

CLARIFICATION NO. 06
TENDER NO. PROC-FC/CB/PROD/NASHPA-2034/2017
SCADA SYSTEM FOR NASHPA WELLS

No.	Item	Subject	Clarifying issues	OGDCL Response
1	Section 4.2. Page 15	Master PLC/MTU	"PLC/MTU shall be designed to support desired number of I/O's". Please define the quantity and type of IO/s required for the PLC/MTU	I/Os are clearly mentioned in Section 5.0 Page 35 of 60.
2	6.1.1 Page 50	Solar Power Supply System	Section 611 requires a skidded structure set for the solar panels. However section 12.0 does not include this structure. Please clarify the scope of supply for the solar array structure.	Vendor shall be responsible for complete package of solar system including any structure, foundation, equipment pads, all type of interconnect cables, cable glands etc. Vendor is also advised to carry out & provide OGDCL wind velocity study for structure / poles and accordingly these structures / poles shall meet the minimum requirement of wind velocity / speed.
3	4.3 Communication System & Radio	Communication tower	Section 4.3 "Installation of communication towers shall be the responsibility of the supplier". However Section 9.2.1 states: "Supplier shall be responsible for installation supervision" only. Please clarify installation scope of supplier	Civil works will be under OGDCL responsibility. This means that contractor will provide the design / drawings of all bases like RTU base, Solar structure base, poles & towers base, cable trays bases, Earthpits etc. OGDCL will construct the bases (only civil related) as per vendor design. Supply and Installation of all equipment, material, Towers, structure, poles etc. will be vendor scope and responsibility. For Earthpits, Earthing, rod, cable and earth plate is considered integral part of earth pit and will be provided by OGDCL. Earth cable (single core 10mm2 pvc insulated from RTU / solar panels / radio etc to Earth pit remains vendor responsibility.
4	5.0 Remote Terminal Unit (RTU)/PLC	Signal, power and control cables.	Section 5.0 states that all cables" will be wired through armored cable running in conduit pipes". However Section 12.0 item 9 and 10 only lists cabling and not conduit. Please clarify scope of supply under item 9 and 10 of section 12.0	All cable trenches, cable support systems, conduits, cable trays, junction boxes shall be vendor scope.
5	12.0 Bill of Quantity	IP Based CCTV System	Section 12.0 item 2 requires 8 IP based CCTV Systems, while item 35 requires 8 CCTV Systems as well. Please clarify scope of supply	Its duplication. Only 8 IP based CCTV system with IR LEDs are required for wells. One Camera per well. Below are camera minimum specs: - PTZ IP Camera - 1080P or Higher - 20x optical zoom - Min 25/30fps@1080P - Tripwire, Intrusion, Abandoned / Missing, Face Detection Alarm - Support PoE+ - Min IR distance 100m - IP66 or higher
6	Page 60 of SOW (Attachment 06)	UTM Coordinates	The UTM coordinates given for the site locations do not seem to be correct. The range of the coordinates given is not anywhere near the project site. Please verify and supply valid UTM coordinates, in order to allow us to perform a path analysis for antenna requirements	See S. No. 25
7			Technical Specs for MUX/DeMUX are not given. Please provide the Specifications of MUX / DeMUX	Specifications of the MUX/DEMUX will be vendor recommended to meet the desired specifications of the tender documents and this clarification.
8	3.0 SYSTEM Philosophy:		Please Clarify; Is There any requirement for Panel HMI in Field at WELL Side for Operator interface?	No

9	4.3.1 (6) Environment:	Meet ETSI EN 301 489-1 V1.4.1 and ETSI EN 301-489-3 V1.4.1 for RFI/EMC	As this is European Standard for ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Is it mandatory or any equivalent can be considered for it?	It is a Mandatory requirement. Please Follow tender specifications.
