## **BOQ & PRICE BID FORMAT**

Subject: Requirement of 5 nos. of C&I supervisor for one year (From 01.02.2021 to 31.01.2022) for C&I Maintenance job of Unit 3 & 4 including AHS and other offsite areas of 2X660 MW. (NIT NO.ITPS/Unit 3 & 4/20-21/132 DTD.19.01.2020)

SI	Service No	Job Desription	UOM	Qty.	Unit Rate (Rs)	Total Amt. (Rs)
1	2140000142	Pressure Gauges/Temp. Gauges/DP Gauges - All Field mounted Gauges (Scope includes dismantling, calibration, re-installation/Replacing and flushing / venting of impulse lines & Preparation of Cal. Report where so ever required.)	NO	200.00		
2	2140000143	On site calibration of Pressure Gauges/DP Gauges - All Field mounted Gauges (Scope includes arrangement of additional tubing, calibration, normalisation and flushing / venting of impulse lines & Preparation of Cal. Report)	NO	200.00		
3	2140000144	Pressure Switch/Temp. Switch/Flow switch/DP Switch/Vaccum Switch (Scope includes dismantling, calibration,re-installation/Replacing and flushing/venting of impulse lines; DCS Loop Checking & Preparation of Cal. Report where so ever required.)	NO	200.00		
4	2140000145	On site calibration of Pressure switches/DP Switches - All Field mounted Switches (Scope includes arrangement of additional tubing, calibration, normalisation and flushing / venting of impulse lines & Preparation of Cal. Report )	NO	200.00		
5	2140000146	Pressure transmitter / DP transmitter / Flow Transmitter / Level Tx(Scope includes; dismantling, calibration, Re-installation/Replacment and flushing / venting of impulse lines, Zero Checking, Loop Checking & Preparation of Cal. Report)	NO	200.00		
6	2140000147	On site calibration of Pressure transmitter / DP transmitter / Flow Transmitter / Level Tx(Scope includes; necessary arrangement, calibration, Normalisation and flushing / venting of impulse lines, Zero Checking, Loop Checking & Preparation of Cal. Report )	NO	300.00		
7	2140000148	Temperature Transmitter / Thermocouple/RTD with/without Thermowell checking/servicing, calibration, terminal tightening and orientation/replacement of TW/TC/RTD; Preparation of Cal. Report: Loop Checking: where so ever required.	NO	350.00		
8	2140000149	HEA Arc Ignitors (Complete assembly along with all accessories) The scope includes; dismantling from field, transportation from field to C&I Lab, cleaning / checking /Servicing /Replacement/ calibration, final reinstallation, Setting & Operation Checking from Main Control Room.	NO	400.00		
9	2140000150	Flame scanner: The scope includes; dismantling from field, cleaning / checking /Servicing/ calibration, final Re-installation /Replacement with proper setting / loop checking, etc.	NO	400.00		
10	2140000151	Flame scanner: The scope includes; dismantling from field, cleaning / checking /Servicing/ calibration, final Re-installation /Replacement with proper setting / loop checking, etc.	NO	300.00		
11	2140000152	Cleaning/servicing/setting/Replacing/overhauling of various Limit Switches/Solenoid valves of ON-OFF Pneumatic valves.	NO	400.00		
12	2140000153	Control valve / Dampers/SADC & Scope: Dismantling of all accessories, cleaning /servicing /Replacement/ overhauling of positioners, I/P converter, AFR / Volume Booster / lubricator, Position feedback transmitter, solenoid valves (if available), limit switches etc. and final calibration along with Cal Report	NO	400.00		
13	2140000154	Float Type Level Switch/Bar (Capacitance/Float) probe level switch, Level Transmitter (Displacer type) of V-Automat Make; Scope Includes: Dismantling, cleaning/servicing/overhauling/replacement of worn out parts, calibration and loop checking etc of all sub- assemblies and complete assembly with Cal Report	NO	500.00		
14	2140000155	Oxygen Analyser - Sensor(Probe) and the transmitter (Analyser): Cleaning/servicing/Replacement of all of its sub-assemblies, calibrations and final installation at field etc.	NO	300.00		
15	2140000156	Analytical Instruments of WTP, Cheminey etc Including SOX, NOX, CO, OPACITY- Dismantling, cleaning/servicing/calibration/overhauling/replacement of faulty parts, calibration and loop checking etc with Cal Report	NO	199.00		
16	2140000157	SWAS System: SWAS probes / sensors and transmitter / analysers: Inspection / cleaning /Replacement/ overhauling of all of its subassemblies, calibration and loop checking etc.	NO	500.00		

## **BOQ & PRICE BID FORMAT**

Subject: Requirement of 5 nos. of C&I supervisor for one year (From 01.02.2021 to 31.01.2022) for C&I Maintenance job of Unit 3 & 4 including AHS and other offsite areas of 2X660 MW. (NIT NO.ITPS/Unit 3 & 4/20-21/132 DTD.19.01.2020)

