

INSTRUCTION FOR COMPLETING
COMPETITIVE SOLICITATION ACKNOWLEDGEMENT FORMS

The Competitive Solicitation Acknowledgement Form must be completely filled in. This may be done on line then printed or you may print then fill in with pen or typewriter.

PLEASE NOTE: IF THIS IS NOT COMPLETED IT MAY BE GROUNDS FOR REJECTING YOUR SOLICITATION.

NOTICE TO RESPONDERS:

Responders must E-Mail or Fax Verification of Receipt of Competitive Solicitation. E-Mail Mary Ward at fsusolicitation@admin.fsu.edu or Fax Attention: Mary Ward, (850) 644-8921.



**Florida State University
Competitive Solicitation
Acknowledgement Form**

Submit Response To:

Florida State University
Facilities Purchasing
969 Learning Way Tallahassee, FL
32306-2370
Phone (850) 644-7642 | Fax (850)644- 8638
www.procurement.fsu.edu

CS No: FAC – 172208-17 **Title:** Centrifugal Chiller Services

Date of Issue: June 27,2017 **Response Due Date and Time:** July 7, 2017

CS Point of Contact

Name: Roberta Williams **Phone:** 850-644-7642 **Email:** rlwilliams@.fsu.edu

Vendor Information

Federal Employer Identification Number or SS Number:

Company Name:	Reason for no offer:
Mailing Address:	
City, State, Zip Code:	

Posting of Competitive Solicitation Tabulations

Area Code	Telephone no.	Proposal tabulations with intended award(s) will be posted for review by interested parties at Procurement Services and our solicitation web page and will remain posted for a period of 72 hours. Failure to file a protest within the time prescribed in Florida Board of Governors Regulation 18.002 and FSU Regulation FSU 2.015, or failure to post the bond or other security as required in Florida Board of Governors Regulation 18.003, shall constitute a waiver of proceedings under that regulation.
	Toll Free no.	
	Fax no.	
Email Address:		

Government Classifications
Check all applicable

- African American
- American Women
- Asian-Hawaiian
- Government Agency
- Hispanic
- MBE Federal
- Native American
- Non-Minority
- Non-Profit Organization
- Pride
- Small Business Federal
- Small Business State
- Veteran/Service Disabled

I certify that this offer is made without prior understanding, agreement, or connection with any corporation, firm or person submitting an offer for the same materials, supplies, or equipment and is in all respects fair and without collusion or fraud. I agree to abide by all conditions of this offer and certify that I am authorized to sign this offer for the responder and that the responder is in compliance with all requirements of the Competitive Solicitation, including but not limited to, certification requirements. In submitting an offer to an agency for the State of Florida, the responder offers and agrees that if the offer is accepted, the responder will convey, sell, assign or transfer to the State of Florida all rights, title and interest in and to all causes of action it may now hereafter acquire under the Anti-trust laws of the United States and the State of Florida for price fixing relating to the particular commodities of services purchased or acquired by the State of Florida. At the State's discretion, such assignment shall be made and become effective at the time the purchasing agency tenders final payment to the responder.

Printed Name/Title

Authorized Signature



**THE FLORIDA STATE UNIVERSITY
Facilities Department
Centrifugal Chiller
Services for The
Central Utilities Plant
ITB
FAC#172228-17**

OVERVIEW

The Florida State University is inviting qualified firms to bid on providing chiller services on centrifugal chillers located at the Central Utilities Plants, located on the University main campus. The objective of this bid is to have qualified service personnel calibrate, inspect, repair, perform PM, and service chillers ensuring peak efficiency and safe operations.

All questions during the quote process need to be referred to Roberta Williams (850)644-7642).
rlwilliams@fsu.edu

MANDATORY PREBID

A Mandatory PREBID will be held on Wednesday, July 7, 2017 at 10:00am. Please meet at Central Utilities Plant ,990 Learning Way, Tallahassee, FL 32306

Note: All vendors must be in compliance with all state and federal law requiring them to withhold pay FCIA taxes for their employees

DEFINITIONS

Purchaser: The Florida State University Facilities hereinafter referred to as FSU Facilities.

