

Addendum #2

Directorate of Facilities Engineering

26 June 2023

This Addendum modifies, amends, and supplements designated parts of the Contract Documents, Specifications and Drawings for:

Bangor West Microgrid Resiliency Project, New Combined Heat And Power Unit (CHP), Regional Training Institute, 286th North Hildreth Street, Bangor, Maine. DFE Project Number 23SC21-305-D1, BGS Project Number 3279, Bid Number 23-034.

It shall be the responsibility of the Contractor to notify all Subcontractors and Suppliers for various portions of the work of any changes or modifications contained in this Addendum.

Clarification Items:

1. **Project Concern:** Addendum #1 deletes the requirement for the new Gas Meter pad. Please clarify the reconfiguration and quantity of bollards protecting the CHP pad now that the gas pad is gone.
Answer: Refer to Attachment #1
2. **Project Concern:** Will DDC Contractor provide for the Thermostatic control valves as shown on M301?
Answer: Yes. The controls contractor shall be responsible for providing the valves (unless provided with the load module by the CHP Manufacturer). The mechanical contractor shall be responsible for installing them in the piping.
3. **Project Concern:** Will DDC Contractor provide thermowell for the DHW-2 unit? Refer to page M401
Answer: Yes. The controls contractor shall be responsible for providing the thermowells. The mechanical contractor shall be responsible for installing them in the piping.
4. **Project Concern:** For the programmable controllers for the water-to-water heat pumps, since they are dedicated to those units, will contractor be expected to remove existing microprocessors and install new ones?
Answer: Yes. Here is an example of a typical controller for a billet heat pump:



5. **Project Concern:** Can we ensure that CHP's will be factory packaged with their own controls?

Answer: CHP units will come with on-board engine and power controls only. All controls shown on M400-2 (BACS) are by the controls contractor.

6. **Project Concern:** Line sizes for all control valves were unclear. Can we assume more than 1"?

Answer: Refer to Specification 230900 Section 2.6.AA.

7. **Project Concern:** Will DDC be expected to provide terminal strips to field devices as mentioned in M500?

Answer: Only if the existing wiring cannot work wire-for-wire with the new compliant controllers.

8. **Project Concern:** If ABI's are not accepted, will DDC contractor provide the iLON Smartservers?

Answer: No. The iLON smartserver already exists that connects the existing controls to the site PC in the maintenance office. It must remain intact if any of the ABIs (#2, #3, #4, or #5) are not taken.

9. **Project Concern:** Do the VFDs have to be Yaskawa or can Honeywell Smart Drives with disconnect be used as Equal?

Answer: Yaskawa is basis of design. Refer to Specification 230900 Section 2.6.CC

10. **Project Concern:** Will the Onicon meter coming with the CHP have a Bacnet interface through an Onicon System-10 BTU Meter?

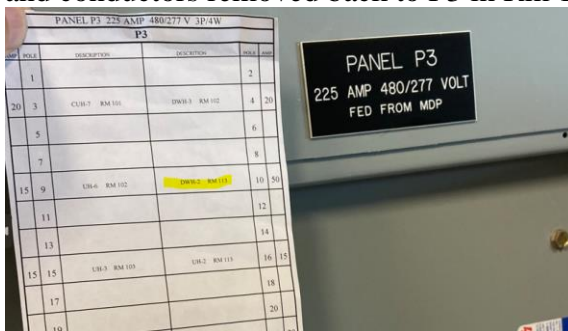
Answer: For the sake of the bid, yes. However, modbus is default and since the engine requires Modbus, the DDC system should be Modbus capable.

11. **Project Concern:** Is there an existing JACE onsite that meets the Army's requirements, or should the controls contractor carry a separate JACE for the ABI's?

Answer: No, there is no JACE on site. A JACE will be provided for the base bid (Admin Wing) and should be selected based on the point and device count for the base bid and ABIs (e.g. JACE J-8200 capable of 200 devices/10,000 point limit could cover it all, but that is up to the controls contractor)

12. **Project Concern:** Drawing M100-2 ADDITIVE BID ITEM #1 refers to E200 for electrical demo associated with this alternate work. I do not see any electrical pertaining to this alternate on the electrical drawings.

Answer: Yes all the electrical (feeders, disconnects, etc) to the tank should be demo-ed and conductors removed back to P3 in Rm 104 (Main Electrical Room).



Specification Items:

1. Replace Section 26 00 00 Combined Heat & Power Generators, page 14 with enclosed revised Section 26 00 00 Combined Heat & Power Generators, page 14. The Owner has changed paragraph 3.7 - Complete Service & Maintenance Warranty By Manufacturer. See attachment #2 for update page 14.