10	5.0 REMOTE TERMINAL UNIT (RTU) / PLC Communications	DNP3 Protocol(Mandatory) requirement in RTU, Please Confirm its application in Well Site Area	Is it mandatory requirement for DNP3? as per our previous experience, our system has no need for this in order to fulfill your requirements. Please specify if there is any special requirement of DNP3 at WELL site.	It is a Mandatory requirement. Please Follow tender specifications.
11	5.13		Please confirm if the PABX system in HQ will be connected to PSTN line(Telephone service provider) or this is only in-house VOIP communication with remote sites	this is only in-house VOIP communication with remote sites. Supply, installation & commissioning of the PABX in CCR (MTU side) is vendor scope.
12	4.1		Is the cabinet at the remote side IP rated or it will be housed on an air-conditioned environment?	All cabinets, JBs, enclosures etc installed at Well site must be NEMA 4X IP 65 SS 316. <u>Traceable</u> Conformity Certificate must be provided with each enclosure. Battery Enclosure will be SS316 Nema 4 or equivalent.
13	5.12 item a		There is a requirement for High resolution CCTV system, please confirm minimum frame rate requirement so we can reduce accordingly the bandwidth size of the radio system.	Please design as per : - PTZ IP Camera - 1080P or Higher - 20x optical zoom - Min 25/30fps@1080P - Tripwire, Intrusion, Abandoned / Missing, Face Detection Alarm - Support PoE+ - Min IR distance 100m - IP66 or higher
14	5.12 item e		When you indicate lapse time recording, how many days would you like to retain the recorded video. Can we assume 30 days recording, with first in-first out after 30 days.	NVR size must be adequate to store 08 +12 future (total 20 wells) Cameras recording @ 1080P for a period of 30 days. with first in-first out after 30 days.
15	4.3.1 (4.a.iii)		When you state Multicast video support, please confirm the maximum users who will access the camera at site.	MultiCast support is mentioned under Radio Specification Section and is required for Radio Communication. For CCTV as per Section 5.12, Vendor to offer NVR to cater for total 20 wells requirement at Nashpa SCS only. Screen Size connected to NVR should be 32 inch minimum and to be placed on the desktop.
16	Clause 3_Pg 13 of 60		Please let us know the distances between CCR and each Wellhead.	Distance from Nashpa SCS to Wells is as under:- Nashpa # 01 is 2.8 km, Nashpa # 02 is 1.8 km, Nashpa # 03 is 3.7 km, Nashpa # 04 is 2.9 km, Nashpa # 05 is 6.8 km, Nashpa # 06 is 7.0 km, Nashpa # 07 is 1.7 km, Nashpa # 08 is 2.2 km
17	Clause 4.9_Pg 23 of 60		As per RFQ, there are requirements of 5 x No. Remote Client Stations. Please provide us the System Block Diagram in order to understand the location where these Remote Client Station shall be placed. Also, please let us know us the display size and single/dual tier console type furniture to be offered for these Stations.	5 remote clients will be connected through internet or intranet for remote viewing. Display size, it is already mentioned in clause 4.8 of tender specifications. Furniture requirement is one console & chair for each work station including CCTV monitoring and terminal server gateway in CCR only. Each console should have its own power supply arrangement to power up the work station on that console. For remote clients, furniture is not required.
18	Clause 5_Pg 35 of 60		Bidder understands that 1 x No. 17" Laptop needs to be offered in CCR. Please confirm. Kindly provide us the System Block Diagram.	Yes Vendor shall supply one mobile configurator (17" Screen EWS Laptop) with necessary softwares for the configuration of RTU/MTU and one fixed EWS as per tender specs. System block diagram is not required as all the items of Nashpa SCS is mentioned in clause 4.1 of tender specifications.

19	General	IO Count required.	Please provide us the IO Summary with IS & NON-IS segregation details. Also, kindly let us know how much Installed spares need to be considered over Raw IOs.	Follow clause 5.0 of tender specification. All signals are NON-IS.
20	General	Third Party Systems	Please provide us the Total no. of Third Party System Packages with the Communication Protocol & no. of IO's associated with these Third Party System Packages.	This provision is for future packages (not finalized at this stage). Vendor must provide OPC, DNP3 and MODBUS 485 / TCP/IP interfaces for future integration in SCADA.