Proposer: Company or individual participating in the ITB process

Vendor: The proposer who submits the successful proposal and receives a purchase order from the University based on and incorporating the terms, conditions and prices listed in this proposal.

TERM OF CONTRACT

The initial period of this contract shall be from July 1, 2017 through June 30, 2019 with an option to extend the contract for three (3) additional one year periods at the same prices, terms, and conditions with the written approval of both parties .Additional twelve (12) month periods, July 1st, 2019 through June 30th, 2020. July 1st, 2021 through June 30th, 2022, and July 1st, through June 30th ,2023.

SCOPE OF WORK

These specifications are intended to obtain materials, (parts, oil, refrigerant, and fittings) consulting services and maintenance or repair of Florida State University Central Utilities Plant (CUP) Chilled Water Systems and equipment. The University has five (5) plants located on the main campus. Any reference to the Central Utilities Plant (CUP) or the University chilled water system includes all plants providing chilled water to campus building under our direct control.

PLANT SAFETY REQUIRMENTS

- A. All persons working in the Central Utilities Plant shall adhere to Plant safety rules and regulations. Hardhats and hearing protection will be worn at all times when in side of the Plant. **(Hardhats should comply with ANSI Z89.1 Class B Standards.) (Hearing protection should comply with ANSI S3.19-1974 standards.)** Lock/Tag-out procedures, safety harness for staff, and employee protective equipment necessary for this job shall be furnished by and used by the vendor employees as required. **(Ball valve Lockout devices should be similar to Brady 65403. Gate valve or round handle Lockout devices should be similar to Brady 65562. Safety switch Lockout devices should be similar to Master420. (Safety harness should comply with OSHA Regulations for fall protection and retrieval harness. Lanyard should be OSHA approved for fall protection.)**
- B. All systems secured for repairs are to be re-energized by the bidder and returned to normal operation before the project will be considered complete. (This shall be scheduled with plant management and coordinated through the control room.)
- C. To help ensure employee protection below work being done on the mezzanine floor, the work area must be covered with an appropriate drop cloth to capture any falling debris. Drip pans shall be used on the mezzanine floor to capture any liquids that may be spilled.
- D. The Main floor area, when needed funnel water to floor drain.

I-SERVICE SPECIFICATIONS

- a.) Service will include but not be limited to Trane chillers and related equipment including primary pumps, secondary pumps, air compressors and control valves. Please note the following listing of major equipment and its location on campus.

Central Utility Plant (CUP), seven (7) Trane 1200 ton, Centravac Chillers, seven (7) primary pumps, seven (7) secondary pumps.

Satellite Chiller Plant 1 (Plant 1), six (6) Trane 1200 ton Centravac Chillers, six (primary pumps, six (6) secondary pumps.

Satellite Chiller Plant 2 (Plant 2) four (4) Trane 1500 ton Centravac Chillers, five (5) system pumps.

University Center Utility Plant (Plant 3) Three (3) primary pumps, four (4) secondary pumps.

BK Roberts Chiller (Plant 4) one (1) Trane 300 ton (400) Centravac Chiller, one (1) Trane 200 ton Centravac Chiller three (3) primary pumps.

b) All Central Utilities Plants (CUP) operate twenty-four hrs. (24) per day, seven (7) days per week. Bidder shall supply all requested parts and services on an around the clock basis without additional charges to the University. Neither overtime nor Holiday time charges will be paid for any work relating to chiller service or repairs. Overtime may be paid for services rendered for special repair projects other than chiller service if approved in advance by plant management Any overtime paid will beat the service company's regular hourly rate plus Y: z of the technician's regular hourly rate. All time will be paid at the service company's regular per hour rate for each service technician or requested service except as noted above. Travel time will not be paid.

