



76-2023 ADDENDUM 3

NEWPCC DCS MIGRATION - INTEGRATOR SUPPLY AND SERVICES

URGENT

**PLEASE FORWARD THIS DOCUMENT TO
WHOEVER IS IN POSSESSION OF THE
BID/PROPOSAL**

ISSUED: May 1, 2023
BY: Scott Symons
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**THIS ADDENDUM SHALL BE INCORPORATED
INTO THE BID/PROPOSAL AND SHALL FORM
A PART OF THE CONTRACT DOCUMENTS**

Template Version: Add 2021-03-05

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 B – BIDDING PROCEDURES

Revise: B2.1 to read: The Submission Deadline is 12:00 noon Winnipeg time, May 12, 2023.

NMS SPECIFICATIONS

Section 40 95 34 – Control System Servers and Workstations

- Add: 3.3.7.4 CS-A8104 – VM Controller
- 3.3.7.4.1 Applications:
- 3.3.7.4.1.1 vCentre Server Appliance
- 3.3.7.4.2 Cores: 2
- 3.3.7.4.3 RAM: 14 GB
- 3.3.7.4.4 Storage: 579 GB

Section 40 99 91 FAT and SIFT Procedures

- Add: 1.1.5 FAT and SIFT testing shall demonstrate all specified functionality in the Specifications and Drawings.
- Add: 1.1.6 Submit FAT test report for Contract Administrator’s approval. Clearly summarize all FAT tests conducted.
- Add: 1.1.7 Contractor shall only proceed with SIFT testing once the FAT test report has been approved by the Contract Administrator.
- Add: 1.1.8 Submit SIFT test report for Contract Administrator’s approval. Clearly summarize all SIFT tests conducted.
- Revise: 1.2.2.1.1 to read: Prepare and submit FAT plan to the Contract Administrator two months prior to scheduled testing for review and approval. Equipment requiring a FAT plan includes the servers, network equipment, PLCs, and Historians.

- Revise: 1.2.2.1.2.8 to read Review of test performed by the Contractor prior to the FAT. Review to include confirmation that the testing was complete and passed. FAT testing will halt if there is evidence that pre-testing was not completed.
- Add: 1.2.2.1.2.10 Test plan including all test procedures.
- Revise: 1.2.2.2.1 to read Prepare and submit to the Contract Administrator two months prior to scheduled testing for review and approval. SIFT will not start until the FAT report has been approved by the Contract Administrator.
- Delete: 1.2.4
- Revise: 3.1.1.1.2.1.5.4 to read: Redundancy of all process control networks and subnetworks
- Add: 3.1.1.1.2.1.5.5 Demonstration of Historian
- Add: 3.1.1.1.2.1.7.8 Alarm Demonstration
- Add: 3.1.1.1.2.1.7.9 Demonstration of Historian, including alarms, trends, and all functions specified
- Revise: 3.1.1.6.1 to read: Create a FAT test report upon completion of all FAT testing activities demonstrating and verifying all functionality as laid out in the FAT plan. Submit FAT test report for Contract Administrator's review.
- Add: 3.1.1.6.1.1 The FAT shall be considered complete once the Contract Administrator has approved the FAT test report.

Section 40 99 92 Automation Testing and Commissioning

- Add: 1.2.2.1 Submit commissioning plan two months prior to commissioning.
- Revise: 1.2.3.2.8 to read: Security of all PCS networks and subnetworks (fire wall rules and network segmentation).
- Revise: 3.4.8.1 to read: Demonstrate all sequence logic and control loops as described in the Process Control Narrative and existing DCS Logic. Force each sequence logic or control loop initiator, one at a time, and confirming that all logic actions occur properly in accordance with the Process Control Narrative and existing DCS Logic.
- Revise: 3.4.11 to read: Demonstrate and monitor PCS diagnostic alarms
- Revise: 3.4.12 to read: Monitor the control system performance for any system failures during testing and operation. System failures include but are not limited to server errors and warnings, and network health.
- Revise: 3.4.14 to read: Create a Commissioning report upon completion of all commissioning activities demonstrating and verifying all functionality as laid out in the commissioning plan. Include tests and demonstrations performed, measured values, system response, and tuned values.
- Add: 3.4.14.1 Submit Commissioning report for Contract Administrator's approval.
- Add: 3.4.14.2 Contract Administrator's approval of commissioning report must be acquired prior to beginning the next area migration.

QUESTIONS AND ANSWERS

Q1: How will the Clarifiers 4 and 5 Bridge PLCs be integrated in the PCS?

A1: The current control panels for Primary Clarifiers 4 and 5 do not directly connect to the PCS. When they are updated with PLCs, they will be connected to the PCS through Area P.

Q2: What kind of CPUs do the pre-purchased servers have? What is disk structure and size? What network interfaces do the servers have?

A2: There is one (1) Intel 8358 2.6GHz/250W 32C/48MB DDR4 3200MHz CPU. There are five (5) 2.4TB HDD drives with a RAID controller. Networking interfaces include Six (6) 1000 Mbps ethernet ports and one (1) Lights Out Management port.