



**ADDENDUM
PURCHASING OFFICE
CITY OF AUSTIN, TEXAS**

Solicitation: RFP 5000 MMO3015

Addendum No: 2

Date of Addendum: 02/24/23

This addendum is to incorporate the following changes to the above referenced solicitation:

1. Questions & Answers:

- (Q1) Is the feed and control equipment to be leased, leased to own or bought as a 1-time purchase? If leased to own how many years is it to be leased before it is considered paid for?
- (A1) *The City will lease the feed and control equipment through the end of the contract term.*
- (Q2) Which systems will need feed and control equipment?
- Boilers: Do all of the boiler systems need controllers and communication?
 - Cooling towers: Do all of the cooling towers need controllers and communication? Do they all need new coupon racks?
 - Closed Loops: Do all of the closed loop systems need controllers and communication? Do they all need new coupon racks?
- (A2) *Most boiler systems will need controllers and communication. Sand Hill's HRSG is controlled and monitored by plant-owned and maintained equipment. All cooling towers need controllers and communication. The cooling towers do not require new coupon racks. The Contractor can use the existing cooling tower coupon racks. Most closed loops need controllers and communication. Sand Hill's closed loop system do not have controllers. The Contractor can use the existing closed loop coupon racks. Sand Hill batch feeds and relies on physical testing for monitoring.*
- (Q3) Which type or model ClO₂ generator is Austin Energy currently using?
- (A3) *Austin Energy is currently using Envirox ClO₂ generators.*
- (Q4) Can we make site visits prior to the due date of this RFP?
- (A4) *There are not any site visits, nor pre-offer conferences scheduled for this solicitation. The City welcomes questions or comments regarding this Solicitation and requests that those questions be submitted by email to the Authorized Point of Contact for the Solicitation, Marian Moore at marian.moore@austintexas.gov.*
- (Q5) Exhibit B 2.1.12 Please clarify responsibility of liquid brine, contractor or AE.
- (A5) *The Contractor will be responsible for providing liquid brine.*
- (Q6) Exhibit B 2.1.6, 2.2.6, 2.3.3, 2.4.3 – Please confirm the condenser water piping materials of construction is galvanized.
- (A6) *Cooling Tower piping is carbon steel. The City has galvanized steel tubes inside the chilled water ice tanks.*

- (Q7) 4.42.1 – Please confirm that DMA, particle, and recirculation analytical test shall be performed on ALL systems at a minimum of 1 x quarter.
- (A7) *Austin Energy and Airport systems require a minimum of recirculation and analytical testing as stated. Other facilities may require less frequent recirculation and analytical testing.*
- (Q8) For the sample sites bid purposes do you have the following data?
- Annual make-up and blow down rates or the percent of total loading that these sites average?
 - What is the pH range you currently run on cooling towers treated with sulfuric acid?
- (A8) *The data for each location is included in Exhibit A – Site Details. The City does not have any additional data to provide at this time unless otherwise provided in this addendum.*
- (Q9) Is specialty chemical provider to include the commodity products Sulfuric Acid, Bleach, Caustic or will they be provided by a commodity provider?
- (A9) *The City reserves the right to purchase commodity products such as Sulfuric Acid, Bleach, Caustic, or others if offered by the Contractor and some departments may require that the Contractor provide these products. Some departments or facilities may purchase the commodity products through separate contracts.*
- (Q10) What are the maximum temperatures of the Heating Hot water loops?
- (A10) *The answer to this question is unavailable at this time.*
- (Q11) Is there a limit on chlorides for the Stainless Steel plate and frame heat exchangers per the manufacturer or Austin Energy?
- (A11) *In the District Energy Cooling South plants there is a limit on chlorides based on galvanized coils in the ice tanks for the chilled water system. Chlorides must be less than 125 ppm. Sand Hill only monitors chlorides in the HRSG boiler water. Most other systems do not have a limit.*
- (Q12) How is Glycol fed to the systems currently. Is it through a glycol feeder, pot feeder or some other means?
- (A12) *For Austin Energy District Energy Cooling facilities, there are glycol feeding systems. The glycol is a closed loop. For Austin Energy's Sand Hill simple units, there is a chilled/heated loop for inlet temperature control. When necessary, but not very frequently, propylene glycol is added via a 2" hose connection from a tanker truck.*
- (Q13) What is the service frequency for the requested field testing? Will you require different frequencies for different locations or systems?
- (A13) *Each facility will have its own frequency of field testing. Site visits will primarily be once per week for industrial sites and once per month for commercial sites.*
- (Q14) Is there a possibility of the due date being pushed back to allow more time for a more comprehensive bid package to be delivered?
- (A14) *The solicitation due date was extended via Addendum 1 after this question was posed. The current due date listed on the solicitation Cover Sheet is March 7, prior to 2:00 PM CST.*
- (Q15) Is a presentation of our bid package going to be allowed?
- (A15) *At this time the City is requesting written proposals in response to the Solicitation. Per the Solicitation instructions Paragraph 11.2*
“Interviews and or presentations, optional. The City will score proposals on the basis of the criteria listed above. The City may select a “short list” of Proposers based on those scores. “Short-listed” Proposers may be invited for presentations, demonstrations, or discussions with the City. The City reserves the right to rescore “short-listed” proposals as a result, and to make award recommendations on that basis.”