c) Bidder shall have a stock of needed parts, components and materials sufficient to make them available at the Central Utilities Plant within two (2) hours of receiving a request. Bidder must certify that he can meet this requirement. Only Trane factory certified parts will be accepted. Certifications relating to the vendor ability to provide parts as requested must be provided with the vendor bid.

d). Bidder is to provide as needed consulting/technical services for all Central Utilities Plant chiller control systems, which are primarily ***Trane UC800 and Trane Summit control systems.***

e) **In declared emergencies, a chiller technician must report in person to C.U.P. within two (2) hours after being called.** Bidder is to provide the name, address, and telephone number of the persons to contact for this service. (If the service company makes use of a cell phone for the technicians then the University shall have those numbers, if the company makes use of a radio style communication (*two* way) i.e. a Nextel system then the University shall have two (2) of these radio's) (these radios' will be supplied by the vendor at their expense.) If the service company uses pagers, then the University shall also be provided those numbers. This information is to be provided with the bid. C. U. P. may require around the clock service and parts. Weekends, holiday, etc. cannot be used as excuses for being unable to supply requested materials or services.

f) Florida State University, Central Utilities Plants operate twenty-four (24) hours a day, seven (7) days a week therefore work can be completed at any time if it does not cause an interruption in the plant's operation. But, the bidder will make every effort to complete work during normal work hours. Time worked other than eight to five Monday through Friday must have prior approval of plant management. Because the Central Utilities Plant is always manned over time will not be paid except as noted in section (c) above. Vendor will be required to complete requested work when it can be scheduled regardless of time or day that it is needed. .11 new requirements listed in any Trane Equipment Upgrades shall also be included in service work or inspection at **NO additional** cost to the University.

h) All testing equipment and procedures are to be as specified in the Trane Centravacs Operation and Maintenance Manuals.

D) Bidder is to provide an individual service report and invoice for each chiller that is serviced or repaired. If two (2) or more chillers are worked on during the same visit, then each chiller shall have an individual service report and invoice. Service reports are to be provided within one (1) week after each service call, and must include the following information. Plant Name/number, equipment name and number. Technician certification number shall be on all service reports. (All invoices MUST include CUP Chiller number; plant location, itemized labor and itemized parts cost. Service reports MUST be legible no matter which copy of the multi copy form the University receives. Service reports MUST have a representative of CUP signature. Service reports that are not legible or do not have a signature will be returned for correction. Service reports shall also include information relating to refrigerant provided or removed as per DEP rules and regulations.)

j) A copy of each invoice shall be sent to the Central Utilities Plant, (Maintenance Supervisors office and the Plant Superintendents office) for proper approval. **This shall be done by electronic mail.** (rvaughan@admin.fsu.edu . Invoices shall be received at CUP within 10_ working days of when the service was performed

k) Whenever pressure/vacuum fittings are replaced or reinstalled after service work or inspections, bolts threads shall be coated with an approved anti-seize product and bolts shall be tighten/torque to OEM specifications using a torque wrench. Utilities Plant management shall be informed of this procedure in advance and a staff member will be assigned to inspect the tightening process as it is completed.

1) Cost of expendable items such as oxygen/acetylene, grinding disk, hand towels, cleaning rags, tools, extension cords, electrical equipment, and anti-seize shall be included in the overall cost of the service/repair work/hourly rate.

II. REQUIREMENTS FOR BIDDER

a. Attendance at a MANDATORY Pre Bid meeting is required for all companies wishing to submit a bid. At the pre bid meeting all companies wishing to submit a bid MUST visit/examine all Plants, so that everyone can be familiar with the Plant equipment and operations. Failure of any firm to attend the pre bid meeting shall be considered non-responsive and shall be disqualified from bidding on this project. NO EXCEPTIONS. A letter or similar documentation stating that the bidder is familiar with CUP equipment and operations must be included with the bid. Lack of familiarity with F.S.U.'s Chilled Water Plants and the work load entailed will not be acceptable reasons for unacceptable service.