21	General	Spare space requirement in Cabinets.	Please let us know the spare space that needs to be considered in Cabinets.	30%.
22	1.2 SCOPE OF WORK		MTU/PLC for RTUs data polling isn't required by Bidder. Experion PKS would communicate directly with the RTUs for all supervisory control and data access requirements. Please confirm if this is acceptable	MTU is mandatory as there will be some local I/Os that needs to be integrated in future. Please follow all tender specs.
23	1.2 SCOPE OF WORK	Provision of OPC interface for future integration with Plant DCS.	Since the Plant DCS system is going to be Experion, OPC isn't required for DCS/SCADA integration, DSA (Bidder Technology) shall be considered enabling all real time data, alarms, history data exchange. Please confirm if this is acceptable	Vendor must Follow tender specs and these clarifications and provide OPC which will be required for integrating future 3rd party packages and systems..
24	4.6 WAN DATA APPLICATION SERVER	will form the gateway to the future DCS through Ethernet. The DAS will be connected with OPC database for intranet connectivity.	Since the Plant DCS system is going to be Experion, OPC isn't required for DCS/SCADA integration, DSA (Bidder Technology) shall be considered enabling all real time data, alarms, history data exchange. Please confirm if this is acceptable	Vendor must Follow tender specs and these clarifications and provide OPC which will be required for integrating future 3rd party packages and systems..
25	Radio Communication TQs		The provided coordinates are neither in decimal degrees or Degrees-Minutes-Seconds. Kindly advise what type of coordinates are given to ensure proper conversion.	Location Latitude Longitude Nashpa Well # 01 33 DEG 15' 01.25" N 71 DEG 19' 26.36" E Nashpa Well # 02 33 DEG 15' 24.70" N 71 DEG 19' 00.60" E Nashpa Well # 03 33 DEG 15' 25.274" N 71 DEG 20' 12.294" E Nashpa Well # 04 33 DEG 14' 48.16" N 71 DEG 18' 02.79" E Nashpa Well # 05 33 DEG 17' 15.5" N 71 DEG 21' 42.6" E Nashpa Well # 06 33 DEG 15' 15.35" N 71 DEG 21' 36.40" E Nashpa Well # 07 33 DEG 15' 15.582" N 71 DEG 18' 06.318" E Nashpa Well # 08 33 DEG 15' 85.4263" N 71 DEG 19' 31.986" E Nashpa SCS 33 DEG 15' 57.3156" N 71 DEG 18' 26.4024" E
26	Radio Communication TQs		The coordinates of NASHPA #5 is identical with NASHPA #7, while in the Drawing, they are on different locations.	See S. No. 25
27	Radio Communication TQs		The coordinates of NASHPA #6 is identical with NASHPA #8, while in the Drawing, they are on different locations.	See S. No. 25

28	Radio Communication TQs		It is stated that the environment is ATEX/IECEX Zone 2. Kindly advise if the Microwave radio itself should be ATEX rated or only the Junction Boxes housing the IDUs being ATEX would be sufficient?	Radio specs are mention in section 4.3.1. All specs are mandatory and must be complied.
29	Radio Communication TQs		It is stated in the RFQ document " Radio communications shall have enough bandwidths to accommodate data, voice & video with 50% free spare bandwidth. " – may we know the current bandwidth consumption of each site to appropriately estimate the radio bandwidth specifications to meet this requirement.	Vendor to estimate the bandwidth requirement as per RTU traffic, CCTV & VOIP data. Vendor to provide bandwidth calculations with technical proposal to prove this.