- (Q16) Will we need to fill out the pricing spreadsheet for all locations in section 3.3 (Commercial Service Locations) and Exhibit A or just the three sample locations listed in the spreadsheet for evaluation purposes?
- (A16) *Proposers must fill out pricing on both the Price Sheet – Sample Sites and Price Sheet Rates tabs. The Sample Sites will be used for evaluation purposes, however contract pricing for all locations (including the sample sites) will be based on the pricing submitted for the Rates tab. Proposers do not need to provide pricing for all locations, unless they wish to do so. If Proposers elect to provide pricing for additional locations beyond the sample sites, that information will need to be provided as a separate tab on the price sheet or as a separate spreadsheet.*
- (Q17) Is the requirement to provide an exceptions list just to the commercial and technical terms, or does it apply to the sample contract as well?
- (Q17) *The exceptions checklist is to be used by Offerors wishing to take exception to any portion of the solicitation, including all documents incorporated into the solicitation. The City will presume that the Offeror is in agreement with all sections of the solicitation unless the Offeror takes specific exceptions which are detailed on the Solicitation’s Exceptions Checklist Form.*
- (Q18) Do any of the cooling towers use softened or partially softened water as makeup? Could you please provide details, including the makeup water chemistry so we can properly model it?
- (A18) *District Cooling Plant 1 uses softened City water as makeup water. They do not treat the makeup water before it enters the cooling tower condenser water system. pH is between 9 – 9.5, temperature does not exceed 100 degrees F. CoC 15-18.*
- (Q19) Besides the Sand Hill combined cycle cooling tower, do any of the other cooling towers use makeup water sources other than municipal drinking water? If so, could you provide details, as well as the water chemistry?
- (A19) *Decker Creek Power Plant uses lake water. The commercial sites may use other sources however, the particular sources for each site are not available at this time.*
- (Q20) The Sand Hill simple cycle cooling towers show that the primary method of bio-control is bromine, but it also lists hydrogen peroxide as an oxidizing biocide in these towers. Can you provide more information about this treatment program? Are you feeding a stabilized bromine or sodium bromide? Is the hydrogen peroxide used to oxidize sodium bromide, or are they used independently?
- (A20) *The use of Peroxide is occaissional to shock the system. AE has found it effective when fighting SRB’s. The Peroxide is added manually to the basins. The liquid bromine solution (Stabrex) is fed into the towers as the primary biocide. The plant will be moving to sodium hypochlorite this year. The plant is completing a project to move the Simple Cycle towers to Reclaim water.*
- (Q21) Mueller Energy Center: The price sheets, sample sites calculations ask us to provide detailed calculations for MEC chemical usage for the month of March, although we don’t have detailed estimates of usage or load factors. It would help if you could provide the following:
- Estimated cooling tower makeup water usage for the month of March
 - Estimated chilled water makeup/losses for the month of March
 - Estimated steam production, boiler makeup, and condensate return for the month of march
 - Estimated hot water makeup/losses for the month of March.
- (A21) *For MEC, the estimated cooling tower makeup water usage for the month of March is 1.6 million gallons. The estimated chilled water makeup/losses for the month of March is 35,000 gallons. The estimated steam production for the month of March is 14 million pounds of steam. The boiler makeup, and condensate return numbers are not recorded. MEC produces steam and receives condensate but does not have a heating hot water system.*
- (Q22) ACC Highland Lakes Campus: The ACC Highland Lakes Campus plant is listed as one of the Sample Sites for detailed bidding, yet the only equipment listed in Exhibit A-Site Details are the four 1500 ton chillers. Exhibit

B mentions cooling towers at the site, but there is no other information. This is not enough information to estimate the service and treatment costs for the month of March. Would it be possible to provide the following information:

- Cooling tower tonnage and system volume
- Cooling tower circulation rates
- Cooling tower makeup water source
- Cooling tower makeup and blowdown total flow estimates for the month of March
- Chiller load (average and peak)
- Chilled loop size, and makeup/leakage rates for the month of March
- Is there a chilled water thermal storage tank? Is it completely sealed, or is it vented to atmosphere?
- What is the current treatment product in the chilled water loop?
- What are the current treatment products and equipment used at the cooling towers?
- Are there any hot water loops, boilers, or other equipment at the site that will be treated? If so, could you please provide the system details, including the system volume and the expected makeup water usage for the month of March?

