June 25, 2020

TO: All Bidders under Invitation to Bid No. 20-101212

FROM: Department of Purchasing and Contracting, DeKalb County, Georgia

ADDENDUM NO. 5

Invitation to Bid (ITB) No. 20-101212 Scott Candler Water Treatment Plant - Ozone Generators Design and Installation is hereby amended as follows:

A. It is MANDATORY that the bidder acknowledges Addendum No. 5.

B. Modification to the Bid.

1. **Exhibit 2 - Specification and Functional Design of the Existing Generator & Facilities.** Revised to add the following:
   
   Exhibit No. 2A - Ozone Building Area “E” Architectural Floor Plan 1034 Level

2. **Exhibit 4 – Technical Criteria – Ozone Generators, 2.4 Electro-Mechanical Requirements, 2.4.17 Maintenance and Guarantee, paragraph 3.** Delete in its entirety and replace with the following:
   
   In addition to the duties related to the warranties, the Contractor will be responsible for service visits at least once every quarter or as required.

3. Add the following:
   
   Exhibit No. 5 - Excerpts from Operations and Maintenance Manual

C. We have received questions pertaining to this Invitation. The questions and their resulting answers appear below:

1. Question:
   
   Exhibit 2 shows Ozone Operating Gas Operating Pressure of 25 PSIG max. Exhibit 4 calls for minimum outlet pressure of 43.5 PSIG. 25 PSIG max is typical. Please confirm that 25 PSIG max is acceptable.

   Answer:
   
   Yes, Maximum operating pressure will be 25 psig.
2. **Question:**
Exhibit 2 shows system max cooling water inlet temperature of Exhibit 4 calls for the generators to operate efficiently at cooling temperatures of up to 95°F. Please confirm the maximum open loop cooling water temperature.

**Answer:**
Cooling temperature is as stated in Exhibit 4, Technical Criteria-Ozone Generators, 2.0 Requirement Criteria, 2.2.2 Generator Equipment, Other design considerations, par b). Contractor must design the cooling water loop such that the generator can operate at the generator’s optimal operating temperature, which can be up to a maximum of 95°F.

3. **Question:**
A small amount of supplemental nitrogen is required for optimal ozone generator performance. Our generators will operate without nitrogen but performance may be impacted. Should nitrogen addition be cut off, our goal would be to reinstate the nitrogen addition as soon as possible.

**Answer:**
Leave Nitrogen addition as optional by nitrogen tank. Routine operation should not use it.

4. **Question:**
Our generators are manufactured with durable materials and our electrodes carry a 10-year warranty. Our electrodes contain high strength borosilicate glass and no quartz. Please confirm this is acceptable.

**Answer:**
No, acceptance will be in accordance with specifications, No glass components.

5. **Question:**
Will a systems integrator be hired to accomplish the required SCADA integration and reprogramming required to accommodate the additional generator?

**Answer:**
The system integrator will be part of the Contractor’s team and will be the responsibility of the Contractor.

6. **Question:**
This paragraph states that the ozone generator shell will be constructed per ASME standards and will contain a ¼” corrosion allowance. We construct the ozone generator shell out of 316SS per ASME standards. Because 316SS has such good corrosion resistance, a corrosion allowance is not used. Corrosion allowances are
used for painted carbon steel structures where a scratch in the paint could result in corrosion issues. Please remove the corrosion allowance for stainless steel vessels.

Answer: Specification will not be changed.

7. Question:
Per spec, there are $1,000 / day LD’s if generator performance falls outside equipment requirements during the Acceptance Test. We request additional details on a correction period or at what point the LD’s are relieved.

Answer: There will be no relief of liquidated damages until the equipment and performance requirements are met.

8. Question:
Since optimal performance of ozone generators is based on applying a small amount of supplemental nitrogen to the LOX based oxygen feed, the performance without it can be suboptimal so we would suggest removing the requirement that the guaranteed performance will be based without the introduction of nitrogen. As stated in Item 3 above: Our generators will operate without nitrogen, but performance may be impacted. Should nitrogen addition be cut off our goal would be to reinstate the nitrogen addition as soon as possible.

Answer: Please refer to Question and Answer No. 3.

9. Question:
Our PSUs use 12-Pulse Invertors with harmonic mitigation equipment on the front end to guarantee that harmonic requirements are met. Please confirm this is acceptable.