30	Radio Communication TQs		Is there an Existing tower at the Main Scada Control Station to accommodate the new MW Radios to all Remote Wellheads? If yes, kindly provide the tower height of the existing tower.	No
31	Radio Communication TQs		The coordinates for Nashpa 1 to 8 is provided, as well as the corner coordinates of the Plant, however the coordinates for the originating location, Main Scada Control Station Tower, is missing. Kindly provide the coordinates for Main Scada Control Station Tower. Or, shall we assume for the central point coordinate of the Plant based on the coordinate of the corners?	See S. No. 25
32	Level Transmitter TQs		Please inform media to be measured	Corrosion inhibitor
33	Level Transmitter TQs		Please indicate Operating Pressure, Temperature	Normal ambient atmosphere
34	Level Transmitter TQs		Please indicate Level Transmitter Mounting Connection details (viz. flange/screwed)	Threaded connection with 2" Gate valve is available on the bottom of corrosion inhibitor tank.
35	Level Transmitter TQs		Please indicate heights of the all 8 tanks to select the level range	General Tank heights are already mentioned in clause 5.10
36	5.12 WELLHEAD CCTV SYSTEM		Please provide details about CCTV camera specifications required for Well head areas: 1. What should be type of CCTV cameras Explosion proof or simply outdoor rated weather proof? 2. Type of Camera: PTZ or Fixed type? 3. Washer/Wiper required?	Please design as per : - PTZ IP Camera - 1080P or Higher - 20x optical zoom - Min 25/30fps@1080P - Tripwire, Intrusion, Abandoned / Missing, Face Detection Alarm - Support PoE+ - Min IR distance 100m - IP66 or higher
37	5.12 WELLHEAD CCTV SYSTEM		Kindly provide details regarding CCTV video storage in terms of redundancy, resolution, Frame rate & video retention period in days.	Further to tender specifications, NVR size must be adequate to store 08 +12 future (total 20 wells) Cameras recording @ 1080P for a period of 30 days. with first in-first out after 30 days.
38	5.12 WELLHEAD CCTV SYSTEM		Kindly provide details if CCTV integration is required with F&G and SCADA?	No standalone CCTV monitoring station.

39	5.12 WELLHEAD CCTV SYSTEM		Kindly provide the resolution, Frame rate & number of days at which background recording to be done for CCTV storage.	Further to tender specifications, NVR size must be adequate to store 08 +12 future (total 20 wells) Cameras recording @ 1080P for a period of 30 days. with first in-first out after 30 days.
40	5.12 WELLHEAD CCTV SYSTEM		We have assumed that Well head CCTV camera would be mounted less than 90 meters from switch in the cabinet. Hence, FO media convertor for CCTV camera is not considered. Please confirm.	Vendor is responsible to design the system as per international standards.
41	5.12 WELLHEAD CCTV SYSTEM		Bidder shall offer integrated solution via Experion hence dedicated workstation shall be excluded. Please confirm.	No. Tender specifications must be followed.
42	5.12 WELLHEAD CCTV SYSTEM		There will be 01 CCTV camera Installed at each well site. Total 08 cameras for 08 well sites. Please confirm. Also suggest if there is any requirement for DVR?	Yes. Same as mentioned above.
43	5.12 WELLHEAD CCTV SYSTEM		There is no CCTV camera require to install at SCS / Plant site. Only CCTV Monitoring workstation will be install at SCS. Please confirm	Yes confirmed.
44	VOIP Telephone TQs		In the requirement it is mentioned to have a Mux Demux system for IP telephones but there no specifications related to the same. Please advice. Can we get any idea what kind of multiplexing is required? Fiber distances and protocols used in the network?	Specifications of the MUX/DEMUX will be vendor recommended to meet the desired specifications of the tender documents. MUX/DEMUX shall be used for data, voice and video
45	Section 4.3. Page 16	Remote Radio Redundancy	Section 4.3 states the requirement for a redundant master radio with automatic change-over. Please advise if a remote radio with automatic change-over is required at the well sites also.	Yes. Redundancy of radios on both ends is mandatory.
46	Section 5.14, page 45	Flow Control Valve	Section 5.14, item 12 mentions Hydraulic speed control. Please advise if an Electronic Valve actuator is acceptable since all major control valve manufacturers are unable to supply an hydraulic valve positioner with the specified valve body.	Please follow clause 5.14 of tender specifications.