SI	Service No	Job Desription	UOM	Qty.	Unit Rate (Rs)	Total Amt. (Rs)
17	2140000158	UPS / 24 V DC along with DCDB and Batteries : Inspection / Clening / servicing / replacements of its various components, terminal tightening and final checking / settings etc.	NO	70.00		
18	2140000159	All Control panels, Relay panels, Control desks, Annunciation panels, recorder panels: Cleaning / servicing / overhauling / replacements of its individual components like Cooling fans, MCBs, terminal blocks, modules etc, checking of power supplies along with Terminal Tightness checking of TBs & MCBs	NO	500.00		
19	2140000160	PC, Monitors, Printers & Auxillaries of DCS AND PLCS.: Cleaning / servicing / overhauling / replacements of its individual components like Cooling fans, MCBs, terminal blocks, modules etc, checking of power supplies along with Terminal Tightness checking of TBs & MCBs.	NO	500.00		
20	2140000161	Impulse Lines For Gauges, Switches & Transmitters: cleaning/Flushing/purging of the impulse lines, Leakage arresting/Replacement of Needle valves	NO	500.00		
21	2140000162	HPBP System: Servo valve, Blocking element, Position Feedback transmitter, Fast Opening Device & solenoid/device (where ever applicable. ON-OFF blocking valve - ARL 10 (whrere ever applicable) per valve wise. Complete dismantling servicing, cleaning, checking, calibration & Operation checking from MCR etc.	NO	250.00		
22	2140000163	Local Junction boxes/panels at field like Main Plant & BOP. Scope: Cleaning/servicing/overhauling/ Door Locking & Sealing / Glanding / Taging & Laveling, replacements of its MCBs, Terminal Block, modules etc. checking of power supplies alongwith terminal block tightening.	NO	500.00		
23	2140000164	All turbo supervisory and turbine stress evaluator instrumentation at Turbine Bearing Pedstal, like Diff Expansion. Overall expansion, vibration sensors, bearing/valve thermocouples/RTD, Turbine casings and all Stop &Control valve, like control valve position feedback transmitter, remote position indicators (Limit Switches). Dismantling, inspection, cleaning/servicing/overhauling, calibration and loop checking etc.	NO	500.00		
24	2140000165	Fire Fighting System: Scope: Dismantling, inspection, cleaning/ servicing / overhauling / Instalation, calibration and loop checking of Fire Detectors, Manual Call Points Control Module, DV system, LHS cables, Its Control Panels and etc.	NO	500.00		
25	2140000166	Sonic Leak detection System: Scope: Dismantling, inspection, cleaning/ servicing / overhauling / Instalation, calibration and loop checking of Sonic LeakDetectors,Control Modules & Its Control Panels	NO	1200.00		
26	2140000167	CO2 Flooding System: Scope: Dismantling, inspection, cleaning/ servicing / overhauling / Instalation, calibration and loop checking of CO2 Sensors & Its Control Panels	NO	250.00		
27	2140000168	Hydrogen/Ammonia.Chlorine Detectors: Scope: Dismantling, inspection, cleaning/ servicing / overhauling / Instalation / Replacement, calibration and loop checking of Hydrogen/Ammonia.Chlorine Detectors,Control Modules Hooters & Lamps etc.	NO	500.00		
28	2140000169	Different Solenoids: Dismantling, cleaning/servicing/overhauling/replacement of worn out parts and its reinstallation after completion of work.	NO	2000.00		
29	2140000170	VFD & Their Auxiliaries: Cleaning / servicing / overhauling / replacements of its individual components like Cooling fans, MCBs, terminal blocks, modules etc,I Tightness checking of TBs & MCBs.	NO	250.00		
30	2140000171	PA System: Cleaning, servicing, checking, Replacing faulty parts and trial taking of PA systems.	NO	500.00		
31	2140000172	Painting: painting of C&I panels, Local Instrument Enclosures (LIE/LIR) Instrument Gauge Racks (IGR), Marshalling Boxes, cable tray supports, impulse lines etc. Painting should be done carefully in an aesthetic manner and by properly covering the nearby areas not to be painted. Paint shall be provided by Contractor. Required consumables like brush, emery paper, cloth, etc are to be supplied by the contractor. Spray Painting m/c (as per requirement) shall also be arranged by the contractor at their own cost. The requirement of painting work is as per the instruction of Execution in charge.	NO	300.00		

## **BOQ & PRICE BID FORMAT**

Subject: Requirement of 5 nos. of C&I supervisor for one year (From 01.02.2021 to 31.01.2022) for C&I Maintenance job of Unit 3 & 4 including AHS and other offsite areas of 2X660 MW. (NIT NO.ITPS/Unit 3 & 4/20-21/132 DTD.19.01.2020)

SI	Service No	Job Desription	UOM	Qty.	Unit Rate (Rs)	Total Amt. (Rs)
32	2140000173	LP BYASS system: Servo valve, Blocking element, Position Feedback transmitter, ON-OFF blocking valve (whrere ever applicable) per valve wise. Complete dismantling servicing, cleaning, checking, calibration & Operation checking	NO	250.00		
33	2140000174	Vibration monitoring system: Dismantling, cleaning/servicing/overhauling/replacement of worn out parts and its reinstallation after completion of work.	NO	900.00		
34	2140000175	DRIVE START/STOP CHECKING: Cleaning / servicing / overhauling / replacements of its individual component, terminal blocks, modules etc,	NO	701.00		
35	2140000176	Universal indicatiors/Converters checking: Cleaning / servicing / overhauling / replacements/calibration and its re-installation after completion of work.	NO	1293.00		
36	2140000177	Cable Laying less than 300 meters including tray work and dressing	Mtrs	1500.00		
37	2140000178	EHTC System: Propertional valve, Position Feedback transmitter, solenoid,ON-OFF valvevalve Complete dismantling servicing, cleaning, checking, calibration & Operation checking from MCR etc.	NO	350.00		
38	2140000182	Assistance requried to other Departments from C&I on annual basis for Unit 3 & 4	NO	3000.00		
TOTAL VALUE IN INR (EXCLUDING GST)						

GST SHALL BE EXTRA AT ACTUALS (APPLICABLE % ALONG WITH SAC CODE TO BE INDICATED)