(A22) For the ACC Highland Lakes Campus,

- Cooling tower tonnage and system volume
The cooling tower tonnage and system volume is 5 cells at 1125 tons each. Only 4 of the 5 are installed at this time.
- Cooling tower circulation rates
The tower design is 9640 gpm at 4500 tons. Three 1500-ton chillers are installed in this phase. One additional 1500-ton chiller will be added for the full build out of the facility.
- Cooling tower makeup water source
The cooling tower makeup water source is onsite well water via an RO system (well and RO not commissioned at this time). City water is used as a secondary source.
- Cooling tower makeup and blowdown total flow estimates for the month of March
The cooling tower makeup and blowdown total flow estimates for the month of March are based on production of 300000 ton-hour, an estimate would be 400000 gallons of CT makeup, 13000 gallons of blowdown (sand filter backwash not specifically asked for).
- Chiller load (average and peak)
Chillers all shutdown during peak period. Due to TES capacity and current campus demand, the chillers can all be offline for several hours while the tank is being discharged, so an average is not indicative of load. The peak load is two chillers running at a combined 3000 tons. From a monthly ton-hour number there is a low of 250000 ton-hour to a max of 815000 ton-hours. Campus is not fully loaded up so these monthly ton-hour totals will increase as campus fills.
- Chilled loop size, and makeup/leakage rates for the month of March
Chilled water volume 1.85 million gallons. Makeup <0.1%
- Is there a chilled water thermal storage tank? Is it completely sealed, or is it vented to atmosphere?
ACC has a 1.8MG thermal energy storage tank which is vented to atmosphere.
- What is the current treatment product in the chilled water loop?
The current treatment product in the chilled water loop is Bulk ClO₂, Trac 114+, 3DT199
- What are the current treatment products and equipment used at the cooling towers?
The current treatment products and equipment used at the cooling towers are Bleach/biocide, Bromine/biocide, 90005/Algaecide, 73551/Dispersant, Acid/pH, 3DTrasar/Anti-scale.
- Are there any hot water loops, boilers, or other equipment at the site that will be treated? If so, could you please provide the system details, including the system volume and the expected makeup water usage for the month of March?
The RO system that will treat the well water before it is used as makeup to the cooling tower will have some chemicals, when/what/how much is to be determined.

(Q23) Austin Convention Center Palmer Event Center

- The Palmer Event Center is listed as one of the Sample Sites for detailed bidding of service and treatment costs for the month of March.
- The load factor and usage rates can have a big effect on the total chemical usage and price determination. Would it be possible to provide the following information:
- Cooling tower makeup and blowdown total estimates for the month of March
- Chilled loop size, and makeup/leakage rates for the month of March
- Hot water loop size and makeup leakage rates for the month of March.
- Current treatment products used in the closed loops.

(A23) *The response for this question is in development. The City will publish another addendum to the solicitation to respond with available information.*

(Q24) District Chiller Plants: Are all of the chilled water loops currently treated with the same treatment chemical program? Could you please provide information on the current treatment products and chemistry? It would be very expensive to replace the treated water currently in the loops with a new product, so we want to make sure that we provide a compatible treatment product.

(A24) *No. DEC North plants (ACC Highland, Domain and MEC) are treated differently (TRAC 107 Plus) than DEC South (DCP1, DCP2, DCP3 and DCP4) (Trac 105)*

(Q25) Exhibit B mentions that DCP4 requires dry chemistry to treat the cooling tower. Can you provide more information on the current system and treatment program? Are there any other locations that use dry treatment products or other non-standard chemistry?

(A25) *DCP4 is the only dry chemistry system. The DCP4 uses the Nalco 3DT Solids Program System and has inhibitor and biocide tablets placed in a dispenser then dissolved and added to cooling tower condenser water system. DCP1, DCP2 and DCP3 do not use the standard bleach as biocide.*

(Q26) Chlorine Dioxide Generators

- Are there chlorine dioxide generators at any of the sites other DCP1, DCP2, and DCP3?
- What size are the current ClO₂ generators in pounds per day?
- Since you have very specific requirements and limitations for your chlorine dioxide generators and the allowed precursor chemicals, would you consider making this portion of the Work Scope a separate contract, so it would not be a limiting factor on bidding on the rest of the Work Scope?