47	Section 4.2. Page 15	Master PLC/MTU	"PLC/MTU shall be designed to support desired number of I/O's". Please define the quantity and type of IO/s required for the PLC/MTU	To cater Future requirements, MTU must include for minimum one AO card (4 ch), one DO card (16 channel), one AI card (08 Ch), one DI card (16 ch), Modbus 485 / TCP/IP interface. All installed cards must be fully wired and all DOs with interposing relays must be provided and wired till marshalling including redundant field power supplies.
48	6.1.1 Page 50	Solar Power Supply System	Section 611 requires a skidded structure set for the solar panels. However section 12.0 does not include this structure. Please clarify the scope of supply for the solar array structure.	Vendor shall be responsible for complete package of solar system including any structure, foundation, equipment pads, all type of interconnect cables, cable glands etc. Vendor is also advised to carry out & provide OGDCL wind velocity study for structure / poles and accordingly these structures / poles shall meet the minimum requirement of wind velocity / speed.
49			As per Annexure A Attachment – 1 note # 02, commercial evaluation will be based on total price sum of Sr. no A, B (Spares), C and D while tender document section 5.18 says that Commissioning spare will not be part of commercial evaluation. Please comment	Yes Commissioning spares will not be part of commercial evaluation.
50			All third party certifications / inspections if required. Will be arranged and bear cost by OGDCL?	Yes Third Party Inspection will be engaged by OGDCL and will be carried out at vendor's site. However vendor shall provide facilities and support to Third Party Inspector.

51			We understand that all well sites are within 10 KM of vicinity from Main plant. Please confirm.	Yes
52			All RTU / Well Control system Cabinets will be IP65 outdoor rated and all cabinet in plant control room / MTU PLC will be IP 42 indoor rated. Please confirm.	All cabinets, JB's, enclosures etc installed at Well site must be NEMA4X IP 65 SS 316. raceable Conformity Certificate must be provided with each enclosure. Battery Enclosure will be SS316 Nema 4 or equivalent. All indoor Cabinets will be NEMA12 / IP42 rated. Conformity certificate is mandatory.
53			SCADA servers should be redundant and no SIL level is applicable for Server layer. Please confirm.	Yes
54			In SCADA Control room: There should be separate Telecom Cabinet for Radio and Switches or we can use the back of MTU cabinet for communication equipment. Please confirm	Separate Network Cabinet is mandatory.
55			Please share the Plant control room Architecture / Drawings for better understanding. If available.	Not available now.
56			MTU PLC will have redundant (CPU, Communication and Power Supplies). IOs will be non-redundant.	Confirmed. Additionally field power supplies should also be redundant.
57			RTU will have non redundant (CPU, Power supplies and IOs). Communication will be redundant?	Yes
58			Please explain the WAN Data Application server ?	WAN Data Application server will be connected with OPC database for intranet connectivity.
59			Please share the details of Panel Board of SCADA control station equipment. Also confirm the 5KVA UPS will install in panel board?	Vendor to follow Tender Section 4.13.
60			Combined system and Marshalling panel will be acceptable for MTU PLC & Well RTU?	Separate Marshalling panel on MTU side. Same system and Marshalling on RTU side.
61			Radio communication equipment at well sites will be installed in RTU cabinets?	Vendor to follow Tender Specs Section 4.3.1
62			The solar charge and load controllers along with accessories will be installed in RTU panels?	NO. Separate Solar JB must be provided.
63			Please reconfirm the Memory of RTU Processor. We suggest 1 MB is more than enough to cater the RTU requirements.	Vendor must Follow clause 5.0 of tender specifications.
64			As per TOR document page number 35 of 60 says RTU AI = 8, AO = 2, DI = 12 & Do = 6. Please confirm the spare no need to consider over and above these IOs. As the given IO details shows that few spare IO's are already considered.	Vendor must Follow clause 5.0 of tender specifications.