Answer: Not acceptable, 18-pulse inverters as required.

10. Question:
Do to the short notice of the Pre-Bid meeting/site walk-through, we are requesting that another site meeting be scheduled to allow for bidders to have access to the equipment and control rooms.

Answer: No additional Pre-Bid or Site Visit will be scheduled.
11. **Question:**
Please confirm if the Contractor can only submit one set of technical documents from a single Ozone System Supplier (OSS) in their bid or if they can submit multiple technical bids. If multiple technical bids are allowed, please confirm that the Contractor will need to identify the Ozone System Supplier used in their Bid Price schedule.

**Answer:**
Multiple technical bids are not allowed.

12. **Question:**
In the bid documents, scopes and responsibilities are distributed amongst the Contractor”, the “Manufacturer” and the “Supplier”, and in some cases, can be interpreted incorrectly. As an example, the specification states that all PLC’s and HMI’s in the existing WEDECO Power Supply Units are to be changed, where Rockwell’s Allen Bradley hardware and software (item g and h on page 21 and par. 2.4.2.a) on page 141) is meant to be used. Please confirm that this is the “Contractor” scope, and that the “Contractor” will accomplish the work directly or through a sub-contractor. In this example, it should likely be the original “Manufacturer” who should be sub-contracted to do the work.

**Answer:**
The Owner will be entering into an agreement with the Prime Contractor. Any services provided by the sub-contractor shall comply with the contract requirements.

13. **Question:**
There is a Team Experience for the Contractor requiring a specific amount of experience on projects of a similar size, yet there is no requirement for the ozone generator system supplier (OSS). There should be a specific experience requirement for the OSS to have at least three (3) ozone systems of equal or larger size in operation for at least two (2) years. This is a critical requirement, especially in retrofit systems with multiple types of equipment at the same plant.

**Answer:**
There will be no ozone generator system supplier requirements added to the specifications. The equipment supplied shall meet the requirements of the contract documents.

14. **Question:**
In exhibit 2 the specifications state the existing equipment is designed for 2000 ppd O3 at 10% O3 concentration in the CW temperature where the range is 40 – 86 deg F, but it states the system is designed for 80 deg F. The ozone requirement is for up to 8000 ppd with all four ozone generators in operation. Since the system will
function at the same ozone concentration of up to 10%, should the design of the new equipment be based on 10% O3 and not 12%. With a diffusion system and high cooling water temperature, there is no advantage to designing for 12% O3. Please confirm if the design concentration should remain at 12%.

**Answer:**
The concentration will be varied between 6%, 8%, 10%, and 12% by weight. No change on Maximum Ozone concentration it should be 12%.

15. **Question:**
Please confirm and clarify whether or not, “EXHIBIT 1”, described as “Technical Specifications”, provided with the bid package as well as found on the web link, is actually the correct and latest version of said specification.

**Answer:**
Please refer to *(Revised February 25, 2020) Exhibit 1-Technical Specifications* provided under Addendum No. 1.

16. **Question:**
Assuming that an Master Ozone Control Panel exists, with or without remote I/O cabinets to support the MOCP-PLC, is the intent that the entire cabinet(s) be replaced or solely the PLC racks and associated hardware?

**Answer:**
If the cabinets can be modified without damaging the cabinets, they do not need to be replaced.

17. **Question:**
In reference to [Exhibit 4, 2.2.2, “Other design considerations are:”, h)], please provide either the documents and codes which are applicable to this requirement or describe in details the desired/acceptable noise levels themselves, making sure to mention distance from equipment and sustained duration.

**Answer:**
The acceptable noise level shall be <85db. which will be measured 3-feet from the source of the noise except if the person exposed to the noise is closer to the source. In that case, the distance will be determined by the actual distance from the source. The maximum time of exposure for an operator is 8 hrs. per day.

18. **Question:**
Par. 2.2.2.a) – Based on the ozone production rate of the existing ozone generators is at 10% concentration, should the new units not be rated at 2000 ppd @ 10% instead of 12% concentration. Please clarify. The new units can operate at 12%, only they will not be rated at 2000 ppd at 12%.
Addendum No. 5
ITB No. 20-101212
Scott Candler Water Treatment Plant – Ozone Generators Design and Installation

Answer:
The ozone concentration will be varied between 6%, 8%, 10%, and 12% by weight. No change on Maximum Ozone concentration it should be 12% and production rate 2000 ppd.

