

Everett Public Facilities District

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REQUEST FOR PROPOSAL

Everett Events Center Everett, Washington

CHILLER REPLACEMENT

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The Vendor is to provide and install a plate and frame style heat exchanger chiller to replace the existing shell and tube apparatus including several peripheral devices used to cool and circulate calcium chloride brine solution, >21%, using anhydrous ammonia as the primary refrigerant. The vender also will provide and install an appropriate single pass shell and tube device to replace the existing sub-floor system heat exchanger. The sub floor heat exchanger will heat circulated calcium chloride brine solution >21% by condensing anhydrous ammonia high side gas, feeding the resulting liquid ammonia to the chiller system. The project will meet the specifications listed herein for use at the Everett Events Center in Everett, WA. Angel Of The Winds Arena is owned by the Everett Public Facilities District (EPFD) and is managed by Spectra Venue Management.

Section 2: Upgrade of the Chiller System

SCOPE OF PROJECT

- A. Prior to the install work, the existing glycol storage tanks, heat reclaim heat exchanger and pumps on the south side of the space will be removed and pertinent glycol and ammonia lines stubbed and capped. The diffuser tanks will also be relocated and modified. This will make a space for the new chiller, pumps, etc. to be installed during normal operation thereby eliminating extensive downtime. Our target downtime is no more than 3 days.
- B. **The plate and frame heat exchanger will have similar capacity of the current shell and tube at 219 T.R. and be equipped with an appropriate R717 primary refrigerant surge drum to prevent liquid refrigerant flood back to the 3 existing Vilter XL-456 reciprocating compressors.

**The new heat exchanger must utilize titanium plates. Alternative solutions will not be acknowledged.

**The Liquid ammonia line to the chiller from the condenser will require an automatic feed valve to meter only liquid refrigerant to the chiller and the system will carry a critical primary refrigerant charge so that should the metering valve seep by, the entire liquid refrigerant charge will not over fill the surge drum and result in liquid flood back to the compressors.

**Liquid level eyes will be installed, 1 on the liquid metering valve column as well as 3 with frost shields at the normal operating level of the chiller i.e. low medium and high.

**The Primary refrigerant surge drum will be constructed with appropriate internal baffling to prevent liquid carryover to the compressors.

**The primary refrigerant surge drum will have the appropriate dual pressure relief valves with an A-B manifold installed and tied into the pressure relief header.

**The low point of the primary refrigerant side of the chiller will have means for purging oil accumulation through an electrically heated oil still.

C. **The brine supply and return lines will have ½" FNPT high point air bleeds.
**The brine pumps and the check valves on the brine return lines will have lug bodied butterfly valves for service isolation.

**The brine pump plumbing will have two ¼" FNPT gauge ports with Ball valve isolation on the discharge side of the pump as well as ¾" FNPT with ball valves on the suction and discharge side of each pump to facilitate maintenance and brine sampling.

**The brine system will need to have an expansion tank of roughly 100 gallons, possibly reuse our existing one.

**The brine side pressure drop may not exceed 7PSID.

- D. The 2 primary and 1 backup pump(s) will be replaced and VFD speed controllers added. These will be adequate to circulate an appropriate volume and velocity of >21% calcium chloride secondary refrigerant out to the 2 ice sheets and back. (Current arrangement is 3 Armstrong 4030-8x6x10 pumps, the main arena and the backup pump are 40hp & 1400 GPM @70ft and the practice ice pump is 30hp & 1200 GPM @46ft.)
- E. Relocation of the existing diffuser tanks to outdoors on the other side of the wall they are adjacent to now will involve creating a concrete pad for the tanks to rest on, extending the ammonia pressure relief lines through the wall to the new location, installation of immersion style heaters on the diffuser tanks for freeze protection, creation of a positive seal for the diffuser tank tops and fabrication of ventilation stacks atop the tanks to extend to 6' above the roof parapet.
- F. The plumbing to and from the new chiller and pumps will be insulated and clad similarly to the existing system and the plumbing routed so that access around the existing compressor skid is not eliminated. Possible options would be to route the plumbing high enough to walk under or ran low and a small crossover bridge provided.
- G. Control for starting and stopping the brine pumps will be tied into the existing panel, there may need to be some programming done on the system PLC as process variables may need to be tuned.
- H. The warm brine shell and tube device will replace the existing single pass heat exchanger. (Henry model # CBH-08060-100). The new heat exchanger could be identical but not necessarily. The existing NH3 condensed liquid float valve device is functional and can be reused.
- I. Awarded contractor will demonstrate previous experience with ice rink systems
- J. Work under this Contract includes all labor, materials, tools, transportation services, supervision, coordination, etc., necessary to complete the following phases of the project:
 - a. Stubbing and capping the ammonia and glycol lines going to the heat reclaim system.
 - b. Removal of the glycol tanks and heat reclaim heat exchanger.
 - c. Creating a pad for and relocating the diffuser tanks and associated plumbing and electrical.
 - d. Positioning the new chiller, surge tank, expansion tank, brine pumps and VFD's.