65			Non SIL RTU and MTU is required, please confirm.	Yes
66			Solenoid, Switches, Chemical injection, ESD, WHCP or any other equipment not mentioned in BOQ mentioned in Tender document are not included in Bidder's Scope.	Yes
67			Refer to section 5.3 of SOW document. please suggest who has to provide the Beacon light with sounding along with poles. We understand that Flame and Gas Detectors along with alarm beacon light is in Bidder Scope. Please confirm. Please share sample of Typical layout /installation of poles ?	IR Flame & Gas detectors, Warning beacon lights with separate poles are under vendor's scope. Pole design will be vendor recommended. However detailed design must be provided with technical proposal.

68			Tubing, fittings and installation hookups of instruments, detectors etc are in Bidder scope? Please confirm.	Yes
69			Please share the complete list of equipment included and not included in Bidder Scope of supply, need to include in solar calculation and sizing.	Follow tender specifications clause 12.0.
70			Please also share the load details of equipment not covered in Bidder scope and need to power-up and consider in solar sizing.	No such equipment.
71			Please suggest the solar system will be based on non-redundant Solar panel, batteries, Controllers etc.	Yes solar system will be based on non-redundant Solar panel, batteries, Controllers etc
72			Battery autonomy / storage backup of 2 days required.	Yes
73			Section 6.1.1 of TOR ask for 1.5 times of expected load as input for solar calculations. Please reconfirm. We suggest 20% of spare instead of 50% over and above the required load is enough and best practice.	Follow tender specs
74			Please suggest 24 VDC or 12 VDC solar module is required?	Vendor to design optimum solution. Solar supply voltage, RTU voltage and field instruments supply voltage should be same. However in case of difference of supply voltages, then vendor will provide the DC TO DC converter
75			Chinese origin / manufacturers are acceptable for all equipment?	Yes with 100% compliance to technical specifications are acceptable. Proof of installed base and system performance must be provided for all offered brands with the technical proposal. OGDCL reserves the right to disqualify or reject any or all bidder unable to provide insufficient evidence of compliance to technical specifications.
76			Local Pakistan made solar structure, JB / combiner box and battery boxes are acceptable.	Yes. Provided that IP ratings are fulfilled and conformity certificates are provided.
77			Simplex / non redundant UPS with battery. 5KVA is required at SCS?	Simplex UPS with a battery backup time of 12 hours is acceptable. All other specs are per tender document.
78			Boarding, lodging, messing and DA of OGDCL personnel for FAT is in Bidder scope	Yes boarding, lodging, messing and DA of OGDCL personnel for FAT outside Pakistan is in vendor's scope.
79			DC to DC converter and Inverter for solar system is not required.	If the quoted field instruments have different DC Supplies wrt Solar supply, then DC to DC converter shall be supplied by vendor
80			TOR asks for 02 trainings as per below. please confirm: a. 5 day operational & maintenance training at OGDCL NASHPA site for 10 days b. Advanced level training for 02 OGDCL nominated professionals at Bidder Facility for a period of 05 days. Air-tickets (if applicable), boarding, lodging & TA/DA @ USD 350/ per OGDCL person per day shall be consider by Bidder. c. Please suggest the above (b) training to be required at Bidders facility within Pakistan or outside Pakistan facility.	Yes two trainings are included in the tender documents as per a and b. Advanced level training will be conducted at OEM's facility outside Pakistan.
81			Please suggest Approved Bidder list of Instruments i.e. PT, TT etc. if any?	Preferred brands are Rosemount, E+H, Honeywell, Siemens, ABB, Yokogawa or equivalent.

82			Please share the details regarding Electrical cabling and Grounding section mentioned in SOW document?	All electrical cabling & grounding connections required for installed equipment shall be supplied by vendor for wellheads and Nashpa Scada Control Station.
83			As per TOR document there are 02 EWS required. Please confirm below understanding. a. 01 EWS workstation at main SCS will have HMI and MTU PLC logic development software's b. 01 EWS Laptop having 01 RTU programing software	Confirmed.