19. Question:
Par. 2.2.2.b) seems to indicate the CW temp of 95 deg F is at the ozone generator. Please confirm if the 95 deg F CW temperature is the open-loop temperature or if it is the closed-loop temperature going to the ozone generator.

Answer:
The Ozone Generators use Plant water from the wetwell to supply the cooling water for the Ozone shell to include the dielectrics this is an open loop system, and also the Power Supply Units indirectly via a heat exchanger and a secondary closed loop mineral oil coolant system. The operator alarm setpoint range is between 90 – 110 degrees F. As stated, 95 degrees F is the Plant’s “normal” operating temperature for the high alarm setpoint. This alarm comes from CW Outlet Temp High PLC logic.

Please also refer to the above listed Modification to Bid No. 3.

20. Question:
In reference to [Exhibit 4, 2.2.4], the “Operational Test” is said to be 10 days, but further down the section, a 15-day operational test is requested. Please clarify which of the two is desired.

Answer:
10 days of operational testing is required.

21. Question:
In reference to [Exhibit 4, 2.2.4], are the number of days put aside for “Operational Test” meant to be “PER NEW Ozone Generator” or as a total “FOR ALL NEW Ozone Generators”

Answer:
Per new ozone generator.

22. Question:
In reference to [Exhibit 4, 2.2.4], are the existing Ozone Generators and PSUs meant to be tested as rigorously and follow the same certification criteria as the new Ozone Generators and PSUs.

Answer:
Only the new generators will be commissioned and tested but during the Acceptance Test the Contractor will demonstrate that the new and existing generators operate
effectively in parallel as intended, providing proof that all automation and integration has been completed successfully.

23. **Question:**
Who is liable in the event that the existing Ozone Generators and PSUs do not meet functional and/or performance satisfaction, either because the equipment is too old or because there is a possible lack of replacement parts, which would make it impossible to operate the existing units appropriately?

**Answer:**
The DeKalb County Department of Watershed Management (DWM).

24. **Question:**
The specifications do not indicate the type of valves, valve actuators, acceptable suppliers for ozone generator and new cooling water system (please provide).

**Answer:**
Summary of Valves

i. Ball Valves: Apollo, Jamesbury, Jamesbury/Limitorque
ii. Butterfly Valves: Keystone, Keystone/Limitorque, Pratt, Pratt/Limitorque
iii. Check Valve: Check-All, Crane, Mueller
iv. Globe Valve: Crane
v. Manifold Valve: D/A Multimatic
vi. Needle Valves: Hoke
vii. Pressure Regulator Valves: Masonelian, Watts, Wilkerson
viii. Relief Valves: Kunkle, Rego, Varec
ix. Rotary Valves: Worcester/Dresser RCS
x. Solenoid Valves: ASCO, Wilkerson (Auto Drain)
xii. Actuators: Limitorque LY Series

25. **Question:**
The specification does not indicate the acceptable instrumentation suppliers for the skid mounted instruments on ozone generator and cooling water system (please provide).

**Answer:**
Instrumentation Manufacturers

I. Flow Meters
a. Dwyer
b. Fischer & Porter
c. Foxboro
d. Kurz
e. Universal Flow Monitors
f. Flow Switches
   1) W.E. Anderson

g. Pressure Transmitters
   1) Honeywell

h. Pressure Gauges
   1) Ashcroft
   2) McDaniels

i. Temperature Transmitters
   1) Honeywell
   2) Rosemount

j. Temperature Gauges
   1) Ashcroft

k. Temperature Switches
   1) Ashcroft

l. Thermocouples
   1) JMS Southeast

m. Oxygen Analyzers
   1) Rosemount

n. Dewpoint Analyzers
   1) Panametrics

o. Dissolved Ozone Analyzers
   1) Orbisphere

p. Gaseous Ozone Analyzers
   1) To be chosen by ozone generator manufacturer

26. Question:
    Please confirm if the new closed-loop cooling water system to be a component based
    system (more flexible in operation) or a skid-mounted system with one skid per new
    ozone generator/power supply unit.

    Answer:
    Skid-mounted system is preferred.