B. Vendor will take every possible precaution to prevent refrigerant from being released to the atmosphere as they work on the equipment. All refrigerants should be captured and reused if possible. Vendor must follow all laws or ordinances relating to the safe handling of refrigerant and refrigerant oil

C. Material Safety Data Sheet; In accordance with Chapter 442, Florida Statutes, if this purchase order involved the shipping of any items designated as a toxic substance such shipment must be accompanied by a Material Safety Data Sheet (MSDS). A toxic substance is defined as any chemical substance or mixture in gaseous, liquid or solid state, if such a substance appears on the "Florida Substance List" promulgated by the Department of Labor and Employment Security; is manufactured, produced, used, applied, or stored in the work place; and causes a significant risk to user agency and must include safety and health during, or as approximate result of, any customary or reasonable foreseeable handling or use.

D. Condition of Equipment; The successful bidder shall accept the equipment in as-is condition.

E. Contractor must have a State of Florida license to perform air conditioning with a minimum of a Class "A" license. Confirmation of this requirement is to be furnished with bid.

F. Company History and office Location: Bidder must have experience in the service and maintenance of 1000 ton Centravacs Chillers that use refrigerant R-11 or R-123 as part of their normal business, in the North Florida, South Georgia area. Bidder is to provide at least three (3) references to support this requirement with the bid. Company brochure, letter from other business or Universities, or related information that will establish both the company location and work completed will be acceptable.

G. To insure a rapid response to any CUP chiller emergency, the contractor must show proof that they employ at least three (3) service personnel that could be assigned to the repair and maintenance of FSU Utilities Plants chiller equipment if needed and they reside within a fifty-mile radius of the University. Employees must have successfully completed an OEM Centravac or Centrifugal chiller training program. Employees, not the company, shall have at least five- (5) years' experience with 1000 ton or larger chillers that use refrigerant R-11 or R-123. Confirmation of this requirement and technician certifications are to be submitted with the vendor's

H. Bidder must have at least one TRANE Certified UC800 and Trane Summit Technician on staff to service the UV800/Summit System with an understanding of its interface with an energy management system similar to a Siemen's computer. Due to the complexity of our operation an equal certification will not be acceptable. Course title, date and location including contact person at the school where the class was presented must be included with confirmation of this requirement. Certification must be for the employee not the company. *UC800 and Summit technicians must live within a fifty-mile radius of Florida State University to insure a rapid response to any controls problems we may encounter.* Confirmation of this requirement (employee's address and a copy of his certification) must be furnished with the bid.

Insulation that is removed or damaged during any service work/repairs shall be replaced/repaired by a company whose primary duties are insulation work. All

repairs/replacements must match existing equipment insulation. Cost of insulation replacement/repairs shall be included in the requested work as there is no line item for insulation pricing.

CONTRACTOR INSURANCE

The Contractor shall not commence any work in connection with this agreement until they have obtained all the following types of insurance and such insurance has been approved by the purchaser otherwise known as The Florida State University Board of Trustees (FSUBOT), nor shall the Contractor allow any subcontractor to commence work on the subcontracted work until the subcontractor has provided proof of insurance for the same amounts as required of the Contractor by FSUBOT and approved. All insurance policies shall be with insurers qualified and doing business in Florida, and with an A.M. Best Rating no less than A-. The FSUBOT shall be furnished proof of insurance by a Certificate of Insurance accompanying the contract documents which shall name The Florida State University and Board of Trustees as an additional insured. The insurer shall provide 30 days' written notice to the certificate holder if a policy is to be canceled before the expiration date of said Certificate.