- e. Installing, leak testing and insulating all possible plumbing, installing electrical conduit, and wiring associated with the chiller as much as possible without doing the actual tie ins.
- f. Remove, replace and pressure test the sub-floor heat exchanger and place into service.
- g. Once the target shutdown date arrives (date TBD), the system is secured for 3 days or less, ammonia and brine is transferred out, all final plumbing, leak testing and electrical tie ins are made, insulation is complete, the ammonia and brine systems charged, the system is test ran.
- h. The commissioning of the system upgrade will be considered complete when the system is operating well with both ice sheets in for (2) weeks.
- i. The old chiller will be retired in place.
- j. Installation:
 - i. Vendor shall supply all technicians to provide all labor.
 - ii. Washington State Prevailing Wage Rates shall apply. Vendor shall be responsible for submitting Intents to Pay and Affidavits of Wages Paid forms to Labor & Industries. Vendor shall supply the copies of forms and subsequent approvals to the EPFD.
 - iii. The Vendor will be responsible for obtaining all required permits, agreements, licenses, and insurance.
 - iv. The Vendor may employ subcontractors to perform certain portions of its responsibilities; however, the Vendor shall not subcontract any portion of its installation responsibilities without first obtaining express written permission from the EPFD. If the EPFD consents to such subcontract(s), the Vendor shall be fully responsible to the EPFD for all acts and omissions of the subcontractor(s).
 - v. The Contractor shall prepare detailed plans and drawings for the installation. These plans shall become the property of the EPFD.
- K. The Contract also includes:
 - a. Pre-Installation meetings on site.
 - b. Verification of dimensions and conditions at the job site.
 - c. Coordination with other contractors and trades.
 - d. Preparation of submittal information.
 - e. Installation in accordance with contract documents, manufacturer's recommendations, and all applicable code requirements.
 - f. Initial tests and adjustments, written report, and documentation.
 - g. Instruction to operating personnel: provisions of manuals.
 - h. Maintenance services; warranty.
 - L. The Vendor is responsible for providing a complete and working system as intended. Any item or items missing on information provided to the Vendor does not relieve the Vendor from the responsibility of providing what is required for a complete system.

QUALITY ASSURANCE

A. Manufacturer and Integrator must have at least 5 years of experience in the design, installation and implementation of all equipment indicated in this RFP.

- B. Provide corporate financial data for the past three years including bonding capacity.
- C. Provide a list of contacts of installations over the past three years for installations of a similar size and scope projects.
- D. Provide Project Manager by name and resume who will lead the project. Also, please indicate what subcontractors will be used with their experience.
- E. To be considered as eligible to submit a Proposal, Vendor must be legally licensed under applicable laws in the State of Washington.

COMMISSIONING, CLOSEOUT AND TRAINING

- A. The installers are to fully commission all aspects of all the equipment with the facility Chief Engineer observing. The facility Chief Engineer must sign off on the commissioning.
- B. The installers are to provide all Operating and Maintenance Manuals in both hard copy and electronic. All licenses are to be provided as required.
- C. The installer will provide any needed training on operation of the new gear.

WARRANTIES AND SERVICE AGREEMENT

A. The manufacture/installer is to provide a two (2) year parts and labor warranty. If an issue can be handled over the telephone that will lead to fixing the problem quickly, then that is acceptable. Repairs requiring labor on part of the manufacture/installer will be required to respond within 24 hours. Identification and location of the service center or third party will be required.

Section 3: Information supplied by bidders

3.1 Company Profile

The bidder should provide information about the company, including years of operation and client/employee growth.

3.2 System Description

Describe the Vendor's proposed system including capabilities, operation and equipment components, technical specifications, technical support and warranties.

3.3 Customer Support

Describe the firm's ability to support the schedule and delivery requirements in accordance with Section 5. Describe the firm's customer support program for resolution of warranty items.

3.4 References

The bidder shall provide a list of at least three (3) references of similar type facilities that have utilized its equipment being proposed within the last five years.

The bidder shall provide a list of costs in accordance with Section 2.

Section 4: Diversity Inclusion

Introduction Overview:

Spectra Venue Management has a long-standing commitment to diversity and inclusion. We recognize that diversity is an important component of our company's future success, not just as a value, but as a business philosophy central to our operations. As one of the world's leading Facility Management companies, we have a responsibility to reflect the customers and audiences we serve in all aspects of our business. To that end, we are committed to creating a best-in-class model for diversity and inclusion within the industry.

Supplier Diversity:

Spectra Venue Management is committed to providing equal access and meaningful opportunities to all vendors. Our supplier diversity program is designed to maximize the inclusion of minority, women, veterans and small disadvantages business enterprises and individuals (Diversity Suppliers) in our supply chain. If the supplier is not diverse, they may be asked to report on relevant subcontracting (Tier II) activity with diverse suppliers. Supplier shall submit these reports at the frequency specified by Spectra Venue Management.

