

**CLARIFICATION NO. 05**

**TENDER NO. PROC-FC/CB/PROD/NASHPA-3200/2018**  
**SCADA SYSTEM FOR NASHPA WELLS**

1. As stated in the tender document; the distance between SCADA control station and nearby Telemetry office is 1km away for which fiber optic communication is required (fiber optic supply and Laying is in OGDCL scope however fiber optic accessories at both ends are in bidder scope). Please confirm the communication switches / Media converter at both end comes under bidder scope or OGDCL scope.

**OGDCL Response:** Communication and Media Converters (as required) will be in bidder scope. This includes both supply and installation work.

2. We understand that there is no requirement of dedicated workstation for CCTV. Only LCD with CCTV controller need to provide. Please confirm.

**OGDCL Response:** CCTV system in both SCS and Telemetry Room shall have video recorder, CCTV control console/joystick and LCD. However if bidder's design requires any workstations for this purpose then it should also be included.

3. With reference to section 4.2 (MTU) communication ports requirement is:

Communications:-

a	Serial Ports	RS-232 (02), RS-485 (02)
b	Serial Protocols	Modbus RTU, Modbus ASCII,
c	Ethernet Port	RJ45, 10BaseT (02 ports)
d	Ethernet Port Protocols	Modbus TCP, Modbus RTU in UDP, Modbus ASCII in UDP,

While section 5.0 for RTU communication ports requirements:

Communications:-

a	Serial Ports	RS-232 (01), RS-485 (02)
b	Serial Protocols	Modbus RTU, Modbus ASCII, Profibus, field bus,
c	Ethernet Port	RJ45, 10BaseT (02 ports)
d	Ethernet Port Protocols	Modbus TCP, Modbus RTU in UDP, Modbus ASCII in UDP,
e	Network Protocols	IP: ARP, TCP, TFTP, UDP, ICMP

**Our offered MTU and RTU is compatible for above mentioned protocols and communication options but we recommend to consider only Ethernet and may be serial ports for current project demands.**

**OGDCL Response:** For minimum acceptable quantity of communication ports, please refer to OGDCL response in published clarifications no. 03, point no. 04. For data communication, bidder shall make sure to include industry standard protocols specially Modbus protocol on serial medium (Modbus RTU, Modbus ASCII) and Modbus protocol on Ethernet medium (Modbus TCP).

- 4. Bidder can also consider slot / space provisions of other communication modules / gateways for future. So if OGDCL requires other communication ports in future, can procure those communication modules and add plug and play accordingly.**

**OGDCL Response:** Communication modules / gateways which are required to comply with communication requirements (mentioned in ITB and mentioned in above point regarding communication protocols) shall be supplied, installed and configured in current project scope.