27. Question:
    In par. 2.4.15 on page 150, are the two (2) laptop computers to be provided by
    Contractor or Ozone System Supplier (Manufacturer). The specification states
    “Contractor”

    Answer:
    Contractor
28. Question:  
In par. 2.4.17, please clarify if it is the “Contractor” that is responsible for a service visit every second month, or does this sentence refer to the Ozone System Supplier (Manufacturer of the equipment). If it is the manufacturer, that is too many trips during the warranty period. It should be changed to either two trips per year.

Answer:  
The Ozone system supplier is responsible for the service visit once every quarter.

Please also refer to the above listed Modification to Bid No. 2.

29. Question:  
Can the question deadline be extended to at least 2 weeks before the bids are due?

Answer:  
Please refer to Addendum No. 1.

30. Question:  
Can the record drawings for this project be provided in PDF and AutoCad? All associated drawings with the complete building will be useful.

Answer:  
No. Any available record drawings will be provided in PDF only.

31. Question:  
Can the shop drawings and/or operation and maintenance manuals be provided for the existing equipment to be removed?

Answer:  
No.

32. Question:  
What is the County’s budget for this project?

Answer:  
This information is not available.

33. Question:  
Is there a raceway or raceways already in place for the future ozone generator system?

Answer:  
There is an existing raceway, but Contractor should include cost for new raceways as needed.
34. **Question:**
   Are new ozone destruct units required or existing in need of replacing for this project?

   **Answer:**
   We will utilize our current destruct system and upgrade it as needed.

35. **Question:**
   Will any new conduit need to be painted?

   **Answer:**
   Contractor should include cost for conduit to be painted as needed.

36. **Question:**
   What are the Water Treatment Plant’s procedures for cutting, welding, and grinding required inside the Ozone Generator Room?

   **Answer:**
   Procedures will include, but not be limited to, the following:
   - Use of nitrogen for purging inside of the ozone generator workshop is required.
   - Shut down of the system during this time is required.
   - Adherence to all applicable OSHA regulations.

37. **Question:**
   Can the County’s ozone system be shut down completely? If so, how long?

   **Answer:**
   Yes. The shutdown duration will be determined by DWM Operations staff based on the work being performed.

38. **Question:**
   Can the existing breakers for the new equipment be tested?

   **Answer:**
   Yes, the new breakers will need to be tested under load once installed.

39. **Question:**
   Are the existing generators and PSU’s interlocked logically or electrically? For example, will taking one system out of operation affect the controls and/or automation of the others?

   **Answer:**
   No, the ozone generators operate independently and can be isolated without effect to the others.
40. **Question:**
   It was mentioned at the pre-bid meeting that the specs for the ozone equipment were going to be revised. Please provide.

   **Answer:**
   Please refer to Question and Answer No. 15.

41. **Question:**
   We request another site visit prior to the bid date. Approximately 2/17/2020.

   **Answer:**
   No additional site visits will be scheduled.

42. **Question:**
   Can you provide a list of acceptable manufacturers for the new ozone equipment?

   **Answer:**
   No

43. **Question:**
   During the pre-bid meeting, a question was asked about modular ozone systems, and it was stated that modular systems would be acceptable, assuming that they fit within the same footprint as the existing system. Can the County please confirm that modular ozone systems are acceptable if they can fit within the same footprint of the existing ozone system?

   **Answer:**
   Modular systems are acceptable provided they meet the specification desired for Concentration and lbs. per day in the ITB.

44. **Question:**
   During the pre-bid meeting, a question was asked about the County’s preference regarding nitrogen feed requirements. Can the County please confirm that it will not accept an ozone system that utilizes supplemental nitrogen feed?

   **Answer:**
   Yes, Leave Nitrogen addition as optional by nitrogen tank. Routine operation should not use it.

45. **Question:**
   There is a conflict in the documents relating to ozone concentration. Exhibit 4 1.0.c states in part “[e]ach unit meets the duty of 2,000 ppd (pounds per 24-hour day – lbs./d) at an ozone concentration range of between 3.0% and 12.0% by weight,” while 2.4.19.A.iii requires bid submittal of power curves that run from 6% to 12%. Please confirm whether 3% or 6% concentration by weight is the minimum required ozone production concentration.
Answer:
(6% to 12%) is desired concentration by weight range.