The FSUBOT shall be exempt from, and in no way liable for, any sums of money that may represent a deductible in any insurance policy. The payment of such deductible shall be the sole responsibility of the Contractor and/or Subcontractor providing such insurance

A. Workers Compensation Insurance the Contractor shall secure and maintain during the life of the agreement, Worker's Compensation Insurance to all employees of the contractor working on this project. The Contractor shall also require all subcontractors to provide Compensation Insurance for their employees working on this project which shall comply fully with the Florida Worker's Compensation Law. In addition, the subcontractor shall list both the Contractor and FSUBOT as an additional insured.

B. Contractor's Public Liability and Property Damage Insurance The Contractor shall secure and maintain during the life of this agreement, COMPREHENSIVE GENERAL LIABILITY AND COMPREHENSIVE AUTOMOBILE LIABILITY INSURANCE naming The Florida State University Board of Trustees as an additional insured to protect all parties from claims for damages, personal injury, including accidental death, as well as claims for

property damages which may arise from operations under this agreement whether such operations be by the Contractor or anyone directly or indirectly employed by the Contractor. The amount of such insurance shall be set at minimum amount no less than the following:

1. Bodily Injury Liability \$1,000,000 each accident/\$2,000,000 aggregate per occurrence
2. Auto Property Damage Liability\$1,000,000 each accident/ \$2,000,000 aggregate per occurrence
3. Property Damage Liability- \$1,000,000 each accident/\$2,000,000 aggregate per occurrence (other than automobile) \$2,000,000 aggregate operations \$2,000,000 aggregate protective \$2,000,000 aggregate contractual
4. "XCU" (Explosion, collapse, underground damage) --the contractor's liability Policy shall provide "XCU" coverage for those classifications in which they are excluded.
5. Contractual Liability - work contracts--The Contractor's liability policy shall cover such contracts when they are affected.
6. In some cases a Contractor and Subcontractor may be required to provide proof of Environmental Protection Coverage.

C. Subcontractor's Public Liability and Property Damage Insurance the Contractor shall require each of the Subcontractors to secure and maintain during the life of this contract; insurance of the same type specified above in addition to insuring the activities of the subcontractors in the event the subcontractor does not have a policy, as specified above.

IV. Contract;

A purchase order will be issued to the successful bidder with the understanding that all items delivered must meet the specification herein. Items delivered not as specified will be rejected and returned to the vendor, at no cost to the University, and the vendor will be required to deliver items meeting specifications or beheld in default.

RIGHT OF TERMINATION

Any purchase order resulting from this agreement can be canceled without cause by the vendor or the Florida State University upon giving thirty (30) days written notice to the other party.

However, during the thirty-day period after such notice is given, the rights, obligation, and liability

of each party to this agreement shall remain in full force and effect. Such cancellation shall end the obligations of both parties with regard to the Request for Quote and any resulting purchase orders.

Instructions to bidders:

Throughout this whole document Mr. Vaughan, and Shift Supervisors will be recognized as "Management Team."

MANDATORY MEETING

It shall be MANDATORY that each Vendor be present for the pre-bid site visit. These meetings are to occur on **Monday June 26, 2017. Attendees are to meet promptly at 10:00 A.M. at designated area.** All attendees must sign in at that time. The purpose of this visit is for all prospective Bidders to acquaint themselves with the conditions and requirements of the task to be performed. Attendees will be apprised of all conditions of the requirements and should take notes if applicable. Bidder shall stay for the duration of the site visit and shall sign out when the site visit is complete. The solicitation response from a Bidder who fails to attend the entire site visit or to sign in and out will be rejected. No allowances will be made for unreported conditions which a prudent Bidder would recognize as affecting the work called for or implied by this Bid.

Site Visit:

Central Utilities Plant 990 Learning Way Tallahassee, FL 32306

CALENDAR OF EVENTS

Unless otherwise revised by a subsequent addendum to this competitive solicitation, the dates and times by which stated actions should be taken or completed are listed below. If FSU determines, in its sole discretion, that it is necessary to change any of these dates and times, it will issue an Addendum to the competitive solicitation and issue a Notice of Addendum on the FSU Purchasing Website. All times listed are Eastern Standard Time (EST). It is the vendor's responsibility to check the FSU Purchasing website for any updates or addendums to this RFP.

