Request for Proposal (RFP) for DCS and Instrumentation Upgradation of GMDC's 250 (2x125) MW Akrimota Thermal Power Station (ATPS), Gujarat

RFP No: GMDC/Power/ATPS/04/23-24

General Manager (Power & Purchase)

Gujarat Mineral Development Corporation Ltd.

(A Govt. Of Gujarat Enterprise)

CIN: L14100GJ1963SGC001206, GST: 24AAACG7987P1ZT

Khanij Bhavan, 132' Ring Road, University Ground, Vastrapur, Ahmedabad 380 052

☎EPABX :079-27913501, 27913200

E-mail: power@gmdcltd.com, Website:www.gmdcltd.com

Table of Contents

Glossary

Abbreviation	Full form
ACW	Auxiliary Cooling Water
AI	Analog Input
AO	Analog Output
APC	Auxiliary Power Consumption
ATPS	Akrimota Thermal Power Station
BFP	Boiler Feed Pump
BOQ	Bill of Quantities
C-Net	Control Network
CCR	Central Control Room
CCW	Circulating Cooling Water
CFAT	Cyber Factory Acceptance Test
CLCS	Closed Loop Control System
C&I	Control and Instrumentation
CV	Control Valve
CW	Cooling Water
DCS	Distributed Control System
DI	Digital Input
DO	Digital Output
EMD	Earnest Money Deposit
ERP	Enterprise Resource Planning
FAT	Factory Acceptance Test
FiS	Financial Score
GMDC	Gujarat Mineral Development Cooperation
GPS	Global Positioning System
GUVNL	Gujarat Urja Vikas Nigam Ltd.
HMI	Human Machine Interface

Abbreviation	Full form
HP	High Pressure
HPH	High Pressure Heater
HSE	Health Safety and Environment
IP	Intermediate Pressure
JB	Junction Box
KPI	Key Performance Indicator
LAN	Local Area Network
LOA	Letter of Award
LOI	Letter of Intent
LP	Low Pressure
LPH	Low Pressure Heater
MCC	Motor Control Centers
MMIPIS	Man Machine Interface and Plant Information System
NRV	Non-return Valve
O-Net	Operations Network
OEM	Original Equipment Manufacturer
OLCS	Open Loop Control System
OS	Operating System
PGT	Performance Guarantee Testing
PLC	Programmable Logic Controller
PLF	Plant Load Factor
PMC	Project Management Consultancy
PPA	Power Purchase Agreement
PSU	Public Sector Undertaking
QAP	Quality Assurance Plan
QCBS	Quality cum Cost Based Score
QCP	Quality Check Plan
QIP	Quality Inspection Plan
RFP	Request for Proposal
RTD	Resistance Temperature Detector
SAT	Site Acceptance Test
SER	Sequence of Events Report
SHR	Station Heat Rate
SOE	Sequence of Events
SRCC	Strikes, Riots and Civil Commotion
SWTP	Sea-Water Treatment Plant
TDS	Tax Deducted at Source
TeS	Technical Score
UPS	Uninterrupted Power Supply

Abbreviation	Full form
VAPT	Vulnerability Assessment and Penetration Testing

Disclaimer

This RFP is being issued by the Gujarat Mineral Development Corporation Ltd (GMDC) (hereunder called “Authority”/ “GMDC”) to the Bidders interested in providing DCS and Instrumentation upgradation services to GMDC for the Overhaul of 250 (2*125) MW lignite based Akrimota Thermal Power Project in Kutch District, Gujarat.

It is hereby clarified that this RFP is not an agreement, and the purpose of this RFP is to provide the Bidder(s) with information to assist in the formulation of their proposals/Bids. While the RFP has been prepared in good faith with due care and caution, GMDC does not accept any liability or responsibility for the accuracy, reasonableness, or completeness of the information, or for any errors, omissions, or misstatements, negligent or otherwise, relating to any feasibility / detailed project report or any other reference document mentioned, implied, or referred herein. This RFP may not be appropriate for all persons. It is not possible for GMDC to consider the investment objectives, financial situation and particular needs of each Proposer/Bidder who reads or uses this RFP. Each Proposer/Bidder should conduct its own investigations and analysis and should check the accuracy, reliability, and completeness of the information in this RFP and where necessary obtain independent advice from appropriate sources.

Bidder should carefully examine and analyze the RFP and bring to the notice of GMDC any error, omission, or inaccuracies therein that are apparent and to carry out its own investigation with respect to all matters related to the captioned subject, seek professional advice on technical, financial, legal, regulatory and taxation matters and satisfy himself of consequences of entering into any agreement and / or arrangement relating to the captioned subject. GMDC and its employees make no representation or warranty, express or implied, and shall incur no liability under any law, statute, rules, or regulations as to the accuracy, reliability or completeness of the information contained in the RFP or in any material on which this RFP is based or with respect to any written or verbal information made available to any Proposer or its representative(s).

GMDC may in their absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP as per its requirements. GMDC reserves the right not to proceed with the project, to alter the timetable reflected in this document or to change the process or procedure to be applied. It also reserves the right to decline to discuss the Project further with any Party submitting a Proposal. No reimbursement of cost of any type will be paid to persons, entities submitting a Proposal/Bid.

The Bidder shall bear all costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by GMDC, or any other costs incurred in connection with or relating to its Bid, regardless of the conduct or outcome of the Bidding process.

Part 1: Introduction

1. Background about GMDC

Gujarat Mineral Development Corporation Ltd (GMDC) is a leading state-owned mining and minerals company in the western Indian state of Gujarat with operational experience spanning nearly 50 years. GMDC is a zero-debt company listed on national and Bombay Stock Exchanges. The Government of Gujarat (GoG) disinvested 26% stake to the public shareholders vide an IPO in 1997 while the balance Ownership is held by the Government of Gujarat.

GMDC's product portfolio spans across mining, value added products, and power, with mining activities spread across the state of Gujarat in districts Kutch, Devbhoomi Dwarka, Panchmahal, Vadodara, Bhavnagar, Bharuch, Surat and Chotaudepur. It currently mines Lignite from five operational mines, with five upcoming mines in the pipeline, and other minerals including Bauxite, Fluorspar, Manganese, Ball Clay, Silica Sand, Bentonitic Clay, and Limestone. It provides value added services through works such as Pyrite removal from Lignite, Beneficiation of Bauxite, low-grade Manganese, and Fluorspar.

To leverage its experience in mining operations, GMDC has set up a diversified power portfolio with forward integration into a 250 MW lignite-based thermal power Plant in Nani Chher, Gujarat, and clean energy sources including 200.9 MW of Wind power assets in Maliya, Jodiya, Gorsar, Bhanvad, Bada, Varvala, Rojmal, and a 5 MW Solar power project in Panandhro.

2. Plant details

2.1 Background about ATPS

GMDC has been operating a 250 MW lignite-based thermal power Plant (Akrimota Thermal Power Station, ATPS) over the past 15 years. ATPS has two units of 125 MW each commissioned in July 2006, and March 2007 respectively.

ATPS procures lignite required for generation of power from GMDC's mines (Mata na Madh, and Umarsar) located at proximity (~60 km) and transported directly to the Plant via road. Furthermore, the water supply to the power Plant is ensured through nearest Kori creek (through 1.4 km long sea water intake channel).

ATPS has a long-term power purchase agreement with GUVNL for supply of power till 2036, for the recovery of fixed charges and variable charges as per the actual Plant performance parameters (net availability, station heat rate, auxiliary power consumption).

The ATPS asset has been under-performing on key performance parameters with Net Availability, Station Heat Rate (SHR), and Auxiliary Power Consumption (APC) values having large deviations from normative values defined in the PPA, leading to cash burn for GMDC. Further, absence of adequate capital infusion for upkeep of the asset post commissioning, and lack of well-defined O&M and contracting practices have affected the overall performance of the asset.

2.2 DCS and Instrumentation: Introduction

ATPS currently has central ABB Symphony Harmony, and Symphony Melody Distributed Control Systems for Boiler and Turbine operations, in the Central Control Room of the Plant. Additionally, there are multiple remote DCS / PLC systems for other sub-systems in the Plant. All the remote DCS / PLC systems are not being monitored / controlled from the Central Control Room.

The Overview of all the DCS / PLC systems along with tentative I/O summary has been detailed below. The detail system architecture of all the DCS / PLC systems, and the Central Control Room Layout have been enclosed in Annexure 1 and Annexure 2 respectively

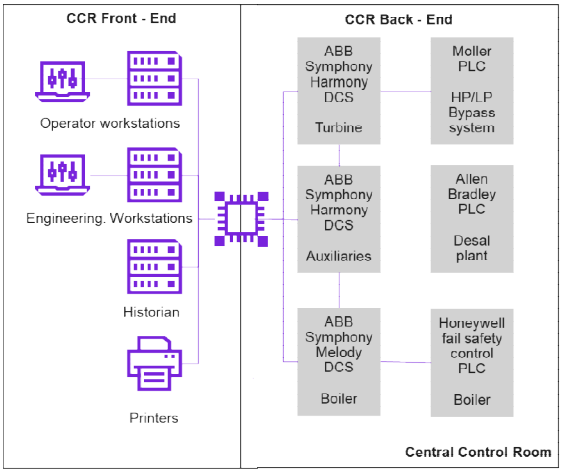
2.2.1 Overview

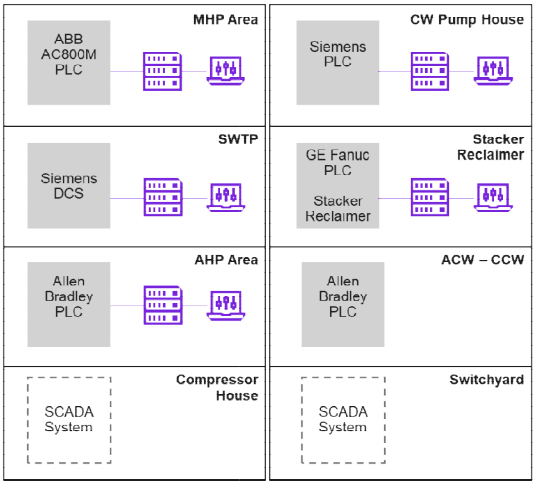
An overview of the DCS and PLC systems at the Plant is provided below.

S. No.	Area	DCS/ PLC	Make	Model	Application	Mode of communication
1.	CCR	DCS	ABB	Symphony Harmony	Boiler / turbine	Modbus, Hardwire
2.	CCR	DCS	ABB	Symphony Melody	Boiler protection, Burner management system, Lime feeding system, Auxiliary PRDS, Soot blowing system	CNR10 to CCR70, Hardwire
3.	CCR	PLC	Honeywell	FSC	Boiler management system	CNR10 to CCR71, Hardwire
4.	CCR	DCS	ABB	Symphony Harmony	Turbine	Modbus, Hardwire
5.	CCR	PLC	Allen Bradley	SLC 5/04	Steam conveys to SWTP (presently not in service)	Hardwire, Modbus
6.	CCR	PLC	Moller	PS4-341 MM1PLC 24 VDC WITH 16DI 3AI/AO	HP/IP bypass system	Hardwire
7.	ACW / CCW	PLC	Allen Bradley	SLC 04	ACW / CCW pump	Modbus
8.	MHP	PLC	ABB	AC800M	Coal handling Plant	
9.	SWTP	DCS	Siemens	Teleperm XP	Sea Water Treatment Plant & Auxiliary boiler	Modbus
10.	CW Pump House	DCS	Siemens	Teleperm XP	CW pump house	Modbus
11.	AHP	PLC	Allen	Logix 1756		Modbus

			Bradley			
12.	Stacker Reclaimer	PLC	GE Fanuc	CPUE05	Stacker reclaimer system	
13.	Compressor	PLC	Schneider Electric		SCADA system (not available right now)	Modbus

indicative existing layout of the all the DCS / PLC system in the Plant mentioned in the table above, is as follows –





2.2.2 I / O Summary

The tentative count of I/O modules in each of the individual DCS / PLC systems across various systems in the Plant is as follows –

Name	CLCS	OLCS	DI	DO	AI	AO	RTD	T/C	SED/ SER
Boiler	51	179	1373	204	515	332	125	195	16
Turbine	24	82	906	80	200	96	169	0	177
Alstom	48	101	832	362	175	12	40	0	
Ansaldo	6	11	515	609	200	219	0	0	
ACW-CCW			94	132	48				
AHP			441	441	45				
MHP			901	197	120	4			
Desal PLC (IP extraction system)			28	6	13	4			
Reject pump house			34	18	7				
HP/LP bypass system			48	48	16	16			
Electric			200	200					

busbar signal									
Fire hydrant system			107	80					
SWTP			992	480	320	144			
KBL			304	208	24				
Stacker PLC			210	80	13	4			

Signal

The tentative count of I/O for Modbus communication system between various DCS / PLC systems and the CCR is as follows –

Name	DI	DO	AI	AO
Compressor	720		252	
Switchyard	348		144	
SWTP	12		56	8
AHP	224		56	4
CW Pump House	24		24	
ACW/CCW	143		48	
Ansaldo - ABB	6	138	7	93
ABB - Ansaldo	158	2	93	7
ABB - Alstom	256	56	41	
Alstom - abb	60	176		
Unit 1 TO 2		64	50	61
Unit 2 TO 1	64		61	50
VMS			44	

2.2.4 Hardwire Signal

The tentative count of I/O for hardwire communication amongst the central DCS for Boiler and Turbine control is as follows –

Name	DI	DO	AI	AO
ABB to Alstom		13		42
Alstom to ABB		68		30
Ansaldo to ABB	17	14	7	
ABB to Ansaldo	14	17		7

2.3 DCS and Instrumentation: Brief description of systems and key issues

2.3.1 Front-End Sub-Systems

The Front-End Sub-Systems in the Plant C&I system are identified as all the hardware and software present in the Operations Network (O-net) of the Central DCS for Boiler and Turbine in the CCR, and the hardware and software present in the O-net of the Remote DCS / PLC systems in the Plant. It comprises of all the equipment starting from communication module connected to the Control Network (C-net) of the system, up to the operator / engineering workstations for the respective DCS / PLC system, which includes real time data servers, historian servers, printers, and all the cables connecting the equipment with the C-net communications card in the respective DCS / PLC system.

A preliminary list of issues identified related to the Front-End Sub-Systems are categorized into two broad categories as detailed below –

I. Central DCS for Boiler, Turbine, and Auxiliaries

Central DCS for Boiler, Turbine and Auxiliaries comprises of the following DCS / PLC systems – ABB Symphony Harmony Systems, ABB Symphony Melody System, Honeywell Fail Safety Control System, Moller HP/LP Bypass System, and Allen Bradley SLC 5/04 IP Extraction System. The key issues related to the Front-End Sub-Systems of these DCS include, but are not limited to the following:

i. Obsolescence of Microsoft Windows 2000 / Windows NT 4.0 operating system, with unavailability of corresponding computer spares and support
ii. Obsolescence of Human Machine Interface (HMI) & Programming software, with a very limited support available, leading to difficulties in operations and maintenance
iii. Non-functional historian servers (both primary and secondary)
iv. Non-functional SOE module, for sequence of events report generation during Plant breakdown
v. Unavailability of spares for HNCC and SCSI interface modules in the market, for the Operations Network (O-net)
vi. Unavailability of any cybersecurity and antivirus provisions in the current HMI system

II. Remote DCS / PLC Systems

Remote DCS / PLC Systems shall comprise of the following DCS / PLC systems – Allen Bradley SLC 04 installed for ACW / CCW, ABB AC800M installed for MHP, Siemens Teleperm XP installed for SWTP and CW Pump House, Allen Bradley Logix 1756 installed for AHP, GE Fanuc CPUE05 installed for Stacker Reclaimer, and the SCADA system for Compressor House and Switchyard. The key issues related to the Front-End Sub-Systems of these DCS / PLC systems include, but are not limited to, the following:

i. Unavailability of discrete operator and engineering workstations in the following PLC systems:

ii.