46. **Question:**
Exhibit 4 2.4.12 indicates that “[t]he cooling water for the PSUs and generators shall be a closed loop heat exchange system,” while 2.2.2 indicates that “the generators will operate efficiently at elevated cooling water temperatures up to 95 degrees Fahrenheit (°F).” Would a closed loop that incorporated water-cooled chillers, with the chilled water cooling the ozone generators and the open loop water cooling the chiller condensers be an acceptable approach?

**Answer:**
Yes

47. **Question:**
Please confirm the firm ozone generation capacity requirement for this project. Is the redundancy requirement that the new ozone generators need to produce no less than 2,000 ppd at 12% concentration with one generator off-line?

**Answer:**
Yes, 2000ppd at 12% concentration is the capacity requirement.

48. **Question:**
During the Prebid meeting, it was stated by plant personnel that during normal water production, ozone demand can be as high as 1000 PPD. Please provide an explanation for the need to have an ultimate build out of 8000 PPD of ozone capacity. With the use of modular technology, customers receive a highly redundant ozone system, allowing for a significant savings in capital cost due to the advantage of not needing such a large redundant ozone system. What is the real firm capacity need of the plant? Is the requirement of 2000ppd + 2000ppd coming from a firm capacity need of 2000ppd? If so, is it acceptable for a modular based ozone system to divide the 2000ppd on N modules and deliver N+1 modules?

**Answer:**
The real firm capacity need is 2000ppd. Yes, it is acceptable to divide the 2000ppd, as long as the required total ozone capacity is met.

49. **Question:**
Plant Capacity - The use of Nitrogen will be required in order to receive an efficient ozone production. Within the Primozone ozone cell, the gas path is very short and extremely narrow, allowing for very high velocities. The combination of high velocity and high pressures alleviates the concern of nitric acid buildup in the reactor. Primozone reactors worldwide have been in operation with the use of
Nitrogen and no build or concerns of nitric acid. Will the use of dry air as a nitrogen source be acceptable if generator cell cleaning is not required?

Answer:
Yes, for testing purposes only. Nitrogen used in daily operations is prohibited.

50. Question:
Plant Capacity - What is the anticipated ozone production per day initially, and ultimately?

Answer:
700 – 1900 lbs. per day (3800 lbs. per day max) based on an anticipated average flows and max day flows.

51. Question:
Plant Process - Will the new ozone equipment operate in conjunction with the existing ozone equipment? If so, will the ozone production from the old and new systems be blended within the main ozone header pipe? Or will the ozone production from the old ozone equipment be used at one contactor, then the ozone production from the new equipment be used at the adjacent contactor?

Answer:
Yes, the ozone production from the old system and new system will blended.

52. Question:
Use of Nitrogen - The use of Nitrogen will be required in order to receive an efficient ozone production. Within the Primozone ozone cell, the gas path in very short and extremely narrow, allowing for very high velocities. The combination of high velocity and high pressures alleviates the concern of nitric acid buildup in the reactor. Primozone reactors worldwide have been in operation with the use of Nitrogen and no build or concerns of nitric acid. Will the use of dry air as a nitrogen source be acceptable if generator cell cleaning is not required?

Answer:
Please refer to Question and Answer No. 49.

53. Question:
Use of Nitrogen - Can Nitrogen addition be accepted upon written guarantee (to be submitted with the bid) that no cleaning of the dielectrics will be needed for 20 years?

Answer:
No, leave Nitrogen addition as optional by nitrogen tank. Routine operation should not use it.
54. **Question:**
Will the PLCs of the old Wedeco units need to be replaced or just integrated into the new MOCP?

**Answer:**
PLCs need to be replaced.

55. **Question:**
Communication - Will the use of Modbus TCP be allow for PLC communication to the MOCP?

**Answer:**
Yes, compatibility with Allen Bradley PLC is required.

56. **Question:**
Testing - What are the requirements for the accredited third party who is supposed to witness the Factory Acceptance Test?

**Answer:**
Third party is required to confirm calibration of all the instruments and confirm the on-site measurements are in accordance with the limits of standard test procedures for parameters listed in the specification.

57. **Question:**
Cooling System - Will chillers and chilled water be allowed for the ozone generator cooling circuit?