<u>Task</u>	<u>Date</u>
ITB Posted	6/27 /17
Mandatory Pre Bid	7/7/17 @ 10:00 am
Last Day for Vendor Questions	7/14/17 @ 4:00 pm

Addenda Released if Necessary

7/13/17 w/Answers to Questions

Bid Due Date

7/14/17 @ 4:00 pm EST

B. The bidder must bid on the entire requirements of the specifications as the contract will be awarded on an all-or none basis.

C. The University will not pay freight charges. They are to be included in all quoted cost

The University will not give verbal answers to any inquiry regarding the specifications. Any explanations

needed by the vendor must be requested in writing to Ms. Roberta Williams FSU Purchasing Department, and if an explanation is necessary, a reply shall be made in the form of an addendum, a copy of which will be forwarded to all vendors who have received a set of bid documents.

E. The contract shall be effective July 1, 2017 through June 30, 2019. Florida State University reserves the right at its discretion to extend this contract for three (3) additional one (1) year periods with the written consent of the vendor. If there is no agreement between the bidder and the University, the contract shall end as specified in the latest Purchase Order issued. All bides cost, terms and conditions of the original contract shall remain in full effect throughout the life of the contract period and any extensions. The University may authorize unit price adjustments on the anniversary date (two years) of the contract. The price adjustments cannot exceed the changes in the annual rate of inflation as determined by the GNP Deflector index in effect on the contract anniversary date.

(First adjustment after original bid time, July 1, 2017 through June 30, 2019).

(Second adjustment after the first extension period.) (July 1, 2019 through June 30, 2020.)

(Third adjustment after the second extension period. July 1, 2020 through June 30, 2021.)

F. The following employees of the Central Utilities Plant (Plant Management) will be the contractor's University contact for supplies and invoices.

Jim Stephens Exec Director Utilities and Engineering Service

R. Vaughan, Plant Superintendent

S. Randle Shift Supervisor

R. Williams Shift Supervisor

T. Russ Shift Supervisor

T. Perkins Shift Supervisor

G. In the event this contract is voided; the contractor shall accept and provide full credit for all remaining parts and materials.

I. Florida State University may cancel this contract without cause or penalties by advising contractor of such intentions by certified mail, at least 30 days in advance of such action.

J. Failure of contractor to comply with any of the articles of these specifications may be cause for canceling this contract.

K. Access: the service company will be provided with three sets of keys (3) allowing access to the equipment under contract. The service company is responsible for safekeeping of these keys and preventing misuse or unauthorized use of the keys. This will include a FSU vendor ID Card for access to BK Roberts. Keys must be returned to the University Key Bank upon completion of this contract. In order to obtain these key, the Service company MUST abide by all rules and regulations set forth by the Florida State University Key Bank.

L. Parking: Service company shall park vehicles in accordance with University rules and regulations.

M. Material Storage: The University does not have storage space available to the service company. Any storage needs must be off site and the responsibility of the service company.

N. Housekeeping: Work areas shall be maintained in a clean and safe condition at all times. All combustibles shall be handled and stored in compliance with University, state and federal safety codes and regulations. Work areas are to be cleaned (swept) at the end of each visit.

O. Waste Oil Disposal: Disposal of all "waste oil" will be the responsibility of the successful bidder. Waste oils, are any oil removed from any piece of equipment that is a part of this specification. All oil removed from serviced equipment will be classified as "waste oil" and is to be disposed of as outlined in EPA Regulations. This includes all manifest associated with tracking the waste oil to its final deposition.

IV.DETAILS OF REQUIREDWORK;

A. Contractor cannot subcontract any work without prior approval in writing from the Central Utilities Plant Superintendent.