S. No.	Area	DCS/ PLC	Make	Model
1	CCR	PLC	Allen Bradley	SLC 5/04
2	ACW/ CCW	PLC	Allen Bradley	SLC 04

n

availability of Front-End hardware and software to monitor / control equipment operating parameters from CCR

iii. Nonfunctional SCADA system for the compressor house and the switchyard

2.3.2 Back-End Sub-Systems

The Back-End Sub-Systems in the Plant C&I system are identified as all hardware and software present in the Control Network (C-net) of each DCS / PLC system in the Plant. It comprises of all the equipment starting from the field instruments, up to the C-net communications module, which includes junction boxes, marshalling and system cabinets, and all the cables connecting the mentioned equipment with the C-net communications card in the respective DCS / PLC system.

The issues related to the Back-End Sub-Systems are categorized into two broad categories as detailed below –

I. Central DCS for Boiler, Turbine, and Auxiliaries

Central DCS for Boiler, Turbine and Auxiliaries comprises of the following DCS / PLC systems – ABB Symphony Harmony Systems, ABB Symphony Melody System, Honeywell Fail Safety Control System, Moller HP/LP Bypass System, and Allen Bradley SLC 5/04 IP Extraction System. The key issues related to the Back-End Sub-Systems of these DCS include, but are not limited to the following:

i. Excessive corrosion and poor state of the field instruments and junction boxes, as detailed in the Bill of Quantities (BoQ) attached as Annexure 3
ii. Congestion of wires in the marshalling cabinets of ABB Symphony Melody DCS, leading to difficulties in troubleshooting
iii. Obsolescence of following cards in the system cabinets:

iv.

S. No.	DCS	Type of Card	Card Model
1	ABB Symphony Harmony	Processor	IMMFP12
2	ABB Symphony Melody	Processor	CMC 50-2
3	Honeywell FSC	Processor	10020/1/1
4	ABB Symphony Melody	Communication	CCO 30-2
5	Honeywell FSC	Communication	10008/3/P

of availability of a central remote-based timeclock for all the DCS / PLC systems

v. Obsolescence of the Honeywell Fail Safety Control system connected to the ABB Symphony Melody DCS
vi. Lack of interoperability between the ABB Symphony Harmony and Symphony Melody systems

II. Remote DCS / PLC Systems

Remote DCS / PLC Systems shall comprise of the following DCS / PLC systems – Allen Bradley SLC 04 installed for ACW / CCW, ABB AC800M installed for MHP, Siemens Teleperm XP installed for SWTP and CW Pump House, Allen Bradley Logix 1756 installed for AHP, GE Fanuc CPUE05 installed for Stacker Reclaimer, and the SCADA system for Compressor House and Switchyard. The key issues related to the Back-End Sub-Systems of these DCS / PLC systems include, but are not limited to, the following:

i. Complete / Partial obsolescence of the following remote DCS / PLC systems –

S. No.	DCS / PLC	Area	Status
1	Siemens Teleperm XP	SWTP	Complete obsolescence
2	Siemens Teleperm XP	CW Pump House	Complete obsolescence
3	ABB AC800M	MHP	Partial obsolescence
4	Allen Bradley SLC 5/04	Desal PLC (IP extraction system)	Controller discontinuation announced from April, 2024
5	Allen Bradley SLC 04	ACW / CCW	Controller discontinuation announced from April, 2024

ii. t
e of the field instruments and junction boxes due to corrosion

iii. Lack of availability of a central remote-based timeclock for all the DCS / PLC systems

iv. No provision for data monitoring and control of the remote PLCs from the CCR. Prosoft Modbus (RS-232) communication cards and corresponding cables have been installed for select PLC systems (as detailed in Section 2.2.3 of Part 1 of this document), connecting the PLC systems to the CCR. However, the Modbus communication systems are currently non-functional

v. Non-functional UPS system for all the remote DCS / PLC systems

3. Context of RFP

3.1 Intent of specification

The intent of this specification is to carry out upgradation of DCS and Instrumentation systems according to the terms of reference / scope of work detailed in Part 2 of this document.

The Bidder shall guarantee the performance parameters stipulated in Section 5.2 of Part 2 of this document towards successful execution and completion of the upgradation of DCS and Instrumentation systems. The Bidder shall ensure the upgradation of the system resolves the issues of obsolescence, non-functional parts, absence of workstations, corrosion of field instruments etc., as specified in Section 2.3 of Part 1 of this document.

The scope of work shall include provision of supply and services for complete upgradation of DCS and Instrumentation systems in the Plant. Services shall include dismantling of previous equipment, refurbishment, retrofitting, inspection of equipment, replacing, repairing, upgradation, carrying out all pre-commissioning tests and or checks, trial runs, running performance tests of various equipment and systems covered under the specification, and any other work required to ensure sustainable performance of the system. Supply shall include procurement, inspection of material at suppliers' works, packing, transportation and installation of requisite spares.

3.2 Battery Limits

The Successful Bidder shall be responsible for upgradation of all DCS / PLC systems and associated electrical / civil / IT equipment within the Plant, as part of the scope of work, as detailed in Part 2 of this document. This requirement includes all equipment starting at Terminal 1 and ending at Terminals 2, and 3 as detailed below:

- Terminal 1: Field junction boxes receiving cables from all the field instruments
- Terminal 2: Operator / Engineering consoles of all the DCS and Instrumentation systems present at the remote system locations in the plant
- Terminal 3: Operator consoles of all the DCS and Instrumentation systems in the Central Control Room

Additionally, the Successful Bidder shall be required to supply and install SCADA system for Compressor House and Switchyard. This requirement includes all equipment starting at Terminal 1 and ending at Terminal 2, and 3 as detailed below:

- Terminal 1: Field instrument measuring the respective operating parameter as per Annexure 5
- Terminal 2: Operator / Engineering consoles of all the DCS and Instrumentation systems present at the remote system locations in the plant
- Terminal 3: Operator consoles of all the DCS and Instrumentation systems in the Central Control Room

3.3 Plant visits

The Bidders are invited to visit the Plant and understand the equipment installed and their working conditions, prior to submission of the Bids. The objective of the Plant visits shall be to understand the scope of work, feasibility of execution, and make the Bidders fully conversant with the job, site conditions, constraints, and collect all information as required and as available before quoting against this specification.

The visits are optional, the Bidders can opt to visit the Plant at their own discretion. Should they opt to visit the Plant, the Bidder shall submit a Plant visit plan to the Owner indicating the timelines and the key personnel visiting, for prior consent and approval. The Owner shall facilitate the visits for the Bidders and make necessary arrangements at the Plant. The cost of the Plant visit, including transportation and accommodation, shall be borne by bidder.

3.4 Integration of equipment / system

Out of complete unit comprising of mechanical, electrical, C&I systems, and civil works, some components/systems are envisaged to be replaced with new ones having better design features while some of the other components are to be refurbished / upgraded or repaired/ Overhauled by the Successful Bidder under the scope of work.

It shall be the responsibility of the Successful Bidder to ensure the components / equipment / systems being supplied, refurbished / upgraded, or repaired / Overhauled are fully integrated with the existing equipment / systems so as to get safe, reliable, and sustained operations of the Plant.

In this context, GMDC is looking for a comprehensive upgradation of the DCS and Instrumentation Systems across both units of the Plant, and is inviting Bids from bona fide and experienced Bidders of financial standing, reputation, and providing such services across India, for the following job:

Name of work:	Request for Proposal (RFP) for DCS and Instrumentation Upgradation of GMDC's 250 (2x125) MW Akrimota Thermal Power Station (ATPS), Gujarat
RFP no.:	GMDC/Power/ATPS/04/23-24

Part 2: Terms of reference / Scope of Work

1. Definitions of the terms and conditions of the RFP

1.1 Definitions

For the purpose of the Contract, the following words and expressions in this Section shall have the respective meanings set forth below:

"**Applicable Laws**" shall mean all laws, treaties, ordinances, rules, regulations applicable in India and amendments, re-enactments, revisions, applications, and adaptations thereto made from time to time and in force and effect, judgments, decrees, injunctions, writs and orders of any court, arbitrator or governmental agency or authority, rules, regulations, orders and interpretations of any Governmental Instrumentality, court or statutory or other body having jurisdiction over construction of the Plant, performance of the Work or supply of Goods, operation and maintenance of the Plant, including Applicable Permits, as may be in effect at the time of performance of work or supply of Goods hereunder by the Bidder, which time would include Latent Defects Period as appropriate, provided, however, that if at any time the Applicable Laws are less stringent than the standards set forth in the Contract hereto, the standard set forth in the Contract hereto shall be deemed to be the standards under Applicable Laws.

"**Applicable Permits & Clearances**" shall mean any and all Permits, Clearances, Authorizations, consents, licenses (including without limitation any import or export licenses), lease, ruling, exemption, filing, agreements, or Approvals, required to be obtained or maintained in connection with construction of the Plant, performance of Work, and the operation of the Plant respectively by the Bidder and the Owner in accordance with the Contract and their maintenance, as may be in effect at the time of Bidder's supply of Goods hereunder; which time would include Latent Defects Period as appropriate.

"**Approval**" shall mean the written approval of the Owner and of the statutory authorities, wherever such authorities are specified by any codes or otherwise.

"**Arbitration Act**" shall mean Arbitration and Conciliation Act, 1996, or any amendment or re-enactment thereof.

"**Authorization**" shall mean approvals required under Applicable Law.

"Back-End Sub-Systems" shall mean all hardware and software present in the Control Network (C-net) of each DCS / PLC system in the Plant. It comprises of all the equipment starting from the field instruments, up to the C-net communications module, which includes junction boxes, marshalling and system cabinets, and all the cables connecting the mentioned equipment with the C-net communications card in the respective DCS / PLC system

"**Bid**" shall mean the offer of the Bidder to the Owner in response to the Bid Enquiry

"Bidder" shall mean single corporate entity Bidding for the Contract

"**Bidder Permits**" shall mean all Permits, required by the Bidder from any Government Instrumentality for the performance of his obligations

"**Bidder's Representative**" shall mean the person named as such in the Contract or other person appointed and from time to time communicated to the Owner by the Bidder in his place in accordance with the terms of the Contract.

"**Bid Security/Earnest Money Deposit (EMD)"** shall mean the security provided by the Bidder to the Owner along with the Bid.

"Central DCS for Boiler and Turbine" shall comprise of the following DCS / PLC systems – ABB Symphony Harmony Systems, ABB Symphony Melody System, Honeywell Fail Safety Control System, Moller HP/LP Bypass System, and Allen Bradley SLC 5/04 IP Extraction System

"**Commencement Date**" shall be the date 7 (seven) days from the date of signing of the LoA for services to be provided by the Bidder

"**Contract**" shall mean the documents as set out in the form of Contract Agreement as may be amended, supplemented, or modified from time to time by agreement in Writing between the Parties.

"**Contract Period**" shall mean the period from the Commencement Date up to and including the last day of the Contract.

"**Documents**" shall mean and includes all design documents, engineering documents, Drawings, calculations, computer software (programs), computer media, samples, patterns, models, construction documents, erection documents, Operation and Maintenance Manuals, and other manuals, and the like as well as, all other data and information to be submitted by the Bidder and shall include without limitation, engineering, design and construction drawings, data sheets, specifications, plans, bills of Materials and estimates.

"Front-End Sub-Systems" shall mean all the hardware and software present in the Operations Network (O-net) of the Central DCS for Boiler and Turbine in the CCR, and the hardware and software present in the O-net of the remote DCS / PLC systems in the Plant. It comprises of all the equipment starting from communication module connected to the Control Network (C-net) of the system, up to the operator / engineering workstations for the respective DCS / PLC system, which includes real time data servers, historian servers, printers, and all the cables connecting the equipment with the C-net communications card in the respective DCS / PLC system

"**Governmental Authority**" shall mean the Government of India, the state government, any local authority constituted under an act of legislature, and any other authority exercising any power or function in pursuance of an act of legislature, or any rules and regulations made there under, and any successor thereof having legal jurisdiction over the matter or person in question.

"**Goods**" shall mean all of the equipment, machinery, apparatus, appliances, components and/or other Materials and things, which the Vendors are required to supply to the Owner under the Contract.

"**Good Industry Practice**" shall mean those practices, methods, acts, techniques and standards as may be followed or employed in the performance of the Work or supply of Goods and discharge of its obligations by the Bidder and which (i) are generally accepted internationally for use in the electric utility industry, taking into account conditions in India, in connection with power stations of the same or similar size and type as the Plant, (ii) are

commonly used in prudent electric utility engineering, construction, project management and operations, and (iii) would be expected to result in performance of the Services and completion of Works in a manner consistent with Applicable Laws, Applicable permits, reliability and safety.

"**GUVNL**" shall mean Gujarat Urja Vikas Nigam Limited

"**Lumpsum Charges for DCS and Instrumentation Upgrade**" shall mean the comprehensive DCS and Instrumentation upgradation charges payable by the Owner to the Bidder in respect of execution of all the services and provision of spares as indicated in Section 3 of Part 2 in this document.

"**Notice in Writing**" or "**Written Notice**" shall mean a Notice in Writing, typed, or printed or handwritten characters, sent (unless delivered personally or otherwise proved to have been received) by registered post or by electronic transmission to the last known private or business address or registered office of the addressee and shall be deemed to have been received when in the ordinary course of post or by electronic media it would have been delivered.

"Overhaul" shall refer to the planned maintenance being undertaken for the 2X125 MW Akrimota Thermal Power Station to enhance performance and reliability of the asset. The Upgradation of DCS and Instrumentation Systems to be undertaken by the Successful Bidder shall be a part of the Overhaul

"Overhauling Activities" shall refer to all the activities that are needed to be performed for successful Overhaul of the 2X125 MW Akrimota Thermal Power Station

"**Owner**" shall mean Gujarat Mineral Development Corporation Limited hereinafter referred to "GMDC", in its capacity as Owner and shall include its successors and assigns, as well as authorized officers.

"**Owner's Representative**" shall mean the person appointed by the Owner from time to time and notified as such to the Bidder to act as Owner's Representative for the purposes of the Contract.

"PMC" shall mean the Project Management Consultancy appointed by Authority / GMDC for providing PMC services for turnaround of GMDC's 2X125 MW Akrimota Thermal Power Station (ATPS)

"Package" shall mean a group of ATPS systems that are Packaged together for the execution of Overhaul

"**Party**" shall mean Owner or Bidder individually and "Parties" means Owner and Bidder collectively.