(A26) *The only sites with chlorine dioxide generators are DCP1, DCP2, and DCP3. The ClO₂ generators are 5.5 lbs. per day at 540 ppm of ClO₂. The City may consider separating this portion of the work into a separate contract or making multiple awards to accommodate requirements at different locations. Proposers must clearly identify any stipulations about which sites their offer addresses and does not address. Otherwise, the City will assume that a proposal is for all sites listed in the solicitation.*

(Q27) Equipment: Does the City of Austin own the existing tanks and controllers? What tanks, containment, controllers, instrumentation, and other equipment will we need to replace if we are awarded the contract? If we replace existing equipment, will we own it, or will it become property of the City?

(A27) *The City currently leases the controllers and its probes and sensors for the industrial sites. The tanks are owned by the chemical vendors. Some of the commercial sites have older vendor-owned controllers. The containment and pumps are owned by the City but supplied by the chemical vendor. The Contractor will own the same items as the current vendor. Otherwise, the City will own the items.*

- (Q28) There is no information provided on the treatment of the Building Services Department sites, the Austin Police Department, and some of the other sites. Do these sites only have closed loops, or are there cooling towers at any of the sites? Do you have the loop sizes and leakage rates?
- (A28) *Library has one cooling tower at the Faulk building and closed cooling and heating loops at Faulk and at Central Library. The APD facility with cooling towers is the APD Police Headquarters. Information for other sites is unavailable at this time.*
- (Q29) Are all sites listed to be serviced weekly?
- (A29) *Per the Scope of Work item 4.18, the service frequency will be determined by the Contractor and agreed upon by the City Site Contact. Site visits will primarily be once per week for industrial sites and once per month for commercial sites.*
- (Q30) Can you please provide make and model for leased ClO2 units that need to be replaced?
- (A30) *The make and model for leased ClO2 units needing replacement is Envirox SRE2000.*
- (Q31) What is the current contract value?
- (A31) *Information on the current contract expenditures is available on the City's Contract Catalog at: https://financeonline.austintexas.gov/afo/contract_catalog/OCCViewMA.cfm?cd=MA&dd=1100&id=NA170000085*
- (Q32) Who is the current water treatment supplier?
- (A32) *Information on the current contract provider is available on the City's Contract Catalog at: https://financeonline.austintexas.gov/afo/contract_catalog/OCCViewMA.cfm?cd=MA&dd=1100&id=NA170000085*
- (Q33) RFP states all feed and control equipment to be provided. Can you please provide a list of all controllers, pumps, and tanks that will need to be replaced and at what sites?
- (A33) *Information regarding the requirements for each site is listed in the Exhibit A – Site Details attachment. Sand Hill currently has three vendor-owned controllers and some totes and drums owned by the vendor as well. The Sand Hill pumps are owned by the City. Additional information regarding equipment needing replacement is unavailable at this time.*
- (Q34) We see references to ROs, softeners, and reclaim water on some systems. Can you provide make up water quality analysis on each site where these systems exist?
- (A34) *Austin Water provides Monthly and Quarterly Water Quality Summaries on their website at: <https://www.austintexas.gov/department/water-quality-reports#:~:text=Austin's%20drinking%20water%20met%20all,is%20fluoridated%20to%20EPA%20standards.>*
- (Q35) Are glycol and closed loop inhibitor to be provided as part of the contract and if so, is there a limit?
- (A35) *All chemical inhibitors are required to be provided by the Contractor as part of the contract in amounts appropriate for each site.*
- (Q36) Building Services Department shows no information on system sizes, tonnage, or heat exchange. Can you please provide a list of systems and sizes for this Department?
- (A36) *The response for this question is in development. The City will publish another addendum to the solicitation to respond with available information.*

2. Documents Updated:

- 2.1 The Solicitation's Cover Sheet has been updated to reflect the changes presented in Addendum No. 2.

3. ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.

ACKNOWLEDGED BY:

Name

Authorized Signature

Date

RETURN ONE COPY OF THIS ADDENDUM TO THE PURCHASING OFFICE, CITY OF AUSTIN, WITH YOUR RESPONSE OR PRIOR TO THE SOLICIATION CLOSING DATE. FAILURE TO DO SO MAY CONSTITUTE GROUNDS FOR REJECTION.