B. Vendor will be required to visit/work at the Central Utilities Plants for the following purposes:

B.1. Training: Conduct two major training classes each year and several smaller classes throughout the year as requested. Provide 3 outlines of progressive training classes starting with basic operation of chillers. Subject for all classes will be the operation and maintenance of Trane Centrifugal and

Centravac Chillers regardless of which plant the chiller may be located in. Training to be as outlined by the Trane Company for proper operations and maintenance of CUP chillers. Training classes are to include the following;

1. Two major four- (4) hour class.
2. Testing at the end of the class to determine if the class understood the information provided.
3. Provide charts, graphics, slides and any other information that may be needed. Charts, graphs and slides are to be related to the University equipment and our operation.
4. Classes are to be handled in a professional manner.
5. Review CUP operational logs and use it as a guide.
6. Allow time for question and answers for each class.

B.2. Technician; Vendor is to provide a fully qualified technician to inspect subject equipment and provide technical advice whenever the equipment is dismantled for repair or maintenance and assistance is requested. This will be routinely accomplished at various times during the year. Technician must report in person to C.U.P. within two (2) hours of a request for service regardless of time or day.

B.3. Preventative Maintenance/Inspections.

The following items are to be completed when requested by the Central Utilities Plant or the designated contact person on each chiller according to Trane instructions and the American Standard Testing Materials Method specifically intended for air-conditioning system. Service may include vibration analysis of equipment as requested.

B.3.1. Oil Samples:

All oil samples shall be captured and delivered to Trane - Charlotte testing laboratory in December during the monthly preventative maintenance for examination (analysis). A detail report of each oil analysis and recommendations for improved operations shall be furnished to the plant Maintenance supervisor in a timely manner. Cost will include the removal of an oil sample; sample container and all tests shall be conducted in accordance with the American Standard Testing material methods specifically intended for air-conditioning systems. Test results must include but not be limited to the following:

1. Machine type and I.D. number (FSU CUP ID NUMBER)
2. Machine serial number
3. Sample oil number.
4. Date of analysis.
5. Moisture content in parts per million.
6. Total acid content.

7. Aluminum in parts per million.

8 Chromium in parts per million.

9. Copper in parts per million.

10. Iron in parts per million.

11. Lead in parts per million.

12. Tin in parts per million.

13. Zinc in parts per million.

14. Comments about interpretation of chemical analysis.

Trane - Charlotte has tested all of the Central Utilities Plant chiller oil from the start of our central plant operations. Therefore, they shall continue to provide test results that reference the past test for comparison.

B.3.2. Annual Preventative Maintenance/Inspection of Chillers

1. Chiller Control panel test and calibration of the following:

All controls and safeties must be set in accordance with the manufacturer specification for this unit. Check and reset to correct set points all controls including the following:

- a.) Low temperature control
- b) High pressure control
- c) Motor temperature control
- d) Oil pressure relief valve setting
- e) Check and calibrate load-limiting relay
- f) Check and calibrate temperature controls for leaving chilled water controller
- g) Check gauges/sensors for calibration
- h) Lubricate the vane control linkage bearing, ball joints, and pivot points
- i) Apply a few drops of light machine oil on the vane operator shaft and spread it into a very light film
- j) Set vane operator if needed

A. Service Purge.

- 1.Remove purge tank sights glass and clean debris from bottom of purge tank.
- 2.Replace filter dryer core.
- 3.Clean air-cooled condenser.
- 4.Perform purge system control check as described in the "Electrical Controls" section of Trane Purifier IOM Manual.
- 5.Replace liquid sight glass.

D. Chiller lubrication Systems:

- 1.Meg oil pumps motor.
- 2.Low-pressure controller.
- 3.Replace oil strainer cartridges.
- 4.Check operation of oil cooling system.
- 5.Inspect oil heaters.
- 6.Change oil with approved type oil when indicated by oil analysis. (Per Service Bulletin CTVSB-19B) Change oil filter with approved Trane filter. (Filter must be dated with a permanent marker).

