

PROFESSIONAL CONSULTING SERVICES FOR NEWPCC BOILER 5 REPLACEMENT

URGENT

PLEASE FORWARD THIS DOCUMENT TO WHOEVER IS IN POSSESSION OF THE BID/PROPOSAL ISSUED: May 15, 2023 BY: Arash Kiayee, M.Sc., P.Eng. TELEPHONE NO. (204) 918-1391

THIS ADDENDUM SHALL BE INCORPORATED INTO THE BID/PROPOSAL AND SHALL FORM A PART OF THE CONTRACT DOCUMENTS

Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid/Proposal, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 10 of Form A: Bid/Proposal may render your Bid/Proposal non-responsive.

PART D – SUPPLEMENTAL CONDITIONS

Add: D3.1(v): **"Supply Chain Disruption**" means an inability by the Contractor to obtain goods or services from third parties necessary to perform the Work of the Contract within the schedule specified therein, despite the Contractor making all reasonable commercial efforts to procure same. Contractors are advised that increased costs do not, in and of themselves, amount to a Supply Chain Disruption.

Replace D22 with the following

D22. SUPPLY CHAIN DISRUPTION SCHEDULE DELAYS

- D22.1 The City acknowledges that the schedule for this Contract may be impacted by Supply Chain Disruption. Commencement and progress of the Services shall be performed by the Consultant with due consideration to delivery requirements and schedule identified in the Contract, in close consultation with the Consulting Contract Administrator.
- D22.2 If the Consultant is delayed in the performance of the Services by reason of the Supply Chain Disruption, the Services schedule may be adjusted by a period of time equal to the time lost due to such delay and costs related to such delay will be determined as identified herein.
- D22.3 A minimum of seven (7) Calendar Days prior to the commencement of Services, the Consultant shall declare whether a Supply Chain Disruption will affect the start date. The Consultant shall provide sufficient evidence that the delay is directly related to a Supply Chain Disruption, including but not limited to evidence related to availability of staff, ordering of Material or Goods, production and/or manufacturing schedules or availability of staff as appropriate.
- D22.4 For any delay related to Supply Chain Disruption and identified after Services have commenced, the Consultant shall within seven (7) Calendar Days of becoming aware of the anticipated delay declare the additional delay and shall provide sufficient evidence as indicated in D22.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D22.5 The Services schedule, including the durations identified in the Contract, will be adjusted to reflect delays accepted by the Consulting Contract Administrator.
- D22.6 Any time or cost implications as a result of Supply Chain Disruption and in accordance with the above, as confirmed by the Consulting Contract Administrator, shall be documented in accordance with C8.

PART E – APPENDICES

- Revise: E.1.1: The following documents have been added to Appendix A List of Relevant Documents and Drawings. These documents are available to proponents who signed Appendix B Non-Disclosure Agreement.
 - Photos of the sublevel below the Boiler 5 Room (aka Boiler Storage Room)
 - Photos of the Fire Alarm Panel
 - Record Drawings
 - Process & Instrumentation Diagrams (including gas detection system)
 - Asbestos Survey Reports
 - NEWPCC Operating Manual, Volume 8, Area B
 - Class of Estimate (CoE) Template
 - NEWPCC Digester Gas Quality Data