"**Personnel**" shall mean employees/personnel engaged by the Bidder who are based in India and are directly or indirectly engaged by the Bidder in the performance of the Bidder's obligations under this Agreement at the Plant.

"**Plant**" shall mean the 2X125 MW lignite based thermal power Plant operated by GMDC in Akrimota (Akrimota Thermal Power Station, ATPS), comprising of 2 units of 125 MW each

"Procurement Activities" shall mean the activities needed to be performed for Procurement of all the raw materials and services for DCS and Instrumentation upgrade of the 2X125 MW Akrimota Thermal Power Station

"Remote DCS / PLC Systems" shall comprise of the following DCS / PLC systems – Allen Bradley SLC 04 installed for ACW / CCW, ABB AC800M installed for MHP, Siemens Teleperm XP installed for SWTP and CW Pump House, Allen Bradley Logix 1756 installed for AHP, GE Fanuc CPUE05 installed for Stacker Reclaimer, and the SCADA system for Compressor House and Switchyard

"Successful Bidder" shall mean the Bidder who is selected by Authority / GMDC for providing services for upgradation of DCS and Instrumentation system of GMDC's 2X125 MW Akrimota Thermal Power Station (ATPS) and shall include such Successful Bidder's legal representatives, successors and permitted assigns

"Turnaround" shall refer to the planned maintenance being undertaken for the 2X125 MW Akrimota Thermal Power Station to enhance performance and reliability of the asset

"**Willful Default**" shall mean an intentional or reckless breach or/ and omission by a Party of any of its obligations under the Contract

1.2 Interpretation

Words importing Persons or Parties shall include related firms and corporations and any organization having legal capacity. Words importing the singular also include the plural and vice versa where the context requires. Words importing one gender also include other genders.

Unless inconsistent with the provisions of the Contract, the meaning of any shipping terms and the rights and obligations of the Parties there under shall be as set forth in the latest International Chambers of Commerce (ICC) official rules for interpretation of trade terms as per "INCOTERMS 2010"

1.3 Law, language, and measurements

Applicable Law to this Contract shall be the Indian Law. The respective rights, privileges, duties and obligations of the Owner and the Successful Bidder under the Contract shall be governed and determined by the Laws of State and of the Republic of India.

All correspondence, information, literature, data, manuals, definitive documents, notices, waivers, and all other communication, written or otherwise, between the Parties in connection with this Contract shall be in English. The official text of this Contract shall be English.

All measurements shall be in metric system.

1.4 Stamp duty and similar charges

The costs of stamp duties and similar charges imposed by law on the Contract or Agreement, or any part thereof shall be borne by the Successful Bidder.

1.5 Commencement of Contract

The Successful Bidder, along with the payment of Performance Security, will enter into a Contract with the Owner on appropriate Stamp Paper (to be provided by the Successful Bidder) in token of acceptance of the terms and conditions of the contract, within 7 (seven) days of submission of its acceptance of the Letter of Award (LOA). In case of any necessity arising after executing the Contract and during the execution of the work, which requires alteration/modifications in the Contract, the same can be made in writing by either party, after mutual understanding and consent of both the parties. The Successful Bidder will have to start the work as per the Scope of Work described in the Section 3 of Part 2 of this document, within 7 (seven) days from the date of acceptance of the LOA. In case of failure to commence the work within the abovementioned period, the liquidated damages shall be levied as per the provision of Section 7.1 of Part 2 of this document

1.6 Successful Bidder's use of Owner's documents

Copyright in the Owner's requirements and other Documents issued by the Owner to the Successful Bidder shall (as between the Parties) remain the property of the Owner. Ownership in all documents provided by the Successful Bidder to the Owner pursuant to the Contract including design, engineering, Drawings and Works layout (but excluding proprietary information and Manuals provided by Successful Bidders of equipment for use of the Owner) shall vest in the Owner. The Successful Bidder may, at its Cost, copy, use and communicate any such documents for the purposes of the Contract. They shall not, without the Owner's consent, be used, copied, or communicated to a third-party by the Successful Bidder, except as necessary for the purposes of the Contract including performance of Work or supply of Goods.

The Successful Bidder shall indemnify the Owner in case of breach of this Section by the Successful Bidder. If these Documents are received by a third-party from the Successful Bidder and the third-party makes use of these Documents to cause harm or monetary loss to the Owner or use these Documents for their personal gain / monetary gain, the Successful Bidder shall compensate the Owner for the loss suffered as well as for the value of gain derived by third-party.

1.7 Confidential details

The Successful Bidder shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out his obligations hereunder. The Successful Bidder shall not publish, permit to be published, or disclose any particulars of the Contract in any trade or technical paper or elsewhere without the previous consent in writing of the Owner and at the Owner's sole discretion.

The Successful Bidder shall indemnify the Owner in case of breach of this Section. If the confidential details relating to this Contract or its contents are received by a third-party from the Successful Bidder and the third-party makes use of these details to cause harm or monetary loss to the Owner or use these Documents for their personal gain/ monetary gain, the Successful Bidder shall compensate the Owner for the loss suffered as well as for the value of gain derived by the third-party. The Successful Bidder shall not use the confidential details of the Contract for any other purpose except for the strict purpose of this Contract.

2. Appointment of Successful Bidder

2.1 Appointment terms

Based on the results of this Bid as per the evaluation criteria mentioned in Section 5 of Part 3 of this document, the Owner shall appoint the Successful Bidder, and the Successful Bidder shall accept the appointment to deploy skilled, qualified, and competent manpower, and necessary systems, infrastructure, equipment, spares, system, software, and tools as required for efficient execution of the Overhaul, subject to the terms and conditions mentioned in the Contract.

The Owner reserves the right to increase or decrease the contractual work during the Contract period by giving prior notice in writing. Successful Bidder shall not be entitled to any compensation or indemnity on account of increase or decrease in the contractual work.

In case of requirement of execution of additional work as part of the scope of work detailed in Section 3 of Part 2 of this document during the Contract period, contractor shall be responsible to execute such additional work during the Contract period at the same rate finalized for the respective works. No escalation in the rate of the works for such additional work during the contract period shall be considered.

In case of a requirement of other works which are not covered in the scope of work detailed in Section 3 of Part 2 of this document, but the same is necessary for successful completion of the upgradation of DCS and Instrumentation System in the plant, the Successful Bidder may be assigned that work at the lowest rate derived and mutually agreed between the Successful Bidder and the Owner.

The MD is authorized to take suitable decision and action in case of requirement to amend/alter the contract conditions/quantities of the works/ extension of the contract period/allotment of additional works/revision of the rates of the work etc., if necessary, in the interest of the Owner.

2.2 Duration of the Contract

The Contract shall be deemed to have come into force and shall be effective from 7 (seven) days from the date of acceptance of the Letter of Award (LOA) by the Owner to the Successful Bidder, and the Successful Bidder shall execute the scope of work for provision of services and supply of material as covered in Section 3 within a period of 40 weeks from the date of acceptance of LoA. In the said duration, the Successful Bidder shall complete the following key activities in the Package as per the stipulated timelines, where T shall mean the date of acceptance of the LOA:

S. No	Activity	Duration
1	Mobilization	T + 2 weeks
2	Completion of supplies	T + 24 weeks
3	Completion of pre-overhauling activities	T + 24 weeks
4	Upgradation and commissioning of DCS and Instrumentation systems	T + 32 weeks
5	Completion of Performance Guarantee Testing for both the units	T + 40 weeks

1. Detailed procurement and upgradation execution planning

2. Procurement of equipment / material as per BoQ for the DCS and Instrumentation Upgrade across both units
3. Delivery of equipment / material as per BoQ for the DCS and Instrumentation Upgrade at the Plant
4. Completion of pre-shutdown activities (e.g., mobilization, inspections, civil works, etc.)
5. Repairing, Overhauling, Upgradation, installation, commissioning, and testing of systems for the DCS and Instrumentation Upgrade as per specifications, and scope of work across both units

The Contract shall be deemed to be successfully executed post completion of the aforementioned activities, as certified by competent authority from the PMC and Owner. The Successful Bidder shall strive to complete the execution within the stipulated period of 40 weeks, however, in case of a delay, the Successful Bidder shall ensure completion of its contractual obligations as early as possible, while the Owner reserves the right to levy liquidated damages as described in Section 7.1 of Part 2 of this document.

3. Responsibilities of the Successful Bidder

The responsibilities of the Successful Bidder as part of the Contract have been segregated into three key categories – services, supply, and functional requirements. The terms of reference / scope of work have been detailed for each category below.

3.1 Scope of services

The scope of the Contract shall be providing end-to-end services for Upgradation / Overhaul of the DCS across both units of the Plant. The Successful Bidder shall ensure execution of the scope of work is done in accordance with good industry practice, standards of safety, and mutually agreed terms with the Owner. The activities to be undertaken by the Successful Bidder for execution of the Upgradation / Overhaul shall include, but is not limited to, the following –

3.1.1 Pre-Overhauling Activities

3.1.1.1 Detailed Overhaul Planning

1. The Successful Bidder shall create a detailed ‘Overhaul Execution Plan’ for the DCS and Instrumentation package in collaboration with the PMC, focusing on sequencing of activities, identification of interdependencies, and indicating clear milestones, in line with timelines mentioned in Section 2.2 (Contract Duration) and Section 8.2 (Payment Milestones) of Part 2 of this document
2. The ‘Overhaul Execution Plan’ shall be used as the single source of truth for monitoring schedule compliance for the Successful Bidder, i.e., deviations in actual timelines vis-à-vis planned timelines
3. The ‘Overhaul Execution Plan’ shall be at an equipment level, encompassing all activities including but not limited to dismantling, procurement, installation of new system, commissioning, and testing

4. The Successful Bidder shall prepare appropriate Quality Assurance Plan (QAP) or Quality Inspection Plan (QIP) and Quality Control Plan (QCP), for execution of the Overhaul and shall get it reviewed by competent authority from the PMC and the Owner. The Successful Bidder shall apprise the Owner about the plans to enable frequent audits, and highlight potential concerns, if any

3.1.1.2 Owner readiness assessment and support

1. The Successful Bidder shall, in collaboration with the PMC, conduct audits and physical verification of existing inventory at the Plant to identify the equipment and associated spares and material readily available to be utilized during the Overhaul
2. Successful Bidder will assess the availability of required spares at the Plant. They will conduct a gap analysis and incorporate the additional material to be procured in the 'Procurement Register' (detailed in Section 3.2.1) to ensure optimal Procurement and consumption of material.
3. The Successful Bidder shall submit a list of deliverables to be provided by the Owner, indicate, and align the support required from the Owner during the execution of the Overhaul to ensure minimal delays

3.1.1.3 Statutory approvals

The Successful Bidder shall obtain, on behalf of the owner, all necessary statutory approvals from Inspection Authorities, or other government authorities, as may be required, as per Applicable Laws along with the associated cost. All necessary documentation prepared and / or obtained for such statutory approvals shall be submitted to the Owner for review prior to submitting for approvals to relevant authorities. Coordination and liaising with competent authority is in the scope of Successful Bidder.

3.1.1.4 Workforce deployment

1. The Successful Bidder shall deploy a 'DCS Package Leader' with strong technical expertise and experience of over 12 years in operations, maintenance, commissioning of Distributed Control Systems, and with prior experience in Upgradation of at least 2 DCS in thermal power plants with capacity >=125 MW, in coal or lignite-based thermal power Plants in India
2. The Successful Bidder shall deploy two "Instrumentation and Electrical Leaders", as per the table mentioned below, with strong technical expertise and experience of over 7 years in operations, maintenance, commissioning of Distributed Control Systems.
3. The 'DCS Package Leader' shall coordinate with the PMC and the Owner on all matters pertaining to the execution of the Overhaul
4. The minimum requirements for the Successful Bidder to ensure coverage of all equipment within the battery limits has been summarized below:

S. No	Member	Role	Minimum requirement	Minimum Qualification
1	DCS Package Leader	Overall package coordinator	1	Graduation in mechanical / electrical / power / instrumentation / or equivalent engineering (B.E / B.Tech) with at least 12 years of relevant experience
2	Instrumentation and Electrical Lead – Central DCS for Boiler and Turbine	Supervisor for instrumentation and electrical activities, for Central DCS for Boiler and Turbine	1	Graduation in mechanical / electrical / power / instrumentation / or equivalent engineering (B.E / B.Tech) with at least 7 years of relevant experience
3	Instrumentation and Electrical Lead – Remote DCS / PLC systems	Supervisor for instrumentation and electrical activities, for Remote DCS / PLC systems	1	Graduation in mechanical / electrical / power / instrumentation / or equivalent engineering (B.E / B.Tech) with at least 7 years of relevant experience

5. The Successful Bidder shall ensure that all deployed personnel are available at the Plant at all times during the execution of the 'Overhaul Execution Plan'. The 'DCS Package Leader' shall be present at the Owner's corporate office in Ahmedabad for progress review and other meetings that may be organized during the course of the Overhaul. The Successful Bidder, at their own cost, shall arrange for their own accommodation for representatives travelling to Ahmedabad for such meetings
6. The Successful Bidder shall submit details of all deployed personnel for execution of the Overhaul to the PMC prior to deployment and ensure they are in line with Contractual requirements

3.1.1.5 Infrastructure arrangement

1. While the Owner will arrange for the accommodation and food for Successful Bidder's personnel deployed in the Plant on the basis of availability and on a chargeable basis, in case infrastructure is not available, the Successful Bidder shall be responsible for arranging the same for the entire course the Overhaul.
2. The Successful Bidder shall maintain a dedicated shed / workshop for conducting necessary works including but not limited to soldering, fabrication, repair, storage of material, system / equipment testing, calibration etc. The Owner shall provide access to the available facilities and workshop in the Plant with prior written consent, as per availability

3.1.1.6 Safety arrangements

1. The Successful Bidder shall ensure the personnel deployed in the Plant adhere to the appropriate health, safety, and environment (HSE) requirements at the time of deployment. This will include medical tests required, if any, among other requirements to be aligned with the Plant HSE team
2. The Successful Bidder shall make own arrangement for proper electronic as well as electrical grounding of all systems as per the industrial standards, supplied by him as required by the system design. All required accessories including grounding cables are also included in Successful Bidder's scope.
3. The Upgradation / Overhauling work by the Successful Bidder shall be carried out in such a manner that no damage is caused to existing equipment / foundations / structure and all precautions, including strengthening of existing structures, as may be necessary, shall be taken by the Successful Bidder to ensure safety of existing Plant / equipment / foundation / structures

3.1.1.7 Permits

1. The Successful Bidder shall obtain and maintain in effect all applicable permits required in connection with the Successful Bidder's performance of its obligations hereunder, including but not limited to licenses to permit the Successful Bidder to do business in the jurisdictions where the work is to be performed, design, engineering, procurement (including loading / unloading), fabrication, construction, erection, testing and commissioning, start-up testing, tests before taking-over, export, import, and other applicable permits required to move, transport, and deliver material / equipment to and from the Plant
2. Successful Bidder shall obtain all necessary Construction permits. If the Successful Bidder at any time becomes aware, whether as a result of notice from Owner or otherwise, of any applicable permit not obtained by him, the Successful Bidder shall promptly give notice thereof to Owner and the Successful Bidder shall be responsible for obtaining such applicable Permit
3. The Successful Bidder shall provide support to the Owner in obtaining necessary Owner's permits, including but not limited to the following activities:
    i. Overall co-ordination of permitting requirements

ii. Attendance at meetings with Owner and third parties designated by Owner
iii. Preparation of permit applications or, as applicable, application to transfer permits to the Owner
iv. Assistance in preparation of responses to inquiries by governmental instrumentalities/ agencies
v. Assistance in presentations at hearing of governmental instrumentalities / agencies
vi. Provision of all available information and documents required by Owner in connection with obtaining any Owner Permits; and
vii. Such other services as Owner may request from time to time required for Owner permits

3.1.2 Overhauling Activities

3.1.2.1 Dismantling of existing equipment

1. The Successful Bidder shall be responsible for dismantling of existing Central DCS for Boiler, Turbine, and Auxiliaries (if needed), and dismantling of all the Remote DCS / PLC Systems, prior to the initiation of the Overhaul, including but not limited to the cabinets, panels, unit control boards, cables, field instruments and associated devices, process piping and fittings, instruments racks, junction boxes etc. The Successful Bidder shall also need to re-install any dismantled equipment as and when needed during the Overhaul
2. The Successful Bidder shall ensure that all the dismantled components are appropriately stored in 'as it is' condition in the area allocated by the Owner for storing the dismantled equipment
3. The Successful Bidder shall take the complete DCS backup of the existing system configuration, control logics, P&ID graphics, and any other relevant information necessary for system engineering and connectivity, before dismantling the existing system.