84			Refer TOR document section 12.0 BOQ. Please clarify the item no. 14, 18 and 19 i.e Transmitter Configurator / Calibrator, HART Communicator and Pressure Calibrator with pressure modules.	Transmitter Configurator and HART Communicator are for the same function. So consider the quantity of Transmitter Configurator as zero(0) while quantity of HART Communicator will be same as one(01). Pressure calibrator shall be one (0) Fluke 725 with pressure modules or equivalent model.
85			. Refer TOR document section 12.0 BOQ. Please clarify the item no. 24 and 25 both are referring to SCADA servers Primary and Secondary while item no. 23 only refers SACAD software's. please confirm	Softwares with Scada System is already explained at clause no. 5.15 of tender specifications.
86			Please share the specifications / details of required consoles / furniture's and chairs at SCS if any. Also suggest recommended make and origin if any.	The requirement is one console + Chair for each work station including CCTV monitoring and terminal server gateway. Each console should have its own power supply arrangement to power up the work station on that console.
87			There will be same Redundant Mux / DeMux (Switches) and Radio network for Voice, Data and Video Communication from and to all well sites and SCS. Please confirm	Confirmed.
88			If during proposal stage Bidder / bidder suggest the time period of 6 months for project procurement (excluding site activities) instead of 04 months as per tender docs. Does this increase in time frame of project will have impact on proposal evaluation?	Please follow tender specs
89			Panel Board Required Quantity: 01 No's. Kindly brief the small discription of Panel Board. Panel board required for SCS (SCADA Control Station) and it is Operator Console type?	Please follow tender specs
90		NSP-WSS-01: Section 1.2 & 4.2	Section 1.2 states SCADA system should have the provision of adding 03 more wells for future expansion. (08 + 03 = 11 wells in total). While Section 4.2 states requirement of total 20 wells. Please confirm total number of wells required including spares.	SCADA System should be capable of handling 08 present wells and 12 future wells (20 in total). Hence all software, hardware, communication network, switches and modems in Nashpa SCS should be selected for 20 wells.
91		NSP-WSS-01: Section 3.0	By Network Management software, we understand that radio configuration software is mentioned here. Please confirm.	This refers to all communication network related software which are necessary to make the system fully functional including (but not limited to) radio management software, any software required for ethernet network etc.

92	NSP-WSS-01: Section 4.1	One table will not be sufficient to host all the workstations & printers. As per understanding, 05 console / tables and 05 chairs will be required here one for each of the following station: - OWS 1 + Printer (A4 size) - OWS 2 - EWS - CCTV Monitoring - Terminal Server Gateway for remote access	The requirement is one console for each work station including CCTV monitoring and Web gateway. Each console should have its own power supply arrangement to power up the work station on that console. Combination of chair / console have ergonomc design and should have adjustable height and arm rests.
93	NSP-WSS-01: Section 4.3	Redundant radios at base station and Wellsite are required? Please confirm.	As clearly mentioned in tender, redundant communication between well site and MTU is required. Redundant communication should be based on Paralled Redundant Protocol (PRP), compliant with IEC61784. On wellsite, 2 independent modems with Antennas communicating on differnet frequencies with MTU which will also have the same setup.
94	NSP-WSS-01: Section 4.3.1	Please confirm if security encryption is required?	Please refer to Section 4.3, that System shall offer AES encryption with 128 and 256 bit key level options. All criteria mentioned in Section 4.3 must be complied. This encryption is required for data as well as CCTV video.
95	NSP-WSS-01: Section 4.3 & pg. 60 of 60.	The last page of the RFP gives the coordinates of the well heads but they are in UTM format; Please share the coordinates in WGS84 or at least give us the following information for UTM system: • Datum • Projection • Zone This information is mandatory to design the radio system.	See S. No. 25
96	NSP-WSS-01: Section 4.5	As core network redundancy is required in the RFQ, TWO (02) 16 port network switches will be required however RFQ states the requirement for only one 16 port switch. Please confirm.	Scada communication network is required with full redundancy and therefore quantity of 16 port ethernet switches shall be two (02) to achieve redundancy. Switches should be manufactured by renowned brands for industrial applicatons / harsh environment only. (Cisco / Hirshmann)
97	NSP-WSS-01: Section 4.5	Bidder recommends to have layer 02 managed 16 port network switch's to correctly implement DMZ for remote access terminal servers. Please confirm.	For better security of data and netwrok, 16 port ethernet switches shall be layer 02 managed switches.
