro, NM 87801
Re: RFP# 2305009M

Offer of _____ (hereinafter called Proposer) a:

Corporation Partnership or Individual

The Proposer in compliance with RFP mentioned above having examined the proposal documents and the site of the proposed work (if applicable), hereby proposes to furnish all materials, equipment, labor and supplies and to complete the work at the prices stated in their offer. These prices, excluding New Mexico Gross Receipts Taxes, are to cover all expenses incurred in performing the Work as required in the RFP proposal.

The Proposer accepts all of the terms and conditions of the Request for Proposal and Instructions to Proposer. This offer will remain subject to acceptance for ninety (90) days after the day of Proposal opening.

An award shall be made pursuant to the evaluation criteria in the Instruction to Proposers. The Institute reserves the right to accept or reject any all offers, based entirely on its own judgment as to which are in the best interest of the Institute and/or within available funds.

By signing this form, proposers acknowledge receipt of the following addendum/addenda:

#1 _____ #2 _____ #3 _____ #4 _____ #5 _____ #6 _____ #7 _____ #8 _____

Title

Date

Telephone

Email

Resident Contractor Certification Number
(include a copy with the offer)

Resident Veteran Contractor Certification Number
(include a copy with the offer)

Signature

Date

Please provide a point of contact for questions regarding your offer:

Name

Telephone

Email

CAMPAIGN CONTRIBUTION DISCLOSURE FORM

(please return with Offer)

Pursuant to NMSA 1978, § 13-1-191.1 (2006), any person seeking to enter into a contract with any state agency or local public body **for professional services, a design and build project delivery system, or the design and installation of measures the primary purpose of which is to conserve natural resources** must file this form with that state agency or local public body. This form must be filed even if the contract qualifies as a small purchase or a sole source contract. The prospective contractor must disclose whether they, a family member or a representative of the prospective contractor has made a campaign contribution to an applicable public official of the state or a local public body during the two years prior to the date on which the contractor submits a proposal or, in the case of a sole source or small purchase contract, the two years prior to the date the contractor signs the contract, if the aggregate total of contributions given by the prospective contractor, a family member or a representative of the prospective contractor to the public official exceeds two hundred and fifty dollars (\$250) over the two year period.

Furthermore, the state agency or local public body shall void an executed contract or cancel a solicitation or proposed award for a proposed contract if: 1) a prospective contractor, a family member of the prospective contractor, or a representative of the prospective contractor gives a campaign contribution or other thing of value to an applicable public official or the applicable public official's employees during the pendency of the procurement process or 2) a prospective contractor fails to submit a fully completed disclosure statement pursuant to the law.

THIS FORM MUST BE FILED BY ANY PROSPECTIVE CONTRACTOR WHETHER OR NOT HE/SHE/IT, HIS/HER/ITS FAMILY MEMBER, OR REPRESENTATIVE HAS MADE ANY CONTRIBUTIONS SUBJECT TO DISCLOSURE.

The following definitions apply:

"Applicable public official" means a person elected to an office or a person appointed to complete a term of an elected office, who has the authority to award or influence the award of the contract for which the prospective contractor is submitting a competitive sealed proposal or who has the authority to negotiate a sole source or small purchase contract that may be awarded without submission of a sealed competitive proposal.

"Campaign Contribution" means a gift, subscription, loan, advance or deposit of money or other thing of value, including the estimated value of an in-kind contribution, that is made to or received by an applicable public official or any person authorized to raise, collect or expend contributions on that official's behalf for the purpose of electing the official to either statewide or local office. "Campaign Contribution" includes the payment of a debt incurred in an election campaign, but does not include the value of services provided without compensation or unreimbursed travel or other personal expenses of individuals who volunteer a portion or all of their time on behalf of a candidate or political committee, nor does it include the administrative or solicitation expenses of a political committee that are paid by an organization that sponsors the committee.

"Family member" means spouse, father, mother, child, father-in-law, mother-in-law, daughter-in-law, or son-in-law.

"Pendency of the procurement process" means the time period commencing with the public notice of the request for proposals and ending with the award of the contract or the cancellation of the request for proposals.

"Person" means any corporation, partnership, individual, joint venture, association or any other private legal entity.

"Prospective contractor" means a person who is subject to the competitive sealed proposal process set forth in the Procurement Code or is not required to submit a competitive sealed proposal because that person qualifies for a sole source or a small purchase contract.

"Representative of a prospective contractor" means an officer or director of a corporation, a member, or manager of a limited liability corporation, a partner of a partnership or a trustee of a trust of the prospective contractor.

DISCLOSURE OF CONTRIBUTIONS:

Contribution Made By: _____

Relation to Prospective Contractor: _____

Name of Applicable Public Official: _____

Date Contribution(s) Made: _____

Amount(s) of Contribution(s): _____

Nature of Contribution(s): _____

Purpose of Contribution(s): _____
(Attach extra pages if necessary)

Name

Title

Signature

Date

-OR-

NO CONTRIBUTIONS IN THE AGGREGATE TOTAL OVER TWO HUNDRED FIFTY DOLLARS (\$250) WERE MADE to an applicable public official by me, a family member, or representative.

Name

Title

Signature

Date

CERTIFICATION REGARDING

DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

(please return with Offer)

The prospective participant certifies to the best of its knowledge and belief that it and its principals:

Debarment: Are not presently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency.

Have not within a three year period preceding this proposal been convicted of all has a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal of State Antitrust statues or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property.

Are not presently indicted for otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses in enumerated in paragraph (2) of this certification and

Have not within a three year period preceding this proposal had one or more public transaction (Federal, State, or local) terminated for cause or default.

Anti-Kickback: Per N.M.S.A. 13-1-191 & 198 and the Federal Acquisition Regulation (FAR 52.203.7) Anti-Kickback Act of 1986, in signing this offer we certify that we have not made, or accepted any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which was provided for the purpose of improperly obtaining, or as a reward for favorable treatment in connection with, any prime contract, or a subcontract relating to a prime contract.

I understand that a false statement of this certification may be ground for rejection of this proposal or termination of the award. Under 18USC Sec. 101, a false statement may result in a fine up to \$10,000 or imprisonment for up to 5 years, or both.

Name

Title

Signature

Date

NON-COLLUSION AFFIDAVIT

(please return with Offer)

State of _____)

County of _____)

_____, being first duly sworn, deposes and says that he/she is (title) _____ of (organization) _____ submits herewith to New Mexico Institute of Mining and Technology, a proposal and that all statement of fact in such proposal is true.

That said proposal was not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization or corporation;

That said Proposer has not directly or indirectly by agreement, communication or conference with anyone attempted to induce action prejudicial to the interest of NMIMT, or any Proposer of anyone else interested in the proposed contract and further,

That prior to the public opening and reading of proposal, said Proposer:

1. Did not directly or indirectly induce or solicit anyone else to submit a false or sham proposal
2. Did not directly or indirectly collude, conspire, connive or agree with anyone else that said Proposer or anyone else would submit a false or sham proposal or that anyone should refrain from bidding or withdraw his proposals;
3. Did not in any manner directly or indirectly, seek by agreement, communication or conference with anyone to raise or fix the proposal price or fix the proposal price of said Proposer or of anyone else or to raise or fix any overhead, profit or cost element of their proposal price or of that of anyone else;
4. Did not directly or indirectly, submit his proposed price or any breakdown thereof, or the contest thereof, or divulge information or data relative thereto, to any corporation, partnership, company, association organization, bid depository or to any member or agent thereof, or to any individual of group of individuals, except that NMIMT, or to any person or persons who have a partnership or other financial interest with said Proposer in his business.

Name

Title

Signature

Date