3.1.2.2 Requirements from the DCS and Instrumentation Systems of the Plant

1. Successful Bidder's obligations cover complete upgradation of Central DCS for Boiler and Turbine. The Successful Bidder may choose to upgrade / replace the existing system as per the requirements mentioned in Section 3.1.2 of this document, without compromising the existing control philosophy at the Plant. The Successful Bidder shall guarantee, for the upgraded Central DCS for Boiler and Turbine, active support for a minimum of 15 years after the completion of the Overhaul. In case the Successful Bidder / OEM upgrades any of the supplied hardware / software in the future, making the installed system obsolete, the Successful Bidder shall update the same at the Plant without any costs up to 15 years after the completion of the Overhaul
2. Successful Bidder shall replace and upgrade all the Remote DCS / PLC Systems to certified latest versions, without compromising the existing control philosophy at the Plant, and shall guarantee an active support for a minimum of

15 years after the completion of the Overhaul. In case the Successful Bidder / OEM upgrades any of the supplied hardware / software in the future, making the installed system obsolete, the Successful Bidder shall update the same at the Plant without any costs up to 15 years after the completion of the Overhaul

3. Successful Bidder's obligations, unless specifically excluded, covers the supply, erection and commissioning of all the Remote DCS / PLC Systems. The Successful Bidder shall prepare erection and installation procedure all the Remote DCS / PLC Systems.
4. Successful Bidder's obligations, unless specifically excluded, covers the supply and installation of necessary hardware and software, to enable monitoring / control of select critical parameters (as defined in section 3.1.2.3 and 3.1.2.4 of Part 2 of this document) of the Remote DCS / PLC Systems, from the Central Control Room of the Plant
5. Successful Bidder shall submit a certificate / document from the OEM / Successful Bidder, to certify that all the supplied and installed DCS / PLC systems are the latest versions the respective systems provided by the OEM / Successful Bidder
6. The services required for upgradation of these systems shall include, but are not limited to supply of material, equipment, spare parts, consumables, staff and labor, structures and facilities, transportation (including unloading to and loading from the Plant), insurance, storage as required for complete Upgradation / Overhauling of the DCS / PLC systems
7. Successful Bidder shall, unless specifically excluded, mobilize all resources, spares, consumables, tools & tackles, and procure all items / material / equipment that can be reasonably inferred from the Contract as being required for fulfillment of services defined in this Section
8. All the materials / items / equipment / services required to fulfill the intent of executing complete Upgradation / Overhauling of the Control and Instrumentation systems in the Plant to ensure operability, maintainability, and reliability of the Plant, but not specifically mentioned in this document shall also be deemed to be included. The Successful Bidder shall ensure that the work is consistent with modern power plant practices, and comply with all applicable codes, standards, guides, statutory regulations, safety requirements in force
9. Successful Bidder shall not modify the existing control philosophy of all the control and instrumentation systems. The Successful Bidder shall create, submit, and take the approval of PMC and the Owner for all the detailed engineering documents including loop diagrams, graphic displays, system architectures etc., for all the works defined in Section 3 of Part 2 of this document. Any modifications in the submitted documents, identified during the Overhaul execution, shall be submitted to the PMC and the Owner for approval. All the documentation shall be done in hard as well as soft form
10. Successful Bidder shall prepare a detailed check list with step-by-step procedure to be carried out for pre-commissioning, loop checking, and commissioning, for all the DCS / PLC systems
11. Successful Bidder shall deploy highly competent engineers, supervisors, and skilled workers for the execution of the Overhaul. The Successful Bidder shall protect all instruments, impulse tubes / fittings, painting from physical damage

and contamination by any foreign material, during the execution of the Overhaul

12. Successful Bidder shall provide identification plates / tags for all the component modules with the following information –
    i. Manufacturer's Name
    ii. Part / model number
    iii. Serial number
    iv. Equipment code
    v. Power supply – Voltage, Current and Frequency
    vi. Manufacturing year

3.1.2.3 Front-End Sub-Systems

Services to be provided by the Successful Bidder for Upgradation / Overhauling of Front-End Sub-Systems shall include, but is not limited to, the following:

I. Central DCS for Boiler, Turbine, and Auxiliaries

Services to be provided by the Successful Bidder for Upgradation of Front-End Sub-Systems for the Central DCS for Boiler and Turbine shall include, but is not limited to, the following:

i. Replace and upgrade all the Front-End Sub-Systems of the Central DCS for Boiler, Turbine, and Auxiliaries, to the certified latest version
ii. Replace and upgrade Real Time Data Servers (both primary and secondary) with latest Windows OS. Provide a cabinet for all the server controllers in the Engineering Station room
iii. Replace and upgrade the existing communication modules (both primary and secondary) in the Operations Network, with Ethernet / Optical Fiber based interface
iv. Upgrade the Human Machine Interface (HMI) system with latest operational functionalities
v. Replace and upgrade all the existing operator/engineering workstations with a minimum of 32-inch interchangeable workstations
vi. Replace and Upgrade the Alarm Management and Annunciation System, as per the requirements defined in Section 3.3 of Part 2 of this document
vii. Replace and upgrade all the operator workstations, engineering workstations, and printers, as per the system configuration provided in Annexure 1. Supply front end desk and new furniture for the HMI system (if needed) with a minimum warranty of 3 (three) years
viii. Supply 2 (two) portable nos. of portable CD drives. Supply 16 nos. of tablets with pre-installed logbook design / application for logging and reporting purposes
ix. Engineer all the functional and protection logics in the upgraded system, as per the existing control logics in the Plant
x. Supply and install all the front-end hardware and software in the DCS needed to enable monitoring and control of all the additional parameters detailed in Annexure 5 of the document

xi. Supply and install all the front-end hardware and software needed to enable monitoring of the following flue gas parameters – Opacity (SPM), O2, CO, SOx, NOx, temperature and pressure

xii. Provide cyber-security measures as per the CEA guidelines for thermal power plants. Supply and install a server-based security system for safe and secured updating process of the security patches and the system / application software, developed by OEMs from time to time

xiii. Replace and upgrade the historian servers (both primary and secondary), with 3 hard disks of at least 1 TB under RAID configuration

xiv. Provide data storage and reporting as per the requirements defined in Section 3.3 of Part 2 of this document

xv. Replace the Sequence of Events (SOE) module, for sequence of events report generation during Plant breakdown

xvi. Provide system self-diagnostic features as per the requirements defined in Section 3.3 of Part 2 of this document

xvii. Provide redundant logic with I/O modules for fail safe operations of all critical control loops / systems

xviii. Supply and install two cameras for furnace visualization via PADO tools detailed in Section 3.3.4 of Part 2 of this document

xix. Supply, install and configure two (2) large screen displays connected to the central DCS for each unit in shift in-charge's office and Plant general manager's office respectively, for monitoring purposes

xx. Supply and install fire alarm and detection system for the entire plant and provide a separate client server for the same in the CCR

xxi. Supply and install hardware and software necessary to provide operations and monitoring facilities for the fire hydrant system in the Plant

xxii. Supply and install Network Healthiness Monitoring system in the CCR for monitoring of C&I network of the Plant

xxiii. Supply and installation of a 200 line EPABX system in the plant area and a 300 line EPABX system in the colony with intercom and cable connections

xxiv. Provide OEM recommended and certified spares for all the equipment replaced / upgraded. The Successful Bidder shall ensure that a minimum of 10% of installed quantity of spare cards are provided

II. Remote DCS / PLC Systems

Services to be provided by the Successful Bidder for Upgradation / Overhauling of Front-End Sub-Systems for the Remote DCS / PLC Systems shall include, but is not limited to, the following:

i. Replace and upgrade the Front-End Sub-Systems of all the Remote DCS / PLC Systems, to the certified latest version

ii. Replace and upgrade Real Time Data Servers (both primary and secondary) with latest Windows OS, for all the Remote DCS / PLC Systems.

iii. Replace and upgrade the existing communication modules (both primary and secondary) in the Operations Network, with Ethernet / Optical Fiber based interface, for all the Remote DCS / PLC Systems

iv. Upgrade the HMI system with latest operational functionalities

v. Replace and upgrade all the operator workstations, engineering workstations, and printers, for all the Remote DCS / PLC Systems as per the system configuration provided in Annexure 1. Supply front end desk and new furniture for the HMI system (if needed) with a minimum warranty of 3 (three) years

vi. Engineer best in class graphic displays for local operator and engineering workstations for the PLCs mentioned above

vii. Replace and Upgrade the Alarm Management and Annunciation System, as per the requirements defined in Section 3.3 of Part 2 of this document

viii. Provide cyber-security measures as per the CEA guidelines for thermal power plants. Supply and install a server-based security system for safe and secured updating process of the security patches and the system / application software, developed by OEMs from time to time

ix. Provide data storage and reporting as per the requirements defined in Section 3.3 of Part 2 of this document

x. Supply and install local historian servers (both primary and secondary) for all the remote DCS / PLC systems with required capacity under RAID configuration

xi. Supply and installation of a SCADA system for the Compressor House, and the Switchyard for monitoring / controlling the operating parameters mentioned in Annexure 5. Control and monitoring of both the systems should be facilitated from the CCR

xii. Supply and installation of central operator workstations, real time data servers, communication modules, and any other hardware or software that maybe needed to enable monitoring / control of select operating parameters mentioned in Annexure 4 and Annexure 5 from the CCR. The data related the operating parameters mentioned in Annexure 4 and Annexure 5, should also get stored for in the central historian for reporting purposes

xiii. Engineer best-in-class control logics and graphic displays in the central operator workstations for monitoring / control of the operating parameters mentioned in Annexure 4 and Annexure 5, from the CCR

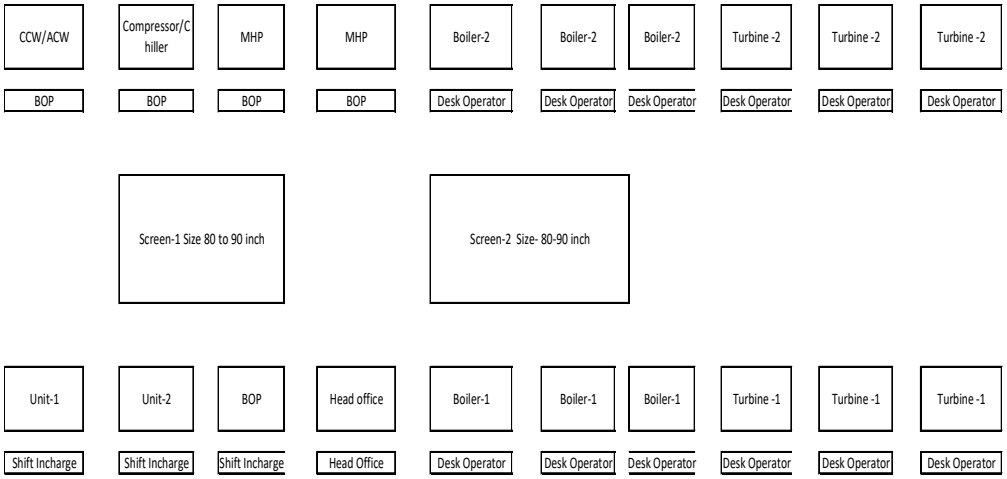
xiv. Supply and install all the front-end hardware and software for all the Remote DCS / PLC Systems, needed to enable monitoring and control of all the additional parameters detailed in Annexure 5 of the document

xv. Supply and install all the front-end hardware and software needed to enable monitoring of weighbridge from MHP control room as well as the central control room

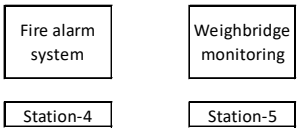
xvi. Provide system self-diagnostic features as per the requirements defined in Section 3.3 of Part 2 of this document

xvii. Provide OEM recommended and certified spares for all the equipment replaced / upgraded. The Successful Bidder shall ensure that a minimum of 10% of installed quantity of spare cards are provided

The Successful Bidder shall design the Central Operating Station in the CCR for the Plant as per the following schematic –



The Successful Bidder shall design the operating / monitoring system for fire alarm and weighbridge monitoring as per the following schematic –



3.1.2.4 Back-End Sub-Systems

Services to be provided by the Successful Bidder for Upgradation / Overhauling of Back-End Systems shall include, but is not limited to, the following:

I. Central DCS for Boiler, Turbine, and Auxiliaries

Services to be provided by the Successful Bidder for Upgradation / Overhauling of Back-End Sub-Systems for the Central DCS for Boiler and Turbine shall include, but is not limited to, the following:

i. Replace / Upgrade all the Back-End Sub-Systems in the Central DCS for Boiler and Turbine, to the certified latest version
ii. Supply and installation of all the hardware and software needed within battery limits for all the field instruments mentioned in the BoQ attached as Annexure 3
iii. Supply and installation of all the equipment such as cards, controllers, JBs, LI panels, cables and cable trays etc. as per the BoQ attached as Annexure 3
iv. Replace and upgrade following cards as a minimum for which the vendor support is limited. The Successful Bidder shall also replace and upgrade all the other necessary hardware and software needed to be upgraded along with the following cards:

v.