Drawing Items:

1. Attachment #1

- H. Retest: Correct deficiencies identified by tests and observations and retest until specified requirements are met.
- I. Report results of tests and inspections in writing. Record adjustable relay settings and measured insulation resistances, time delays, and other values and observations. Attach a label or tag to each tested component indicating satisfactory completion of tests.
- J. Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each power wiring termination and each bus connection. Remove all access panels so terminations and connections are accessible to portable scanner.
 - 1. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan 11 months after date of Substantial Completion.
 - 2. Instrument: Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
 - 3. Record of Infrared Scanning: Prepare a certified report that identifies terminations and connections checked and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

3.6 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain packaged engine generators. This shall be completed even if a factory service contract is utilized.

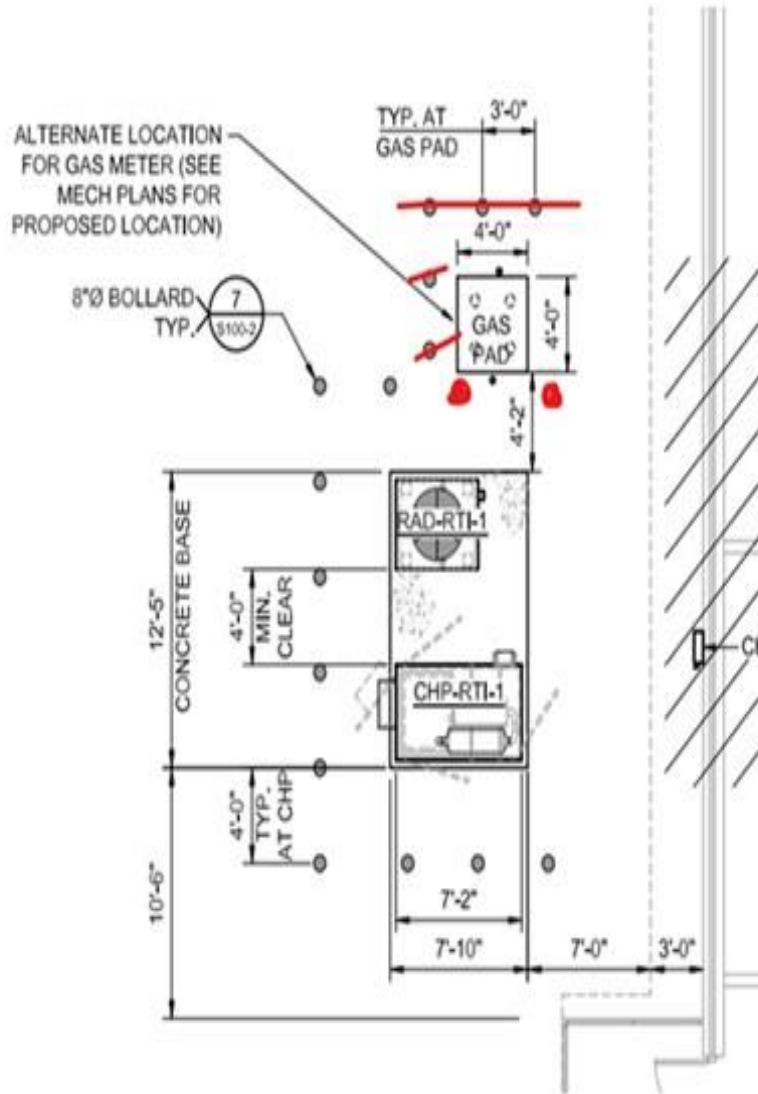
3.7 COMPLETE SERVICE & MAINTENANCE WARRANTY BY MANUFACTURER

A. The Combined Heat-Power unit System Manufacturer shall provide a comprehensive maintenance program on the Combined Heat-Power unit and associated equipment. The service period includes all manufactures maintenance services defined as commencing on the date of start-up until 5,000 engine run hours. This shall include all items provided by the manufacturer to include:

- 1. An annual scheduled inspection of the unit(s) in the fall and spring over and above any scheduled maintenance.
- 2. Both scheduled and unscheduled service of each Combined Heat-Power unit module shall be included, including parts, labor, travel, and consumables during this period.
- 3. In addition, complete engine and/or generator replacements or overhauls shall be included (parts and labor), as needed.
- 4. The manufacture/maintenance contractor will provide a monthly report to include run hours, kWh production, natural gas consumed, and any service performed during the service period.

END OF SECTION 263000

There will be 12 bollards protecting the CHP unit. Remove three bollards from your pricing resulting from removal of the gas pad.



Dan Fisher
Principal

ICDS
Innovative Construction & Design Solutions, LLC

ATTACHMENT #1