**Answer:**
Yes, as long as waste heat is disposed to the atmosphere and doesn’t affect building internal temperature.

58. **Question:**
Exhibit 4, 2.2.4 - Commissioning and Testing:
a. Item c) under the first sentence on page 136 states the Operational test is to be 10 days.

b. Item c) on page 137 states the Operational test is to be 15 days. Please clarify.

**Answer:**
The Operational test will 15 days.

59. **Question:**
Please provide all available record drawings applicable to the project.
Answer:
Please refer to Exhibit 2 - Specifications and Functional Design of the Existing Generator & Facilities and the above listed Modification to Bid No. 1.

60. Question:
What firm will the County be using to review the submittals submitted by the successful Design-Build team?

Answer:
AECOM

61. Question:
What firm will the County be using to oversee and inspect work by the Design-Build team?

Answer:
DWM will use a County contracted construction management firm depending on available contractors at the time of this ITB award.

62. Question:
Addendum #1 states that funding for this project may be provided by the Water Infrastructure Finance and Innovation Act. Please provide all documents that the Design-Build Team will be bound and regulated by if this funding source is utilized.

Answer:
At this time, the available documentation concerning the Water Infrastructure Finance and Innovation Act (WIFIA) funding has been provided.

63. Question:
Can the general arrangement drawings of the Ozone Generator room be provided?

Answer:
Yes. Please refer to Question and Answer No. 59.

64. Question:
Exhibit 4 – Technical Criteria – Ozone Generators Section 1.0 Scope of Work item ‘c’):
   a. Bullet one states each unit meets the duty of 2,000 PPD – Is it acceptable to run multiple generator modules manifolded together as a “Unit”?
Addendum No. 5
ITB No. 20-101212
Scott Candler Water Treatment Plant –
Ozone Generators Design and Installation

Answer:
Yes, it is acceptable to operate multiple generator modules manifòlled
together as a “Unit”.

b. The generators can function independently of nitrogen being available or not –
Please define the term function in this requirement? For example, if a unit will
function for a short period without nitrogen available or functions at less than design
capacity without nitrogen available does that meet the requirement?

Answer:
The unit(s) must be able to function without nitrogen and the capacity of the
unit(s) will be guaranteed without the introduction of nitrogen.

65. Question:
Are the only proposers allowed to bid this project the ones that attended the
mandatory Pre-bid meeting on 1/28/2020?

Answer:
Correct. Bidders were required to attend and participate in the mandatory pre-bid
conference and site visit. Only the Bidder or its authorized representative or
employee shall sign in at the mandatory pre-bid meeting and site visit. For individual
firms planning to bid as a yet to be formed joint venture, a representative from each
firm was required to attend and sign in. Failure of a Bidder to attend or sign in at the
mandatory pre-bid conference and site visit, will be cause for rejection of Bid.

66. Question:
Section 2.2.3 states liquidated damages will apply for Acceptance Tests that fall
outside of the requirements standard. Does this apply even though the existing
generators are operational and fully functional? Does the penalty apply if the
Acceptance Tests occurs prior to the Contractual Completion date?

Answer:
This requirement applies to new generators. Penalty applies if Acceptance Tests
occurs prior to Contractual Completion date.

67. Question:
Section 2.2.2, d):
a. What is the range required to meet the optimum level of Oxygen consumption?

Answer:
The optimum level of oxygen consumption will be at least 180 g O3/m3 O2
or 0.01 lb. O3/ft3 O2 at 12% ozone concentration.
b. What is the range required to meet the optimum level of power consumption?

Answer: The optimum level of power consumption will not exceed 0.01 kWh/gO₃ or 5.0 kWh/lb. O₃ at 12% ozone concentration.

68. Question: Section 2.2.2, b) states that the generators will operate efficiently at elevated cooling water temperatures of up to 95 degrees Fahrenheit. Please define the factors and their range to be considered efficient.

Answer: The efficiency is related to the guaranteed ozone concentration, the production rate of 2000 PPD, the optimum ratio ozone produced vs oxygen consumed and the optimum level of ozone produced vs power consumed.

69. Question: Section 2.2.2: What does the design cooling water temperature need to be?

Answer: Up to 95 degrees F.

Please refer to Exhibit 4 – Technical Criteria, 2.0 Requirements Criteria, 2.2 Generator Requirements, 2.2.2 Generator Equipment, Other design considerations, b).