S. No.	DCS	Type of Card	Card Model
1	ABB Symphony Harmony	Processor	IMMFP12
2	ABB Symphony Melody	Processor	CMC 50-2
3	Honeywell FSC	Processor	10020/1/1
4	ABB Symphony Melody	Communication	CCO 30-2
5	Honeywell FSC	Communication	10008/3/P

r
e availability of a minimum of 25% spare slots in the system cabinet racks for expansion purposes in future

vi. Ensure availability of a minimum of 20% spare channels in all the cards in the DCS. The Successful Bidder shall replace all the cards that don't meet this criterion

vii. Reduce cable congestion in the terminal blocks of marshalling cabinets of the ABB Symphony Melody DCS system, by inserting din type rail for mounting TB block, and execute all the cable connections with cross feruling

viii. Supply and install terminal strips for the cables entering from the field to the marshalling / system cabinets. Terminal strips shall be segregated as follows –
   a. Digital input from field
   b. Digital output from field
   c. Digital input from MCC room
   d. Digital output from MCC room
   e. Digital input from local panels
   f. Digital output to local panels

ix. Use multicore cables and lock type plug-in connectors / cables for interconnections

x. Supply and upgrade the multi-loop controller / processor cards, to have the following functionalities as a minimum –
   a. Data acquisition of analog and digital signals
   b. Mathematical calculations
   c. Control loop processing
   d. Totalization and Integration
   e. Analog relay function
   f. Conversions
   g. Auto tuning
   h. Statistical process calculation
   i. Regulatory control block
   j. Communication with other systems

xi. Supply and install all the hardware and software needed from JBs to the DCS to enable monitoring and control of all the additional parameters detailed in Annexure 5 of the document

xii. Supply and install all the hardware and software needed from JBs to the DCS to enable monitoring of the following flue gas parameters – Opacity (SPM), O_2, CO, SO_x, NO_x, temperature, and pressure

xiii. Provide an accidental voltage tolerance of 1000 VAC / DC with no damage being passed to any components of the DCS
xiv. Provide protection against any inductive loads, over currents, and short circuits shall be provided in all the I/O circuits
xv. Supply and installation of a central GPS based Master clock, and Slave clocks for all the DCS / PLC systems
xvi. Provide humidity protection layers on all the equipment
xvii. Replace and install all the non-usable cables / wires, as per the standard IEC codes, from junction boxes to the respective DCS / PLC systems
xviii. Termination of wires of different voltages shall be done on separate terminal blocks with color coding. Wiring shall be accomplished with flexible stranded tinned copper wires sized in compliance with the applicable codes
xix. Provide plastic raceways of suitable dimensions for all the wiring, with 40% of spare space for future expansion. Categorize and organize raceways to run electric wires according to their voltage level and function; power supply wires and low voltage signal wires shall not be grouped together in the same raceways
xx. Perform cross feruling on all the cables needed to be laid / replaced.
xxi. Supply and installation of UPS systems (primary and redundant) for the upgraded DCS system (up to system cabinet level). The Successful Bidder shall calculate the UPS load required for the upgraded system as per the best engineering practices
xxii. Provide earthing for all the electrical and electronic equipment as needed
xxiii. All cabinets (marshalling, system etc.) shall have two separate grounding bars – one known as the “safety bar” for equipment / cabinets /console body grounding of appropriate size etc., and other known as the “reference grounding bar” for system input/ output signals and system electronic module for reference zero-volt signal and with the metal cable shielding.
xxiv. Replace and upgrade the Honeywell Fail Safe Control System for boiler operations, and Moller HP/LP Bypass PLC system for turbine operations, with the certified latest version of the system (or its equivalent). Retain the existing control philosophy of both the systems
xxv. Replace and upgrade the existing SWAS system
xxvi. Provide OEM recommended and certified spares for all the equipment replaced / upgraded. The Successful Bidder shall ensure that a minimum of 10% of installed quantity of spare cards are provided

II. Remote DCS / PLC Systems

Services to be provided by the Successful Bidder for Upgradation / Overhauling of Back-End Sub-Systems for the Remote DCS / PLC Systems shall include, but is not limited to, the following:

i. Dismantle all the existing Remote DCS / PLC Systems in the Plant
ii. Replace all the Back-End Sub-Systems of the Remote DCS / PLC Systems, to the certified latest and uniform versions across all the systems

iii. Supply and installation of a SCADA system for the Compressor House, and the Switchyard for monitoring / controlling the operating parameters mentioned in Annexure 5. Control and monitoring of both the systems should be facilitated from the CCR
iv. Supply and installation of all the hardware and software needed within battery limits for all the field instruments mentioned in the BoQ attached as Annexure 3
v. Supply and installation of all the equipment such as cards, controllers, JBs, LI panels, cable and cable trays etc. as per the BoQ attached as Annexure 3
vi. Ensure availability of a minimum of 25% spare slots in the system cabinet racks for expansion purposes in future
vii. Ensure availability of a minimum of 20% spare channels in all the cards in the DCS.
viii. Supply and install terminal strips for the cables entering from the field to the marshalling / system cabinets. Terminal strips shall be segregated as follows –
    a. Digital input from field
    b. Digital output from field
    c. Digital input from MCC room
    d. Digital output from MCC room
    e. Digital input from local panels
    f. Digital output to local panels
ix. Use multicore cables and lock type plug-in connectors / cables for interconnections
x. Supply and upgrade the multi-loop controller / processor cards, to have the following functionalities as a minimum –
    a. Data acquisition of analog and digital signals
    b. Mathematical calculations
    c. Control loop processing
    d. Totalization and Integration
    e. Analog relay function
    f. Conversions
    g. Auto tuning
    h. Statistical process calculation
    i. Regulatory control block
    j. Communication with other systems
xi. Termination of wires of different voltages shall be done on separate terminal blocks with color coding. Wiring shall be accomplished with flexible stranded tinned copper wires sized in compliance with the applicable codes
xii. Provide plastic raceways of suitable dimensions for all the wiring, with 40% of spare space for future expansion. Categorize and organize raceways to run electric wires according to their voltage level and function; power supply wires and low voltage signal wires shall not be grouped together in the same raceways
xiii. Perform cross feruling on all the cables needed to be laid / replaced.

xiv. Supply and installation of all the processing / communication cards needed for the new operating and engineering workstations of the local PLCs as detailed in Section 3.1.2.3 of Part 2 of this document

xv. Dismantling of all the Modbus communication channels between all the Remote DCS / PLC systems and the Central DCS for Boiler and Turbine

xvi. Supply and installation of optical fiber communication channels and all the associated hardware / software needed to be installed between the Remote DCS / PLC systems and the Central DCS for Boiler and Turbine, to enable monitoring / control of operating parameters detailed in Annexure 4 and Annexure 5, from the CCR. The Successful Bidder will be responsible to evaluate the length of the optical fiber cable needed to be installed

xvii. Supply and installation of UPS systems (primary and redundant) for all the Remote DCS / PLC Systems. The Successful Bidder shall calculate the UPS load required for the upgraded system as per the best engineering practices

xviii. Provide an accidental voltage tolerance of 1000 VAC / DC with no damage being passed to any components of the DCS

xix. Provide protection against any inductive loads, over currents, and short circuits shall be provided in all the I/O circuits

xx. Supply and install Slave clocks for all the remote DCS / PLC systems, which shall be connected to the GPS based Master Clock in the CCR, to synchronize the clocks of all the systems

xxi. Provide earthing for all the electrical and electronic equipment as needed

xxii. All cabinets (marshalling, system etc.) shall have two separate grounding bars – one known as the “safety bar” for equipment / cabinets /console body grounding of appropriate size etc., and other known as the “reference grounding bar” for system input/ output signals and system electronic module for reference zero-volt signal and with the metal cable shielding.

xxiii. Provide humidity protection layers on all the equipment

xxiv. Supply and install all the hardware and software from JBs to the respective Remote DCS / PLC Systems, needed to enable monitoring and control of all the additional parameters detailed in Annexure 5 of the document

xxv. Supply and install all the hardware and software from JBs to the MHP Remote DCS / PLC System, needed to enable monitoring of weighbridge from MHP control room as well as the central control room

xxvi. Upgrade the chiller compressor units (4 Nos., Make – Blue Star) control system

xxvii. Provide OEM recommended and certified spares for all the equipment replaced / upgraded. The Successful Bidder shall ensure that a minimum of 10% of installed quantity of spare cards are provided

3.1.2.5 Training of Owner's Personnel

The Successful Bidder shall be responsible for providing operations and maintenance training for all the hardware and software of the upgraded DCS / PLC systems to the Owner's personnel at the Plant. The Successful Bidder shall also train the Owner's personnel on the Successful Bidder's system to develop a detailed understanding of the HMI system of the upgraded DCS The Successful Bidder shall train the Owner's personnel for efficient and safe Plant operation and maintenance practices.

3.1.2.6 Site acceptance tests (SATs)

The Successful Bidder shall submit the procedure for carrying out the SAT for Owner's approval. The SAT shall be carried out on the basis of this approved document. The Successful Bidder shall test all the items / material / equipment supplied and installed after completing all the services necessary as defined in Section 3 of Part 2 of this document. The Successful Bidder shall demonstrate the functional integrity of the hardware and software for all the DCS / PLC systems. All the equipment shall be checked thoroughly after its installation and commissioning. The tests as a minimum shall include:

1. Visual, mechanical, and functional testing
2. Redundancy checking of all the redundant units like, Controller, Communication bus, Sub communication I/O modules, power supply unit etc.
3. Demonstration of all system diagnostics features
4. Checking of changeover of redundant devices
5. Demonstration of all system functions
6. Checking of proper functioning of DCS / PLC programming unit
7. Checking of complete engineering configuration of DCS / PLC including Graphics tuning, FLD etc.
8. Loop testing and interlock checking.
9. Demonstration of an overall accuracy of +/- 1% wherever deviations are observed in each loop
10. Checking of System loading time, control loop update time for of all the DCS / PLC systems
11. Communication between internal systems as well as communication with other third-party systems/devices as per specifications

All the SATs shall be done in the presence of the Owner, the PMC, and other representatives deployed by the Owner (if needed). The Owner, the PMC and other Owner's representatives (as needed) shall sign off the SATs, to mark the successful completion of the SATs

3.1.2.7 Commissioning

Commissioning of the Plant shall be done after successful completion of the Performance Guarantee Tests as per Section 5 of Part 2 of this document. The commissioning shall be divided into the following major steps:

1. Cold commissioning and start up services (without process part)

2. Hot commissioning (including process part)

Each step of commissioning shall be performed by following the set industry practices for –

1. Closed loop control
2. Open loop control
3. Power supply and monitoring
4. Control and Plant network
5. Operator and Engineer stations

The Successful Bidder must ensure that the following requirements are met during the commissioning of the upgraded control and instrumentation systems in the Plant:

1. Conduct necessary loop tests for all the instruments, by simulating the process conditions.
2. Provide one complete set of tools and tackles required for installation, assembly, disassembly, and maintenance of the upgraded systems, at the time of commissioning
3. Ensure that the Plant shall not trip during the commissioning of the upgraded system

3.1.2.8 Post Upgradation Support

The Successful Bidder shall provide an active spares and services support to the Owner, for all the hardware / software supplied and installed during the Overhaul, for a minimum of 15 years after the completion of the Overhaul. The Owner shall formally register a request for support as and when needed, to which, the Successful Bidder shall respond within 5 working days. The Owner also reserves a right, but not an obligation, to invite the Successful Bidder to execute an inspection of the DCS / PLC systems, once in every 3 years for 15 years after the completion of the Overhaul, including running a system diagnosis to identify any potential existing / future potential issues with the system. The Successful Bidder shall provide all the necessary support to fulfil Owner's request in a timely manner. The Successful Bidder shall provide an Undertaking for Post Overhaul Support, in the form of Annexure 17 of this document.

3.2 Scope of supply of material

3.2.1 Procurement planning

1. The Successful Bidder shall create a 'Procurement Register' for DCS and Instrumentation systems in collaboration with the PMC, including but not limited to, detailed item-wise Bills of Quantities (BoQs) with associated costs and technical specifications of all the material / equipment necessary for upgradation of DCS as per the requirements mentioned in Section 3.1 and 3.3 of Part 2 of this document, to ensure adherence to desired quality and exercise cost control

within Contractual limits. The Successful Bidder shall be responsible to purchase and procure all the items in the Procurement Register

2. The Successful Bidder shall prepare a 'Procurement Plan' for DCS and Instrumentation systems for the purpose of monitoring all Procurement activities and ensuring timely delivery of all material, in line with timelines mentioned in Section 2.2 (Duration of Contract) and Section 8.2 (Payment Milestones)
3. The Successful Bidder shall coordinate with the PMC in maintaining a digital data sheet (in excel format) of the 'Procurement Plan', with the desired timelines and costs vis-à-vis the actual timelines followed and costs incurred by the Successful Bidders to track compliance. The Successful Bidder and PMC shall grant all requisite access to the data sheet to the Owner, and share necessary summaries for reporting purpose, if requested

3.2.2 Material Management

The Successful Bidder shall deploy appropriate material management systems (e.g., ERP solutions) to track movement of material and adherence to schedules and quality. Further, the Successful Bidder shall integrate the system with the digital data sheet described in Section 3.2.1 of Part 2 of this document

3.2.3 Storage of material in Plant

The Successful Bidder shall be responsible for storage of all procured material / equipment at the Plant within the Successful Bidder's shed. The Successful Bidder shall be solely responsible for security of the material / equipment at the Plant. In case of theft / burglary / loss of material, the Successful Bidder shall bear the cost of replenishing the material and ensure timely delivery to minimize impact on the execution of the Overhaul.

3.2.4 Quality Management

The Successful Bidder shall ensure the procurement of material is as per the technical and design specifications, and adhere to highest standard of engineering and workmanship, to ensure after completion of the Overhaul, the Plant shall be capable of performing in a safe, reliable, sustainable, and in a manner acceptable to the Owner.