G. CONTROL PANEL SAFETY CONTROLS:

- 1.Check and calibrate all safety and inter locking controls in control panel. All controls and safeties must be set in accordance with the manufacturer specifications of this unit. The manufacturers operations and maintenance manuals shall specify all testing procedures and equipment.

ff. REPORTS:

1. Record and provide a running log of pertinent system temperatures and pressures necessary to learn the existing operating characteristic of the system. Provide a sample of the form you propose to use for our operation with the bid.
- 2.Provide written reports of activities completed and indicate all detected deficiencies.
- 3.Check general condition of equipment and make recommendation.
- 1.Review operating procedures with operating personnel.

I.GENERAL:

1.Check all thermometers and gauges on condenser, evaporator and recalibrate or replace at CUP expenses.

2.Check system and auxiliary water strainers and clean as required.

1.Check all thermometers and gauges on condenser, evaporator and recalibrate or replace at CUP expenses.

2.Check system and auxiliary water strainers and clean as required.

3.Check refrigerant level.

4.Check all sight glasses.

J. RECORD AND REPORT RESULTS OF:

1.Running amperes and volts.

2.Condenser and evaporator pressure drops, water temperature in and out, refrigerant temperature and pressure.

3.Check and record oil pressure, temperature, and level temperature to bearing, net oil pressure and general condition of oil.

4.Comments for correction or adjustments to improve chiller efficiency.

5.Record and provide, (attach examples of logs used) of a running log of pertinent systems temperatures and pressures necessary to determine the existing operation characteristics of the system.

6.Provide written report of activities completed and show all detected deficiencies.

7.Check general condition of equipment and make recommendations that would improve the chiller operation there by improving plant efficiency.

B.3.3 Semi-Annual Preventative Maintenance/Inspection of Chillers

a) Check purge unit for proper operation

b) Check refrigerant and oil levels

c) Log machine and purge unit

d) Lubricate the vane control linkage, bearings, ball joints, and pivot points

- e) Apply a few drops of light machine oil to the vane operator shaft and spread into a very light film

B.3.4 Monthly Preventative Maintenance/Inspection of Chillers

- a) Check purge unit for proper operation
- b) Check refrigerant and oil levels
- c) Check machine for proper operation
- d) Log machine and purge unit

ALL PREVENTATIVE MAINTENANCE LOG SHEETS WILL BE PROVIDED BY CUP AT THE PROPER DATE WHEN NEEDED. (a calendar will be provided)

V. BIDDING REQUIREMENTS:

Prices quoted by bidder are to remain constant through the period of the contract. All bided cost must reflect a per machine cost. Florida State University will only use labor and materials listed as needed to maintain our operations. Should additional labor or materials be needed during the year the vendor must provide them as needed using the listed prices with no increase. Disposal of daily used materials or specific tools required is the vendor's responsibility not the University's. Bidders should quote prices for the following:

A. Cost per hour for one Mechanic. \$ _____ X500 _____

B. Cost per hour for one Mechanic Helper. \$ X500 \$

C. Cost for Training as outlined in Section IV Item B.1. \$

D Cost for Oil Sampling as outlined in Section IV Item B.3.1. \$ _____ X19
\$ _____

E. Cost for each machine (chiller) to be Annual Inspected and serviced during the physical year as outlined in Section IV Item B.3.2. Per machine \$ _____ X19 _____

F. Cost for each machine (chiller) to be Sero-Annual Inspected during the fiscal and as outlined in Section IV,

Item B.3.3. Per machine \$ _____ X19 \$ _____

G. Cost for each machine (chiller) to be Monthly Inspected during the fiscal and as outlined in Section IV, Item

B.3.5. Per machine \$ _____ X 19 \$ _____

- H. Cost for one 2 1/2-gallon container of Trane Oil "22" in sealed containers. \$-----
- I. Cost to replace purge canister (when needed). \$

Bid will be awarded on the one each of the extended total cost of all listed items. Florida State University will provide funding as deemed necessary.

PRICE SHEET

1. \$ _____