QUESTIONS AND ANSWERS

- Q1: Can photos of the sublevel below the basement be included in an addendum?
 - A1: Photos of the space below the Boiler 5 Room (aka Boiler Storage Room) are provided in Appendix A.
- Q2. Are the existing drawings for the gas detection system available as they don't appear in either drawing set provided?
 - A2: See P&IDs provided in Appendix A.
- Q3: Current upgrades to carbon monoxide detectors require an interconnect into the fire alarm panel. Does the existing fire alarm panel for the facility have capacity to accept new inputs for CO if they are not tied in?
 - A3: The current Fire Alarm Panel appears to have space for Carbon Monoxide Detectors (Photos of the Fire Alarm Panel are provided in Appendix A).
- Q4: The Boiler Room Plan New Stair & Opening portion of drawing NEP-2415 Rev. 2 indicates "Boiler operating weight 23,000# boiler skid designed to span between existing columns below (refer to boiler spec). Is the as-built drawing available of the slab, columns and beams of this floor assembly?
 - A4: See the attached drawings provided in Appendix A. Boiler 5 Room used to be called Vacuum Filter Building. Boiler 1-4 Building was called Elutriation Building.
- Q5: Could you please include an asbestos inventory for both boiler rooms and the space below the room with Boiler 5?
 - A5: Asbestos Survey Reports are provided in Appendix A.
- Q6. Is there a baseline composition for the biogas/sludge gas (i.e. percentage of methane, carbon dioxide, hydrogen sulfide, water, and other detectable compounds/elements)?
 - A6: The Digester Gas Quality data from March 2022 to May 2023 is provided in Appendix A. The oxygen (O₂) concentration is zero.
- Q7: Please confirm the pressure of the biogas/sludge gas is 5 psig?
 - A7: Per NEWPCC O&M Manual (page B200-14) provided in Appendix A, the water tube boilers receive digester gas at a pressure of 17 kPa (2.47 psi). The supply line pressure to the boilers is 120 kPa which passes through a pressure reducing valve at each boiler to the pressure required by the burner.

Tender No. 325-2023 Addendum 1 Page 3 of 3

- Q8: For the purpose of this RFP when discussing requirements for ventilation and gas detection, does "Boiler Room" mean the specific room which houses Boiler 5 and does not include the lower level boiler room which houses Boilers 1 through 4?
 - A8: It is referring to Boiler 5 Room. The Consultant is to ensure the air supply and ventilation system of Boiler 5 Room complies with the Inspection and Technical Services (ITS) requirements, and provide recommendations following review of the existing system.
- Q9: If the award date is after the intended date of June 9, 2023, will the dates specified for Critical Stages be adjusted by the difference between the intended and actual dates?
 - A9: Yes. All dates will be adjusted accordingly.
- Q10: In reference to the following clauses: D9.12 the way this reads is that the boiler requires a custom control system. The automation details requested by the City on other projects have become fairly complex, so it would be good to have this clarified. In other words, what is included in the design of the boiler control system? Panel layout, power distribution, PLC wiring diagrams, and loop drawings and D9.13 integration of the boiler system into the Distributed Control System SCADA. This just calls for coordination, but again, implies a custom control solution. Can the requirements of D9.12 and D9.13, in terms of functionality and drawing deliverables, be further clarified?
 - A10: At a high level, the design is expected to address the following:
 - Overall architecture of the new controls i.e. Will the control of the new boilers be similar to the existing boilers, where there are controllers (e.g. Fireye) for each boiler but the overall control is done by the main plant control system (currently DCS), or will there be an intermediate PLC that controls these new boilers, that will interface with both the main plant control system and the local boiler controllers?
 - Updated control narrative
 - Panel layouts/BOMs, power distribution, PLC wiring diagrams depending on the design, this may
 include updates to existing panels, and depending on the timing, this could require changes to DCS
 panels or PLC panels
 - Loop drawings
 - I/O list new and/or updates to existing
 - Interface map if there will be signal exchange between main plant control system and a new PLC (if applicable)
 - Network requirements & drawings– e.g. additional switches, cable runs, new network panels if required; updates to existing network drawings. IP address list (provide a list of devices that will require an IP address, and the City will assign addresses or a range of addresses for use by the project)
 - Note that timing will be important The City would expect the DCS/main PCS programming to be
 performed by AICG (Automation, Instrumentation, and Control Group) if (a) this project goes ahead while
 the City is still running boilers from DCS, or (b) this work happens after the boilers area has already been
 migrated from DCS to PLC and the area has been turned over to the City. In a situation between those
 two scenarios, it is expected that the DCS Migration system integrator would handle the programming.
- Q11: The City has an Excel spreadsheet outlining the level of document development for a Class 3 and Class 1 estimate for process/utility disciplines. Will this be made available to the proponents for bidding purposes?
 - A11: See the attached Class of Estimate (CoE) template. It is to be used in conjunction with the Basis of Estimate (BoE) for this project.