3.2.5 Packing and transportation

1. The Successful Bidder shall be responsible for packing and transportation of all material and equipment to be repaired / refurbished from the Plant to the Successful Bidder's / supplier's facilities and back to the Plant. The Successful Bidder shall also be responsible for loading, unloading, preservation, and storage of the material during transit
2. The Successful Bidder shall arrange for appropriate transit insurance and clearances from relevant authorities for all material to be transported from the Plant to the Successful Bidder's / supplier's facilities and back

3. The Successful Bidder shall be solely responsible to replace the material that may be damaged or lost in transit and shall bear the cost for all such material. Further, the Successful Bidder shall provide notice in writing to the Owner, copying the PMC and the Owner with the details of the issue, as needed

3.2.6 Factory acceptance tests (FATs)

I. Introduction

1. A 100% integrated system simulation test shall be carried out in the Successful Bidder's staging area to test all the hardware and software supplied by the Successful Bidder
2. The Successful Bidder shall arrange for factory acceptance tests to be conducted for all equipment at the Successful Bidder's facilities, prior to shipping, in the presence of the Owner, the PMC, and other representatives deployed by the Owner, if needed
3. The Successful Bidder shall arrange necessary accommodation and food and beverage requirements, for the Owner, the PMC, and other representatives deployed by the Owner for supervision of the Factory Acceptance Tests
4. During system development, it will be decided if the Factory Acceptance Test will either be performed on the complete Control System or if separate tests will be conducted on each item performing a final integration test
5. Cyber FAT test shall be arranged by the Successful Bidder at the respective OEM's works for the complete system, with installed hardware and software
6. Successful Bidder shall be responsible for making all connections between system components, peripherals, and test equipment, including foreign device interfaces
7. The cost of performing the FAT shall be borne by the Successful Bidder

II. Facilities

1. The Successful Bidder shall assign qualified personnel during the entire test period to perform the test and operations
2. The staging area shall satisfy the following requirements:
   i. Area dimensions shall be enough to easily accommodate all cabinets and equipment necessary to the complete test.
   ii. A warehouse containing at least one item per device type in the supply shall be available to change any device found defective during the test within one working day
   iii. Power supply lines for system equipment shall be suitable for testing purposes

III. Test Procedure

1. Duration will depend upon the real status of the system which will be checked at the FAT beginning
2. The Successful Bidder shall provide three weeks' notice to the PMC and Owner prior to the scheduled test beginning

3. Daily meetings shall be held to state progress, pending points, modifications, and any required rescheduling of activities

IV. Hardware Test

1. FAT shall be performed using hard-wired simulated inputs, with simulators to be provided by the Supplier
2. The Successful Bidder shall provide monitors and equipment to determine the performance of the system under test with respect to loading and response time requirements
3. The Hardware tests shall consist, but not be limited to the following tests:
   i. Check of supply completeness
   ii. Visual check of hardware against Manufacturer's documentation
   iii. Item list check:
      a) Number of Item's modules
      b) Quantities of auxiliary equipment
      c) Quantities of switches and push buttons
      d) Check of system documentation
      e) Quantities of consumable
   iv. System drawings check: System cabling and wiring check
   v. Check of proper change-over of the back-up units in case of unit failure
   vi. Power loss simulation
   vii. Shutdown of operator stations and their reloading
   viii. Shutdown of process stations and their reloading
   ix. Fail on (for redundant systems):
      a) Processor - Master card
      b) Communication - Master card
      c) Power supply - Master card
      d) Processor – Back-up card
      e) Communication - Back-up card
      f) Power supply - Back-up card
   x. Communication fail: for redundant cables/busses and serial links
   xi. Demonstration of diagnostic features
   xii. Power off and power on of any single unit
   xiii. Check of auxiliary devices
   xiv. Check of correct functionality of keyboards
   xv. Testing of the printers
   xvi. Simulation of power-off and restart
   xvii. Test of system interfaces working
   xviii. Check of power supply load
   xix. Check of analogue channels accuracy (tests to be performed as sample)

V. Software Test

The Software tests shall consist, but not be limited to the following tests:

1. Check of database configuration
2. Check of batch sequences (if any) and interlocks configuration

3. Check of monitor displays (all kind of displays)
4. Check of all the report generation variations
5. Check of system internal loading (processors, communication system, etc.)
6. Check of printing functions (alarm, reports, etc.)
7. Check of time stamping and continuous operation
8. Scan time checking (test to be performed as sample)

VI. Input output working

The I/O working tests shall consist, but not limited to the following tests:

1. Analogue (4-20 mA) inputs check
2. Analogue (4-20 mA) outputs check
3. Digital inputs check
4. Digital outputs check
5. Check of proper correspondence between electrical signals and internal indications. Check of AI/AO/DI/DO points against detailed engineering diagram

VII. System configuration check

1. Database configuration check

VIII. Internal Programs test

1. Energy measures check
2. Flow compensation formulas check
3. Optimization programs check: the proper working of the programs and their ease of handling will be verified
4. Special control algorithms check
5. Special functions check: all the functions implemented inside the system (i.e., data reconciliation checks, etc.)
6. Interlocks checks: the proper working of all the interlock schemes will be checked against engineering Successful Bidder's documentation using external simulators to simulate the field
7. VA / PT (CFAT) tests to be carried out for vulnerability and security assessment

IX. Auxiliary devices

1. Proper working of printers shall be checked
2. Proper working of trip amplifiers, temperature convertors, relays etc. is to be checked

X. Documentation

The Successful Bidder shall prepare documentation and deliver a copy of the same to the PMC and Owner two weeks before the FAT beginning. The Successful Bidder shall provide the following documents:

1. System database

2. Application database
3. Logic Diagrams
4. Factory Acceptance Test Plan

3.3 Functional requirements of DCS

The scope of the Contract shall be providing services as defined in Section 3.2 of Part 2 of this document, for Upgradation / Overhauling of the Control and Instrumentation systems across both units of the Plant. The Successful Bidder shall ensure execution of the scope of work is done and shall provide the functionalities in accordance with the best industry practices. The following functional requirements shall be the minimum requirement for optimal performance of the Plant:

3.3.1 General requirements

1. Owner's operators at the Plant shall be able to access all the information related to the DCS for Boilers and Turbines, and select information related to the other remote DCS / PLC systems as defined in Section 3.1.2.3 of Part 2 of this document, through the operator consoles present in the CCR
2. The DCS / PLC systems shall meet the following requirements without a supervisory computer – Control, Data acquisition and monitoring, Alarming, Logging and report generation, Historical data storage
3. Successful Bidder shall enable monitoring and control of all the Remote DCS / PLC Systems remotely as well as from the CCR. The Successful Bidder shall provide a switch (or an equivalent mechanism) to ensure that at any point of time, the monitoring and control of a Remote DCS / PLC Systems is done either remotely or from the CCR, and not from both the locations. The Successful Bidder shall provide a separate switch (or an equivalent mechanism) for all the Remote DCS / PLC Systems
4. All the cards present in any Remote DCS System, should be interchangeable with the cards of other Remote DCS Systems
5. Plant process and safety shutdown shall be independently performed by the DCS / PLC systems

3.3.2 Data Acquisition Sub-System

The Data Acquisition Sub-System for each DCS / PLC system is defined as all the hardware and software used to interface and multiplex analog and digital inputs from control loops. The hardware and software used in the Data Acquisition Sub-System of all the DCS / PLC systems must meet the following minimum requirements:

1. All I/O modules shall be plug in type, hot-swappable, and intelligent modules
2. Points per I/O card shall not exceed the following limits –
   a. Analog Input/Output – As per manufacturer std., subject to a maximum of 16
   b. Digital Input/Output – As per manufacturer std., subject to a maximum of 32
3. System shall have the capability to interface and multiplex analog and digital inputs from open / closed loops
4. All input modules shall be compatible to receive the following feedback signals from field instruments –
      a. AI input: 4-20 mA for 0% to 100% feedback with 24 V DC

b. DI inputs: 8 V DC and 24 V DC for open/close feedback

5. System shall have the capability to process both linear and non-linear analog inputs
6. System shall have a provision to replace I/O cards while DCS is powered
7. System shall have the capability to execute advanced diagnostics which can detect any failure in the system and are able to raise diagnostic alarms
8. All the cards present in any Remote DCS System, should be interchangeable with the cards of other Remote DCS Systems

3.3.3 Controller Sub-System

The hardware and software used in the Controller Sub-System of all the DCS and PLC systems must meet the following minimum requirements:

1. Control function of the system shall be executed by microprocessor based multi-loop controller consisting of a set of algorithms which are easily field configurable using user friendly software
2. Controller shall have highly rugged intelligent I/O modules which shall be having isolation from the field
3. All the cards present in any Remote DCS System, should be interchangeable with the cards of other Remote DCS Systems
4. Controller shall have advanced control algorithms to implement regulatory and advanced control strategies. These shall include PID, adaptive, feed forward, dead time, lead-lag, high-low, signal selection, real time computational capability etc. apart from other algorithms as specified in the job specification
5. Controller shall be able to scan close loop in less than 100 mSec for critical loops and 200 mSec for non-critical Loops unless otherwise specified in job specifications
6. Controller shall be able to scan open loop in less than 50 mSec for critical loops and 100 mSec for non-critical loops unless otherwise specified in job specifications
7. Controller load shall not exceed 60% i.e., the number of created control sheets in the controller memory shall not be more than 60% of the maximum capacity
8. Loop execution time shall be freely configurable and should not be a fixed value
9. Loop integrity shall be maintained in controller sub-system architecture by providing one to one controller back-up. In case failure is detected in the active controller, all the control shall be transferred to back up controller automatically within 1 msec
10. Closed loop control system shall provide automatic control of the plant for full applicable operating range of the unit, with operating turndown ratio of not less than six to one
11. Controller shall be capable of accepting process signals from various process sensors and switches, preferably without requiring external or auxiliary signal conditioning devices
12. Controller shall be able to operate in either manual, auto, cascade or computer mode. Mode change-over in either direction shall be seamless. It shall be possible to change set point, tuning constant, operating mode, controller configuration from the central level i.e., operator's interface keyboard and engineer's interface keyboard
13. All main control loops shall be having online pressure, temperature compensation, density correction, auto tuning etc. as per existing control and operation philosophy
14. Controller shall have a provision for slow and fast ramping of set point and output. All controllers shall have anti-reset wind up as a standard

15. Controller shall be able to track computer generated set point and shall hold the last generated value in case of computer failure. In such a scenario, the controller shall fall back on auto mode and continue to operate at the last received set point
16. In cascade loops, the primary controller shall be able to track the set point of the secondary controller when the secondary controller is not operating in cascade mode
17. Controller shall provide a 100 Mbps C-net operations network, and shall not be battery dependent
18. Controller shall have radio clock interface the central time synchronization of all the modules, which shall be connected to the GPS based master clock in the CCR
19. Controller shall be responsive and stable, to maintain the deviations of controlled variables from set point within limits specified so that the equipment being controlled will operate over the specified range
20. During transient conditions causing deviation in performance variables of the plant, the control system shall not permit deviations exceeding those permitted by the manufacturers of the controlled process equipment, and control loops shall bring the controlled variable to the set point in a stable manner
21. The control system network should be separate from the ERP system network

3.3.4 Human Machine Interface Sub-System

The hardware and the software used in the Human Machine Interface Sub-system present in the CCR for all the DCS / PLC systems in the plant, must meet the following minimum requirements:

1. The operator interface sub-system shall provide the centralized information of the Plant in the following fields:
    i. Indication of all analog and digital process variables of control loops
    ii. Manipulation of control loops including changing set point, mode output, configuration, tuning and computational constants
    iii. Alarm displays and annunciation
    iv. Graphic displays and status indication
    v. Logging and trending including historical trend recording
    vi. Trend recording on assignable trend recorders
    vii. Self-diagnostic messages
2. The system shall have graphic displays based on the P&IDs provided by the Owner. A reference or tag number for the applicable I/O can be used to provide mimic animation of the graphic screen. Graphic display for Network Healthiness Monitoring shall be based on the Plant C&I network architecture
3. The system shall have high performance graphics, and display builder with –
    i. Toolbars
    ii. Tab browser
    iii. Templates
    iv. Symbol libraries
    v. Pictures
    vi. Alphanumeric description of tag status
    vii. Graphic symbols changing as a function of tag status
4. The system shall have 3D editing features with dynamic animation facility for system graphics

5. The system shall provide real time access to all the information available within the control system
6. The engineering workstation shall be the primary server and operator workstations shall be the client servers
7. The system shall have operator hints message facility for guidance to the operator
8. Any changes made in the data base of one monitor shall automatically update the data base of other monitors of the same console
9. Sufficient data handling capacity/bandwidth shall be present in the installed servers, with a provision to measure the data handling capacity/bandwidth
10. All the cards present in any Remote DCS System, should be interchangeable with the cards of other Remote DCS Systems
11. Logging of all measured and computed parameters, operator actions, alarms etc. shall be possible from operator consoles
12. The historians shall capture and store historical data of all the DCS / PLC systems up to a minimum of six months
13. The historians shall capture the data at a minimum of 1 sec interval and the sampling rate shall be changeable as per the operators' inputs
14. Logs / reports shall be generated on hourly, daily, weekly, or monthly basis, as per the job specification given by the operator
15. The system shall have Performance Analysis, Diagnostic, and Optimization tools, and performance monitoring systems as per latest applicable standards such as PTC-6 and PTC-4. The PADO tools should have following minimum functionalities
    i. Provision of logbook
    ii. Efficiency calculator
    iii. Summarization of equipment running hours
    iv. Block wise DC display software
    v. Furnace visualization via camera
16. The system shall be capable of generating the following types of reports. All reports must have programmable time range, system scope etc. –
    i. Trending reports
    ii. Real time customizable MIS reports
    iii. Sequence of events reports (with a timestamp of 1 mSec)
    iv. Maintenance reports
    v. Alarms and interventions reports
17. The sequence of events reports shall check for all the alarms detailed in Annexure 6
18. Each activity in the DCS / PLC system must be logged in the server and reports including all events, operator actions, process alarms, occurrence time etc. The logger shall have facility to print out reports
19. Data across all the operator / engineering system shall be consistent i.e., the data available on one station shall also be available on all other stations, so that failure of one OS does not make the data of that station disappear
20. The system shall be able to generate all the reports in familiar Microsoft Office and PDF formats
21. All the historical data shall be stored on a non-volatile memory device like hard disk with RAID configuration, which can be subsequently recalled by operator on any screen
22. All USB ports must be blocked for pen drive / mass storage

23. All real time clocks in the HMI system shall be synchronized with the master clock
24. Engineer interface sub-system shall have configuration, tuning, composing and maintenance capabilities, along with all the capabilities of an operator console
25. Configuration display shall provide a detailed display for each loop, indicating the configuration of that loop and all other interrelated loops. It shall also display the following:
    i. Loop configuration giving designation of each block
    ii. Control block interconnection showing soft wiring or hard wiring value of each block parameter linked P&ID, ratio, bias, dead-time, lead time etc.
26. The system shall provide the ability to graphically develop control system strategies, develop and maintain global system databases and manage system libraries of reusable software components
27. The system shall use a common system-wide database to eliminate duplicate entry and automate the configuration of interrelated configuration tasks
28. The system shall have an integrated explorer which presents a unified, single view of the system which the user can organize and navigate
29. Users shall be able to add additional applications to enable creation and management of operator displays, advance turning of control loops, batch language support and network management
30. All detailed diagnostics of the DCS shall be available on the operator and engineering console
31. Electrical & electronic earth monitoring data must be online for status & rectification purpose in the DCS

3.3.5 Alarm Management System

The hardware and the software used in the Alarm Management System present in the CCR for all the DCS / PLC systems in the Plant, must meet the following minimum requirements:

1. Advanced alarm management system shall be present with categorization of alarms and features such as alarm grouping, filtering, and inhibiting, leading to advanced statistical analysis and alarm reports.
2. Alarms shall be provided for any deviations of Plant performance as per the existing control philosophy of the Plant, as well as the failure of all the DCS and Instrumentation system equipment such as field instruments, cables, cards, servers, buses, power supply, cooling fan etc.
3. Alarm and annunciation system shall be modular and programmable by an engineer. The system shall have provision to set process alarm limits from the engineering keyboard i.e., alarm limits on absolute value of measured variable, rate of change of measured variable, high and low deviation set points etc.
4. Lamps shall be LED based and replaceable. Hooter shall be solid state type with audibility of 100 dB at 3 meters. Hooter shall have provision to set different tone for different functions
5. Display of process and system alarms on the operator consoles on an immediate basis as and when they occur, by flashing a page and group number of the input under alarm irrespective of the type of display on the operator’s console

6. Retention of the audio alarm and visual flashing even after the condition returns to normal unless it is acknowledged by the operator
7. Provision to display alarm summary and alarm history up to six months. It shall be possible to display a summary of all alarms in the sequence of their occurrence. The alarm display list shall contain the following information
    i. The date and time of occurrence
    ii. Point identification
    iii. Point description
    iv. Type of alarm
    v. Serial number of alarms in the sequence of its occurrence
8. Alarm Information Management System (AIMS) shall have following minimum features:
    i. Logical processing of events and alarms
    ii. Facility to analyze frequency of occurrence of events in a pre-defined period
    iii. Standalone system with server PC connected to the DCS
9. Capability to display and print out the alarm history up to a minimum of six months. The alarm display and print out shall list the following for each alarm as a minimum:
    i. The date and time of occurrence
    ii. Point identification
    iii. Point description
    iv. Type of alarm
    v. Time of acknowledgment
    vi. Time of return to normal
    vii. Serial number of alarms in the sequence of occurrence

