



City of Clatskanie

Water Treatment Plant PLC Upgrade

CIP # 2020-106

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Sealed bids for the City of Clatskanie, Water Treatment Plant PLC Upgrade will be received by the City of Clatskanie until 3:00 PM, Monday, September 28, 2020. Bids shall be addressed to Mr. Greg Hinkelman, City Manager, 75 South Nehalem Street, P.O. Box 9, Clatskanie, OR 97016. At 3:00 PM. Bids will be opened and read aloud in the City Hall Council Chambers, Clatskanie, OR.

The City of Clatskanie is requesting sealed bids for their Water treatment Plant PLC upgrade. The purpose of this upgrade is to replace the existing GE PLC and computer control system with a new Rockwell Automation control system.

The new system to include, at a minimum, the following specifications:

1. New Rockwell Automation CompactLogix PLC system to replace the existing GE PLC system.
 - a) 2 MB processor capable of Ethernet communications.
 - b) I/O to provide for 48 relay outputs, 48 120 vac inputs, and 16 4-20mA analog inputs.
 - c) Must fit in existing PLC space.
 - d) RSLogix 5000 programming software registered to the City of Clatskanie.
 - e) New logic to emulate existing GE logic.

2. New Rockwell Automation computer graphical control software.
 - a) RSView Machine Addition Station software licensed to the City of Clatskanie.
 - b) Programming to emulate the functionality of existing graphical control and trend screens.

3. Historical data logging software.
 - a) Must be capable of logging at least 10 PLC tags for 3 years at a 1 minute sample rate.
 - b) Must be capable of logging at least 20 PLC tags for six months at a 1 minute sample rate.
 - c) Must be capable of communicating with RSLogix/RSView and of trending its logged data with RSView.

4. New computer system with the following minimum specifications.
 - a) Computer:
 - 32GB 2x16GB DDR4 2666MHz UDIMM Non-ECC Memory NVIDIA(R) Quadro(R) P620, 2GB, 4 mDP to DP adapter
 - 1TB PCIe NVMe Class 40 M.2 SSD
 - Intel Core i7-9700,(8 Core, 12MB Cache, 3.0GHz, 4.7 GHz Turbo w/UHD Graphics 630)
 - RJ-45 Ethernet port
 - Windows 10 Pro 64bit English
 - b) 24" monitor.
 - c) Wireless keyboard and wireless scrolling mouse.
 - d) UPS power supply capable of 1 hour of backup during power loss.

5. Replace existing (2) GE micro PLCs (one in WTP and one remote) with MicroLogix 1100 PLCs.
 - a) Use existing Data-Linc Group modems with the serial ports of new MicroLogix PLCs.
 - b) Set up modems to communicate using AB DF1 protocol.
 - c) On Water Plant MicroLogix 1100, use Ethernet port to communicate with CompactLogix PLC and pass data between the MicroLogix and CompactLogix PLCs.
 - d) Emulate existing GE logic in both new PLCs.

6. Plant Shutdown:
 - a) All programs shall be developed before shutting the plant down to swap out the PLCs.
 - b) The shutdown must be scheduled with the Water Plant operator.
 - c) The swapping of the PLCs and the testing of the new program functionality shall be done in one day.

6. Warranty:
 - a) 1 Year warranty of hardware and 90 days warranty of software functionality (after sign-off by owner).

Total Bid (In Figures) : _____

NAME OF FIRM: _____

BY: (Signature) _____

If Bid is by a partnership, then one of the partners must sign the Bid.

NAME: _____

ADDRESS: _____

TELEPHONE NO. _____

IF CORPORATION, ATTEST: _____

(Secretary of Corporation)

(SEAL)