98	NSP-WSS-01: Section 4.6	For DMZ Implementation, Firewall and Gateway PC is required and it is not mentioned in the tender document. Please confirm if it is required.	Firewall & Gateway PC along with table & chair must be provided. Firewall must be of Cisco 5508 or equivalent. PC specs should be same as OWS. Any thing beyond DMZ will be OGDC scope e.g. Internet connectivity etc.
99	NSP-WSS-01: Section 4.12.6	It is assumed that alarm annunciation will be on HMI and OWS internal speaker will be used for audible alarm annunciation. Please confirm.	All alarms shall be displayed on HMI screen and should be audible through dedicated speakers with each OWS station.
100	NSP-WSS-01: Section 5.0 & 5.2	RTU panel is required of polycarbonate while glands are required of SS. This is not compatible. Please confirm if PVC glands are acceptable.	RTU panel shall be powder coated SS304 steel with nickle plated brass glands.
101	NSP-WSS-01: Section 5.8.1	Please share pressure class for thermowell flanges.	Class 600
102	NSP-WSS-01: Section 5.9	Please share pressure class for Junior orifice Assembly.	Class 600

103		NSP-WSS-01: Section 5.10	We assumed that flange connection on Corrosion inhibition tank is available, Please provide type for level transmitter e.g Capacitance / Radar / Ultrasonic Etc.	Threaded connection with 2" Gate valve is available on the bottom of corrosion inhibitor tank. Level transmitter can be Capacitance or ultrasonic type.
104		NSP-WSS-01: Section 5.13	Please confirm if any existing VOIP exchange is installed in SCS for plant usage so well sites can be integrated in the existing exchange? If yes, please share the make , model and spare channels in the existing exchange.	No
105		NSP-WSS-01: Section 9.2.4	Transportation of Material from port to site, Storage of Material at site. Transportation and handling of material at site will be OGDCL responsibility. Please confirm.	Yes confirmed.
106		NSP-WSS-01: Section 9.1.3	We understand that during SPT of 30 days, Bidder physical presence at site is not mandatory. In case of any issue, Bidder will provide support via telephone / email. If the issue is not resolved then INETECH will mobilize its resource within 24hrs to site. Please confirm is this understanding is correct.	Vendor presence is mandatory.
107		NSP-WSS-01:	Bidder Requests for site visit during next week.	Regretted.
108		NSP-WSS-01:	We assume that all the take off points / process connections complete with necessary isolation valves are already available at site for all the required instrumentation. Please confirm that No hot works / piping modification will be required for installation of the instruments. Please also provide details of these process connections (screwed, flanged, and their sizes)	All tapping points or piping modification works shall be under Ogdcl scope.
109		NSP-WSS-01: Section 11.0	FAT is required at Manufacturer Facility while Training is required at Bidder Site. Please elaborate.	FAT shall be at Manufacturer / OEM facility. Training will be at SCADA OEM Training center.
110		NSP-WSS-01: Section 11.0	FAT & Training will be completed in one go. Please confirm.	No. They will be held separately.
111		NSP-WSS-01: Section 11.0	As per bidder understanding, ISO 14001 & OHSAS18001 are the prevailing standards while the tender documents states OHSAS14001. Please advise correct standard.	All bidders must provide evidence of CSIA Registration, ISO 9001 and OHSAS 18001.
112			Bidder understand that for all instruments, take of points / tapping points will be under OGDC Scope. No mechanical fabrication / modification for instruments or valves is in vendor scope. please confirm.	Confirmed.