3.3.6 Communication Sub-System

The hardware and the software used in the Communication Sub-System of all the DCS / PLC systems must meet the following minimum requirements:

1. Communication sub-system shall be a digital communication bus, that provides a high-speed data transfer rapidly and reliably between the operator consoles, process I/O and other back-end devices, process computer and other devices connected to it.
2. Communication speed across all the systems shall be minimum 100 Mbps
3. Communication bandwidth usage shall not exceed 60% of the total capacity
4. Communication speed on the communication bus shall be sufficient to update the operator console data base once in every second.
5. The mechanism used by the communication system for error checks and control shall be transparent to the application information
6. Automatic transfer to the backup device or bus without interrupting the system operations, in case of main bus failure or any communication device failure
7. The network connectivity should be manually manageable and should have the facility to shutdown unused ports
8. All the cards present in any Remote DCS System, should be interchangeable with the cards of other Remote DCS Systems

3.3.7 Power supply

The power supply system in all the DCS / PLC systems must meet the following minimum requirements:

1. UPS back up time must be more than 24 hours
2. Redistribution of power shall be done with proper isolation through required rating of fuses and MCB. Cabinet shall be provided with one ammeter and voltmeter. 230V AC shall also be terminated and further distributed to all panel
3. Isolating switches and fuses with reverse protection shall be employed to isolate and protect the load; the suppliers shall guarantee cut out selectivity. The supplier shall provide the following data regarding power supply:
    a. Total power consumed
    b. Peak power consumed
    c. Maximum tolerable no-voltage period
    d. Power dissipated as heat i.e., Number of units to be powered. The vendor shall ensure redundancy of power supply for each cabinet/rack

3.3.8 Redundancy

The hardware and the software of all the DCS / PLC systems must meet the following minimum requirements to ensure redundancy:

1. Each system must be 100% redundant, including I/O cards, I/O bus, processor cards, servers, server controllers, control network bus, communication network bus, power supply, cooling fans, historian, operator / engineering workstations, UPS (including UPS batteries), hard disks etc.
2. Multi-loop controller shall have the highest order of redundancy with respect to the control processor, remote I/O communication bus, communication with I/O modules, interface units to all nodes, floating power supply etc.
3. Each server must have redundant hard disk and power supply at all levels
4. Communication system shall be deterministic based on IEEE802.4, dual redundant, consisting of two separate communication buses and two separate communication system interfaces for each device. In case of systems having traffic directors, redundant traffic directors shall also be provided
5. All redundant system must be hot type, with availability of networking line diagram graphic display for quick diagnostic
6. Recovery of the system after failure of any primary component shall be automatic, swift, and transparent for the operator with consistent inputs/outputs during the switchover of the equipment. The switch over time shall be one millisecond
7. The Primary and redundant CPU and communication modules may be placed in different racks in the system cabinet so that in case of failure of one rack or its power supply, the system still keeps running by switching over to its corresponding back up device placed in the healthy rack
8. Design and provide redundant protective earthing system as per international standard required for the DCS / PLC systems
9. Redundancy as per the existing design philosophy shall be retained wherever not mentioned explicitly

3.3.9 Self-diagnostics

The hardware and the software used in the self-diagnostics of all the DCS / PLC systems must meet the following minimum requirements:

1. System shall have an extensive set of self-diagnostic routines which shall locate and identify the system failure at least up to module level. Individual module failures shall be indicated on the operator screen display
2. The self-diagnostic message for a sub-system failure shall appear on the operator console irrespective of the display selected on the screen
3. System self-diagnostic display shall be available which shows different sub-systems over the communication subsystem, showing the status of each sub-system
4. Failure of a sub-system or module shall be annunciated with a change in color for the associated loops or point tags

3.3.10 Cyber security

The hardware and the software used for all the DCS / PLC systems in the Plant must meet the following minimum requirements to ensure cyber-security:

1. Integrated security functions are required on all the operator and engineering workstations to prevent unauthorized operations
2. Access and authorization to different control functions shall be initialized based to different levels such as user group, tag importance level, operation mark and other defined security levels
3. System shall have security provisions such as password protections at different security levels
4. Antivirus and other relevant precautionary software shall be installed in all the systems. However, it should not affect the application or operation of the Plant. The validity of the antivirus software should be a minimum of 3 years
5. Manual data deletion from the system shall not be possible for operators and engineers
6. Local system for IT data backup, restoration and retention shall be setup for servers, storage, and any other necessary requirements
7. Online value forcing must be traceable and logged
8. Centralized server-based system shall be provided for surveillance and security, system and application program updates. The switching changeover time between the Di-Militarized Zone and Plant's LAN switches should be less than 1 sec

3.4 Reporting and Governance

The Successful Bidder shall prepare and submit a comprehensive 'Overhaul Completion Report' incorporating the key activities undertaken, results of the Site Acceptance Tests, and list of material supplied to the Owner as part of the Overhaul, within 2 weeks of completion of the Overhaul, to mark the completion of the Overhaul.

Further, the Successful Bidder shall prepare and submit fortnightly progress reports with the PMC and the Owner. Each progress report shall include:

1. Photographs and detailed descriptions of progress including each stage of design, procurement, manufacture, delivery at Site, construction, erection, testing and commissioning
2. A detailed description of the milestones achieved, and the Work/Services performed prior to the date of the fortnightly progress report and the extent to which payments therefore have been received against the milestones
3. A description of the current status (the name of manufacturer, manufacture location, percentage progress, and the actual or expected dates of commencement of manufacture, Successful Bidder's inspections, tests, and delivery) of supplies and Equipment and of Successful Bidder's and all Major Sub-Contractors activities and engineering, manufacturing and construction progress as compared with the Project Schedule.
4. Copies of quality assurance reports including test results (i) from the manufacturing and supply facilities of all Sub-Contractors and (ii) with respect to all supply and installation activities at the Facility Site
5. Safety statistics required under Applicable Laws, including details of any hazardous incidents and activities relating to environmental aspects and public relations.
6. Comparisons of actual and planned progress, with details of any aspects which may jeopardize the completion in accordance with the Contract, including Overhaul Execution Plan and the mitigation measures / action plan being (or to be) adopted to overcome such aspects. It shall include a clear identification and evaluation of problems and deficiencies in the Services (including but not limited to an evaluation of any factors which are anticipated to have a material effect on the Project Schedule).
7. Any other information as considered necessary by Owner / Owner's Representative.

3.5 Standards for performance of obligations

The Successful Bidder represents and warrants that it has the requisite skills, experience, expertise, and capacity to fulfill its obligations and responsibilities under the Contract. The Successful Bidder shall perform all of its services hereunder in accordance and compliance with:

1. Accepted prudent industry practices
2. Standard Operating Procedures, Standard Maintenance Procedures, Hazard Identification and Risk Assessment with mitigation and control measures, and Manufacturer's Recommendations
3. Incident reporting with corrective and preventive measures
4. Implementation of lessons learnt from incidents on similar facilities
5. All Applicable Laws
6. All applicable clearances to be obtained and maintained including but not limited to all relevant health and safety legislations, environment permits and licenses

The Successful Bidder shall have round-the-clock qualified, trained, and experienced, with valid necessary certifications, crew of adequate strength who are alert and vigilant for carrying out all the normal and emergency operations, start-up, and shutdown of DCS and Instrumentation systems. Startup and shutdown of the Plant will be done by the Plant engineers under the supervision of Successful Bidder.

3.6 Standards for Sub-Contracting

For the purpose of performing its obligations under the Contract, the Successful Bidder may appoint Sub-Contractors with prior written intimation to the Owner as deemed fit. Appointment of such Sub-Contractors by the Successful Bidder shall at no time mean that the Successful Bidder is relieved of its primary duty and liability to perform its obligations as set out in the Contract. The Successful Bidder shall be responsible for:

1. Obtaining any and all necessary authorizations required for use of all Plant infrastructure / facilities in connection with the performance of its obligations hereunder
2. Ensuring adherence to standard operating procedures and safety standards by the Sub-Contractor and be liable in the event of any issue affecting the performance of the asset

4. Responsibilities and rights of the Owner

4.1 Responsibilities of the Owner

The Owner shall be responsible for the following key activities pertaining to the execution of the Overhaul of the Plant

4.1.1 Access to Plant infrastructure

The Owner will arrange for the Successful Bidder's accommodation and food and beverage requirements at the Plant for the key Personnel deployed on ground to oversee the execution of the Overhaul, on chargeable basis and on the basis of availability of accommodation. In case infrastructure is not available, the Successful Bidder shall be responsible for arranging the same. The Successful Bidder shall ensure that the Personnel are available at the Plant for the entire course of Overhaul and shall take requite consent from the Owner with prior intimation through a Written Notice in case of any changes in availability of Personnel.

4.1.2 Access to documents and data

The Owner shall provide the Successful Bidder with access to available drawings, documents, OEM manuals, and operational information required for the successful execution of the Overhaul. In case any technical drawing, document is unavailable with the owner, then the same shall be developed by the Successful Bidder at its own cost and risk.

4.1.3 Shutdown and startup activities

The shutdown (prior to commencement of the Overhaul), and startup of the plant (post successful completion of the performance guarantee tests) shall be done by the Owner, in the presence and supervision of the Successful Bidder.

4.2 Rights of the Owner

The Owner, throughout the tenure of the Contract, reserves the following rights relating to preparation and execution of the Overhaul of the Plant, not specifically granted to the Successful Bidder.

4.2.1 General policies and procedures

The Owner reserves the rights for review and determination of general policies and procedures not previously delegated to the Successful Bidder as part of the scope of work.

4.2.2 Audits

The Owner may, from time to time, designate any responsible person on its behalf to conduct audits, pertaining to the Owner's capacity defined in the Contract, of financial (billing and invoicing), technical, safety, and to visit and inspect the Plant to discuss such affairs, which relate to the services provided by the Successful Bidder, with its authorized representatives

4.2.3 Access to data

The Owner reserves the rights to access all records, documents, and data relating to the services provided by the Successful Bidder and / or the Successful Bidders, during the preparation and the execution of the Overhaul, including for making copies thereof or extracts.

The Owner shall have the right, at all times, on reasonable notice and at the premises of the Successful Bidder to examine drawings / design documents which have been prepared by the Successful Bidder and / or the Successful Bidders.

5. Performance Guarantee Testing (PGT) and acceptance procedures

5.1 Performance Guarantee Testing (PGT)

1. The Performance Guarantee Testing shall be done after the completion of Overhaul for all the packages (Boiler, Turbine etc.) in the Plant
2. The Successful Bidder shall submit for Owner's approval, the detailed Performance Test procedure containing the following:
    i. Object of the test
    ii. Various guaranteed parameters and tests as per contract
    iii. Method of conductance of test and test code
    iv. Duration of test, frequency of readings and number of test runs
    v. Method of calculation
    vi. Correction curves
    vii. Instrument list consisting of range, accuracy, least count, and location of instruments
    viii. Scheme showing measurement points
    ix. Sample calculation
    x. Acceptance criteria

xi. Any other information required for conducting the test
xii. VAPT (CFAT) tests for vulnerability assessment and security updates

3. The Successful Bidder shall make the equipment ready for carrying out the performance guarantee tests post completion of the Overhaul
4. The tests shall be binding on the Successful Bidder to determine compliance of the 'Unit' / 'Equipment' with the performance guarantees.
5. All instruments required for performance testing shall be of the type and accuracy required by the code and prior to the test, the Successful Bidder shall get these instruments calibrated in an independent test institute. All test instrumentation required for performance tests shall be supplied by the Successful Bidder and shall be retained by him upon satisfactory completion of all such tests at site. All costs associated with the supply, calibration, installation, and removal of the test instrumentation shall be borne by the Successful Bidder. All calibration procedures and standards shall be subjected to the approval of the Owner.
6. All special equipment, tools and tackles, instruments, measuring devices required for successfully conducting the PGTs shall be provided by the Successful Bidder
7. After the conductance of Performance test, the Successful Bidder shall submit the test evaluation report of Performance test results to Owner promptly but not later than two weeks from the date of conductance of Performance test. However, preliminary test reports shall be submitted to the Owner after completing each test run

5.2 Performance guarantee parameters

The Successful Bidder shall conduct the PG Tests after the completion of Overhaul for all the packages (Boiler, Turbine etc.) in the Plant. The Successful Bidder shall adhere to the performance based functional requirements set forth in Section 3.3 of Part 2 of this document, and the requirements detailed below in this Section, in order to ensure successful completion of the Overhaul and obtain an 'Operation Acceptance Certificate' by the PMC:

1. Processor spare duty cycle time:
   i. Under maximum load, each MMIPIS (Man machine interface system & plant information system) processor in the system bus present in the CCR, shall have 40% free time when measured over any two seconds, and 50% free time when measured over any one-minute period
   ii. Under maximum load, each control system processor of the all the DCS and PLCs shall have 20% free time when measured over any one-minute period
2. Display response time:
   i. The system shall acknowledge all operator requests in one of the following manners within one second of pressing the last button: Commencement of the requested display OR acknowledgment of operator request in a suitable manner
   ii. The response time for screen update after execution of the control command from the time the command is issued shall be two seconds
   iii. All displays shall update automatically in every two seconds
3. System accuracy requirements
   i. The overall system accuracy for the all the DCS and PLCs, from signal input terminal to output presentation on the operator displays and printers for the least accurate input range, and maximum scan rate shall not be worse than +/- 0.1%
4. Loop testing

i. The Successful Bidder shall test all the loop including, but not limited to, the critical loops detailed in Annexure 7 of this document
ii. The loop cycle time should adhere to the requirements defined in Section 3.3 of Part 2 of this document

5.3 Notice of tests

The Successful Bidder shall issue 21 days' notice to the Owner of the date after which he will be ready to commence the tests and the Successful Bidder shall commence the tests promptly thereafter.

5.4 Retesting

If the unit fails to pass the test (which in the case of performance tests means not achieving the acceptable limits), the Owner reserves the right to ask the Successful Bidder to repeat such tests on the same terms and conditions. The retest shall be conducted by the Successful Bidder within 14 (fourteen) days of notification from the Owner.

5.5 Delayed tests

If the tests could be carried out but are being unduly delayed by the Successful Bidder, the Owner may by notice inform the Successful Bidder to conduct the tests within 14 (fourteen) days after the receipt of such notice. The Successful Bidder shall conduct the tests on such days within that period as the Successful Bidder may fix and of which he shall issue notice to the Owner.

If the Successful Bidder fails to conduct the tests within such notice the Owner may himself proceed with the tests. All tests so conducted by the Owner shall be at the risk and cost of the Successful Bidder and the cost thereof shall be deducted from the contract price or charged to the Successful Bidder. The tests shall then be deemed to have been conducted by the Successful Bidder and the test results shall be binding on the Successful Bidder.

5.6 Independent inspector

The Owner reserves his right to appoint an independent inspector at his own cost as his representative to discuss the test program, to approve the instrumentation, to witness the tests and to analyze the test results.