Company Ownership:

Is your company publicly or privately held? YES NO

If your company is publicly held, please provide the stock symbol that your company's stock is traded under.

Please fill out below as it applies to your company's diversity status:

Women Business Enterprise (>=51% owned and controlled) YES	NO			
Minority Business Enterprise (>=51% owned and controlled) YES	NO			
Veteran Business Enterprise (>=51% owned and controlled) YES NO				
Other (Specify)				
If Diverse, is your business certified? YES NO				
If certified, by which organization/council?				

Tier II (Subcontracting)

If your company does not have diversity status, please describe how a partnership with a diversity supplier would work. Spectra Venue Management encourages Suppliers to explore all available opportunities to partner with diversity suppliers who offer products and services that are being sought in connection with this RFP. Spectra Venue Management expects any such arrangements to augment, and not duplicate, the responsibilities and efforts of supplier and other suppliers engaged in the provision of the RFP. Please describe your company's efforts with respect to Tier II.

Section 5: Project Timeline

The schedule of the chiller and related equipment installation will need to be coordinated with the facility management personnel. The systems must be operational by July 27, 2022, with commissioning completion once both ice surfaces have operated without issue for at least two (2) weeks.

Section 6: Acceptance or Rejection of Proposal

The EPFD reserves the right to reject any and/or all Proposals when such rejection is in the interest of the EPFD to reject Proposal of Bidder who has not met the prerequisites of the bid proposal, who has previously failed to perform properly or complete on time contracts of a similar nature; and to reject proposal of Bidder who is, in the opinion of the EPFD, not in a position to perform the contract. EPFD also reserves the right to waive any information, technicalities or irregularities in bidding. Contract will be awarded based on three factors which are described below. Each factor will be rated and the contract will be awarded (unless all bids are rejected), under normal circumstances, to the bidder receiving the highest number of points. Points will be awarded for Bid Proposals exceeding the minimum standards as described in Bidder's Pre-Qualifications. The EPFD reserves the right, however, to award contract to its best interest or to reject all bids. The EPFD reserves the right to award a contract for the chiller system upgrade on an adjusted project timeline or to separate it into multiple phases.

Price = 30 Points. The highest number of points in this category will be given to the lowest responsible bid price.

Equipment = 35 Points. Points will be awarded based on the quality, reliability, and overall functionality of the vendor's product.

Capacity = 35 Points. Points will be awarded on the basis of prior experience in performing similar work and the vendor's ability to meet the implementation date required.

Section 7: General Information & Timeline

Contact:

Please keep your contact to Spectra / Angel Of The Winds Arena limited to email so that we can share your responses easily with members of our evaluation group and simply track discussion points.

Please include the name of your company and "Angel Of The Winds Arena Chiller Replacement RFP" in the email subject line of any correspondence (example: Acme Chiller Installation Company Angel Of The Winds Arena Chiller Replacement RFP).

Spectra / Angel Of The Winds Arena may contact you by phone for clarification on your responses.

All communication should be sent to:

Mark Clark – Chief Engineer, Angel Of The Winds Arena – Spectra Mark.clark@spectraxp.com

Corey Margolis – General Manager, Angel Of The Winds Arena – Spectra Corey.Margolis@spectraxp.com

Site visits may be arranged through this contact list to assist in preparation of accurate proposals.

Timeline:

January 13, 2022	Request for Proposal issued to vendors
January 24, 2022	Last day for site visit requests
January 31, 2022	Last day for clarification questions
February 7, 2022	Responses from vendors due at 4:00 PM Pacific
February 14, 2022	Notification to vendors on contract award (time TBD)

This is a tentative schedule only and may be altered at the sole discretion of the EPFD.

Proposal Instructions:

Sealed bid proposals will be received at the offices of Spectra Venue Management, 2000 Hewitt Avenue, Suite 200, Everett, WA 98201, until 4:00 P.M. on February 7, 2022. Bid Proposals received after the time and date stated will not be accepted. Proposals received on time will be opened publicly and read aloud in the presence of the bidders or their representatives at an appointed time.

Envelopes containing Proposals shall be labeled as stated below and must be presented so that they may be easily identified as containing a Proposal. Envelopes must include the following:

Name and location of project. Name and address of bidder. Addressed to Everett Public Facilities District. Submit proposal in duplicate plus one original. (Oral or telephone modifications will not be considered.

The EPFD will negotiate a contract with the most qualified vendor at a price that the EPFD determines is fair and reasonable. In making its determination, the EPFD will consider the value of the services to be rendered as well as the scope, complexity, and professional nature of the services to be provided. If the EPFD is unable to negotiate a satisfactory contract with the vendor selected at a price that is determined to be fair and reasonable, negotiations with that firm will be terminated in writing. Another firm will then be selected, and the process continued until an agreement is reached or the process is terminated.