70. Question: Section 2.2.3, Factory Acceptance Testing (FAT):

i. Does the proposer need to include the costs for the Owner to witness the FAT?

Answer: Yes

ii. If so, how many representatives will need to be included?

Answer: At least three (3) representatives

iii. What is the duration required for the FAT?

Answer: No pre-established time duration
71. **Question:**
Section 2.4.18 states Liquidated Damages of $1,000.00 per hour for any outage 2 of 2 period longer than 3 hours. Is this penalty applicable only for the Construction phase?

Does this penalty apply after substantial and final completion?

**Answer:**
Yes, liquidated damages are applicable throughout the life cycle of the project, up to final completion.

72. **Question:**
Dimensional and additional field data is needed to properly prepare the proposal. Can an additional site visit be made to gather the information?

**Answer:**
No additional site visit will be provided.

73. **Question:**
If an additional site visit is allowed, can there be additional time allotted for questions afterwards?

**Answer:**
No additional site visit will be provided.

74. **Question:**
Attachment A – Par. C. (3).f
Please provide information on the existing MCC’s and associated switchgear for integration into the existing MCCs as the ozone production rate is greater than the original equipment and the cooling water temperature with the closed-loop system will be higher than the original ozone system design.

**Answer:**
The available information is provided in the scope of work as well as the existing project drawings. “Review and confirm the capacity of the existing electrical supply, including all conduits, cables, transformers, switchgear, Power Supply Units (PSUs), space availability and the ability to accommodate the proposed new ozone generators and related electrical equipment”.

Please refer to *Attachment A - Scope of Work*, b. on page 20; *Exhibit 2 - Specifications and Functional Design of the Existing Generator & Facilities*; and the above listed Modification to Bid No. 1.
75. Question:
Attachment A – Par. C. (3).g and Par. 2.4.2 on page 141 of Exhibit 4

Please confirm that it is Installing Contractor’s responsibility to replace the PLC’s in the existing WEDECO Ozone Generator Power Supply units. Another Ozone System Supplier cannot take the responsibility of the existing WEDECO Power Supply units if changing out the PLC’s to Allen Bradley CompactLogix causes any damage to any other parts of the Power Supply units.

Answer:
Yes, the scope of work requires the Design Builder to conform to the following: “Integrate the new and existing PSUs, MCCs and associated instrumentation for the entire ozone generation system, including but not limited to the liquid oxygen supply, nitrogen boost, ozone generation, ozone contactors, ozone destruct, and cooling water systems (including new closed loop system), into a new Control Logix/Compact (PLC) with latest compatible software version at the time of implementation (including all programming and with redundancy on the master PLC) and into the facility’s existing Factory Talk Supervisory Control and Data Acquisition (SCADA) System. All existing Siemens PLC hardware will be removed and replaced with Allen Bradley. The Scott Candler WTP predominately utilizes Allen Bradley/Rockwell Automation hardware and software. As the Plant and its process and controls system is widespread throughout the Plant and Distribution System, staff has standardized these systems and focused on training specific to Allen Bradley/Rockwell Automation products. Allen Bradley has proven reliability and standardizing installation of process equipment would allow for sustained commitment necessary to preserve an efficient automation system. Communication with new equipment will use Ethernet Industrial Protocol (IP) where available.”

Please refer to Attachment A - Scope of Work, g. on page 21.

76. Question:
The Design-Build Team for this project will be compromised of a Contractor, Engineer and an Equipment Supplier. Please confirm that the combined experience of the Team can be used to satisfy Team Experience - Section A (page 23-24) of the Invitation to Bid.

Answer:
No. Please comply with the outlined requirements within the Project Scope of Work, each professional has a required experience.

D. It is the responsibility of each bidder to ensure that he is aware of all addenda issued under this ITB. It is MANDATORY that this addendum be signed and returned. You may call
Cornell Brown, Procurement Agent, at (404) 687-3949 or send an email to cbrown1@dekalbcountyga.gov before the bids are due to confirm the number of addenda issued.

E. All other conditions remain in full force and effect.

Cornell Brown
Procurement Agent
Department of Purchasing and Contracting
ACKNOWLEDGMENT

Date:____________________________

The above Addendum is hereby acknowledged:

________________________________________     ___________________________________
(Signature)                                                            (Title)

(NAME OF BIDDER)