It is the Successful Bidder's responsibility to co-ordinate for suitably carrying out the performance tests. The duration of the test shall be in accordance with the agreed test codes at the loads after necessary stabilizing period to obtain steady state conditions. All other tests to prove the guarantees as indicated in the Successful Bidder's offer shall also be conducted.

The equipment parameters during the performance test shall be adjusted as far as practicable to the guaranteed performance test conditions. The tests shall be conducted to prove guaranteed parameters as defined in the contract.

The performance test results shall be reported as computed from the performance test observations with corrections for site conditions, variations in load, etc., and test conditions.

Such correction curves shall be submitted along with the bid. No additional allowances for errors in measurement are permissible.

5.7 Reporting of test results

Immediately after the conclusion of the performance test, The Successful Bidder shall submit a test report (Six copies of each test) to the Owner stating whether the unit has passed or failed such test, accompanied by sufficient test data and calculations to demonstrate the level of performance attained with respect to each of the tested parameters.

The report(s) shall include as a minimum, the following:

1. Description of the test procedures
2. Standards that were used
3. Instrumentation details and calibration
4. Full schematic diagrams with indication of instrument test location and identification tag of same
5. Test logs and summary of test readings used for performance calculations
6. Full set of correction curves
7. Computation of test results
8. Computations to prove measurement uncertainty is within acceptable limits
9. Conclusions of performance tests: test passed or not

5.8 Acceptance of test report

Within fourteen (14) days of receipt such test report(s), the Owner shall submit a notice to the Successful Bidder stating either:

1. That Owner concurs with the information provided in the Successful Bidder's test report(s), or
2. That Owner disputes some or all of the information provided in the Successful Bidder's test report(s), the areas being disputed, and the levels of performance being disputed.

If Owner concurs with the information in the Successful Bidder's test report(s), the Owner shall, within fourteen (14) days of receipt of the test report, provide a written notice to the Successful Bidder accepting the results of the tests.

If Owner disputes any or all of the results contained in the Successful Bidder's test report(s), representatives of the Successful Bidder, Owner and the Engineer shall meet within fourteen (14) days of the receipt of the Owner notice at a mutually acceptable location to review and discuss the dispute.

5.9 Disagreements as a result of tests

If the Owner and the Successful Bidder disagree on the interpretation of the test results, each shall give a statement of his views to other within reasonable time after such disagreement arises. The statement shall be accompanied by all relevant evidence. The Owner and the Successful Bidder shall mutually discuss and agree regarding the results of the test.

6. Defect Liability

1. The Successful Bidder warrants that the DCS and Instrumentation and any part thereof shall be free from defects in the design, engineering, materials, and workmanship of the equipment supplied and of the work executed
2. The Defect Liability Period shall be 18 (eighteen) months from the date of Completion of the Overhaul (or any part thereof) or 12 (twelve) months from the date of Operational Acceptance of the equipment (or any part thereof), whichever first occurs, as certified by the PMC/Owner /any agency on behalf of the Owner
3. If during the Defect Liability Period any defect should be found in the design, engineering, materials, and workmanship of the equipment supplied or of the work executed by the Successful Bidder, the Successful Bidder shall promptly, in consultation and agreement with the Owner regarding appropriate remedying of the defects, and at its cost, repair, replace or otherwise make good (as the Successful Bidder shall, at its discretion, determine) such defect as well as any damage to the equipment caused by such defect. All the costs associated to the remedying of the defects shall be borne by the Successful Bidder
4. The Owner shall give the Successful Bidder a notice stating the nature of any such defect together with all available evidence thereof, promptly following the discovery thereof. The Owner shall afford all reasonable opportunity for the Successful Bidder to inspect any such defect.
5. The Successful Bidder shall guarantee 99.7 percent system availability for a continuous period of 180 days. An Availability Test shall be conducted to assure this level of availability. The system availability can be calculated as follows –

$$\text{Availability} = \left[1 - \frac{\text{Downtime (during test period) of DCS/ PLC systems}}{\text{Total test period}}\right] \text{X } 100$$

   Downtime shall start upon loss of a DCS / PLC system function and shall end upon full restoration of the affected system function, during the test period. If the accrued down time exceeds 0.3 percent of 180 days, during availability test run, a new 180-day test run shall start at the time when the system becomes available again. Before the initiative of the new 180-day test, the Successful Bidder shall promptly, in consultation and agreement with the Owner regarding appropriate remedying of the defects leading to unavailability greater than 0.3 percent, and at its own cost, repair, replace or otherwise make good (as the Successful Bidder shall, at its discretion, determine) such defect as well as any damage to the equipment caused by such defect. The Successful Bidder shall submit the suitable procedure to conduct and monitor the availability test to the Owner for approval.
6. The Successful Bidder shall provide on-site support to the Owner, for a minimum of 3 months after the date of Completion of Overhaul (or any part thereof) or Operational Acceptance of the equipment, whichever first occurs, as certified by the PMC/Owner/any agency on behalf of the Owner
7. The Owner shall afford the Successful Bidder all necessary access to the Plant to enable the Successful Bidder to perform its obligations under this clause
8. The Successful Bidder may, with the consent of the Owner, remove from the Plant, any equipment or any part of the equipment that are defective if the nature of the defect, and/or any damage to the Plant caused by the defect, is such that repairs cannot be expeditiously carried out at the Plant

9. If the repair, replacement or making good is of such a character that it may affect the efficiency of the equipment or any part thereof, the Owner may give to the Successful Bidder a notice requiring that tests of the defective part of the equipment shall be made by the Successful Bidder immediately upon completion of such remedial work, whereupon the Successful Bidder shall carry out such tests.
10. If such part fails the tests, the Successful Bidder shall carry out further repair, replacement or making good (as the case may be) until that part of the equipment passes such tests. The tests in character shall in any case be not less than what has already been agreed by the Owner and the Successful Bidder for the equipment
11. If the Successful Bidder fails to commence the work necessary to remedy such defect or any damage to the equipment caused by such defect within a reasonable time (which shall in no event be considered to be less than fifteen (15) days), the Owner may, following written notice to the Successful Bidder, proceed to do such work, and the reasonable costs incurred by the Owner in connection therewith shall be deducted by the Owner from any payment due to the Successful Bidder or claimed under the Performance Security
12. If the equipment or any part thereof cannot be used by reason of such defect and/or making good of such defect, the Defect Liability Period shall be extended by a period equal to the period during which the equipment or such part cannot be used by the Owner because of any of the aforesaid reasons. Upon correction of the defects in the equipment or any part thereof by repair/ replacement, such repair/re placement shall have the Defect Liability Period extended by a period of twelve (12) month from the time such replacement/repair of the equipment or any part thereof
13. At the end of the Defect Liability Period, the Successful Bidder liability ceases except for latent defects. The Successful Bidder's liability for latent defects warranty shall be limited to a period of five (5) years from the end of Defect Liability Period. For the purpose of this clause, the latent defects shall be the defects inherently lying within the material or arising out of design deficiency which do not manifest themselves during the Defect Liability Period
14. In case, there is any dispute between Owner and Successful Bidder regarding latent defects, a third party as mutually agreed upon by the Owner and the Successful Bidder shall be engaged by the Owner for settling the dispute
15. The third party, so engaged by the Owner, shall be paid fee plus reasonable expenditures incurred in the execution of its duties as mentioned above. These costs shall be recoverable from the Successful Bidder and the Successful Bidder shall bear and / or reimburse such costs to the Owner if the latent defect has been proved. If the dispute regarding latent defects cannot be settled as above, then the dispute shall be settled as per Section 11.6 (Arbitration) as deemed fit

7. Successful Bidder performance measurement

Key performance indicators (KPIs) have been defined to assess the performance of the Successful Bidder towards the Contractual obligations. The KPIs and associated liquidated damages for performance below thresholds have been detailed below:

7.1 Key performance indicators (KPIs)

The Successful Bidder shall adhere to the following KPIs and targets during the Overhaul. In case of shortfall, liquidated damages shall be applicable and in case of superior performance, incentives shall be applicable as per the following sections:

Phase	KPI	Liquidated damages	Incentive
Procurement of material / equipment	Schedule compliance with 'Procurement Plan' for DCS and Instrumentation Upgrade prepared by the Successful Bidder as per Section 3.2.1 of Part 2 of this document	0.5% of total lumpsum price for supply of material / equipment for every week of delay in completion of 'Procurement Plan'	NA
Execution of Overhaul	Schedule compliance with 'Overhaul Execution Plan' for DCS and Instrumentation Upgrade prepared by the Successful Bidder as per Section 3.1.1.1 of Part 2 of this document	0.5% of total lumpsum price for Overhaul execution for every week of delay in completion of 'Overhaul Execution Plan'	0.5% of total lumpsum price for Overhaul execution for every week of delivering ahead of schedule in completion of SATs, as defined in the 'Overhaul Execution Plan'. The incentive shall be awarded to the Successful Bidder only on successful and timely completion of PG tests defined in Section 5 of Part 2 of this document

Note – Any delay of more than 3 days shall be accounted as a week of delay while calculating the liquidated damages

7.2 Overall ceiling on Liquidated damages and incentives

1. All liabilities due from the Successful Bidder arising out of the shortfall of performance levels mentioned under Section 7.1, as per the liquidated damages defined in Section 7.1, during the course of the Overhaul, shall be restricted to a maximum of 10% of the lump sum price for supply of material and Overhaul execution defined in Section 8.1 of Part 2 of this document
2. All incentives due to the Successful Bidder arising out of the enhanced performance levels mentioned under Section 7.1, as per the incentives defined in Section 7.1, during the course of the Overhaul, shall be restricted to a maximum of 5% of the lump sum price for supply of material and Overhaul execution defined in Section 8.1 of Part 2 of this document

8. Payment Terms

8.1 Lumpsum Charges for DCS and Instrumentation Upgrade

The Successful Bidder shall quote the lumpsum charge for supply of material and lumpsum charge for Overhaul execution (services) for the duration of the execution of the Overhaul, as per the Price Bid format specified in Annexure 18 of this document.

8.2 Payment milestones

The Owner hereby covenants to pay the Successful Bidder for performance of the Contractual terms as payment terms specified hereunder –

T – date of acceptance of LOA

Category	Activity	% of total contract value	Timelines
Supply of material	Mobilization fee	10%	T + 2 weeks
	Dispatch of all equipment / spares, material - satisfactory evidence of FATs and shipment to be provided, and invoices to be produced	45%	T + 20 weeks
	Receipt of all equipment on site after successful completion of FATs, and physical verification and certification of the same	20%	T + 24 weeks
	Completion of SATs for equipment across both units and issue of certificate by PMC	5%	T + 32 weeks
	Completion of Guarantee Tests for both units and issue of Operation Acceptance Certificate by the PMC	5%	T + 40 weeks
	Submission of final 'Overhaul Completion Report' approved by Authority	5%	T + 42 weeks
	Completion of defect liability (warranty period) and successful completion of the Availability Test detailed in Section 6 of Part 2	10%	18 (eighteen) months from the date of Completion of the Overhaul or 12 (twelve) months from the date of Operational Acceptance of the equipment, whichever first occurs
Overhaul execution	Mobilization fee	5%	T + 2 weeks
	Monthly payments against progressive installation of equipment on site	15% (per month)	Monthly payments in equal installments for 3 months during Overhaul execution
	Completion of the Overhaul activities and SATs for DCS and Instrumentation for both the units, and issue of Completion Certificate by the PMC	15%	T + 32 weeks
	Completion of Guarantee Tests for both units and issue of Operation Acceptance Certificate by the PMC	20%	T + 40 weeks
	Submission of final 'Overhaul Completion Report' approved by	5%	T + 42 weeks

Category	Activity	% of total contract value	Timelines
	Authority		
	Completion of defect liability (warranty period) and successful completion of the Availability Test detailed in Section 6 of Part 2	10%	18 (eighteen) months from the date of Completion of the Overhaul or 12 (twelve) months from the date of Operational Acceptance of the equipment, whichever first occurs

1. The Successful Bidder shall submit invoices upon achieving milestones stated in sub clause hereinabove. Authority shall make payment within 30 days of submission of invoices upon verifying the milestone for which invoice is submitted subject to deduction of any damages pursuant to Contract conditions
2. Applicable GST, over and above approved Lumpsum Charges for DCS and Instrumentation Upgrade, at the time of invoicing shall be reimbursed by the Owner upon submission of proof thereof. The risk of applicability of any taxes, duties, and levies except GST, shall rest with the Successful Bidder
3. The Owner shall be entitled to deduct tax at source as may be applicable. The TDS certificate(s) shall be submitted as per the due date specified in the Income Tax Act

9. Insurance

9.1 Insurance of Equipment

Successful Bidder shall, at their sole cost, in the joint names of Owner, Successful Bidder, and the Sub-Contractors, take insurance cover for full replacement value for the following:

1. "Material Damage Insurance" (Storage-cum-Erection Insurance) on an “All Risk" basis (including terrorists act, SRCC) of loss or of damage arising during period of Insurance coverage to any part of the Contract works, material and supplies Successful Bidder any transit and off-site storage, and anywhere in India for ex-works Indian factory and foreign supplies, materials, etc.
2. Such insurance shall be administered and managed by the Successful Bidder and shall be affected from the Commencement date of Contract and thereafter shall operate from the time the relevant property leaves the premises of the manufacturers in the country of origin, and shall continue during the ordinary course of transit and during storage on or off the Plant site, if any, and during erection and commissioning until the date on which Owner takes over the care, custody, and control of the Plant/Equipment, to the exclusion of the Successful Bidder

9.2 Rented Equipment

1. All construction equipment shall be brought to and kept at the Site at the sole cost, risk and expense of the Successful Bidder. Owner shall not be liable for any loss or damage thereto. The Successful Bidder, at his sole discretion, may maintain adequate, appropriate and prudent insurance with respect to such construction equipment. The

Successful Bidder shall obtain adequate insurance to cover all construction equipment rented or leased from third parties and also for the construction equipment of Sub-Contractor.

2. Any insurance policy carried by the Successful Bidder, any Sub-Contractor or any third party on or in respect of any construction equipment shall provide for waiver of the underwriter's right to subrogation against Owner, their assignees, subsidiaries, parent companies, affiliates, employees, insurers, and underwriters.

9.3 Statutory Insurance Benefits

The Successful Bidder shall maintain with respect to the Work to be done under the Contract, in each applicable jurisdiction, all statutory benefits and other insurance required by law including without limitation unemployment insurance.

9.4 Third Party Insurance

1. Successful Bidder shall, in the joint names of Owner, Successful Bidder and the Sub-Contractor's prior to the commencement of any work in the Plant pursuant to this Agreement, insure in an amount not being less than project cost thereof against any liability for damage or death or personal injury occurring in the Plant, obstruction, loss of amenity, trespass, nuisance or advertising liability pursuant to the Contract. Such insurance shall be endorsed or amended as to be considered primary, and any other insurance maintained by Owner shall be in addition and not contributory to this insurance.
2. Indemnity amount indicated above shall be the minimum coverage that the Successful Bidder takes under the policy. Notwithstanding the above coverage, the Successful Bidder at their discretion will take policy for an appropriate coverage not less than the indemnification amount prescribed as above, so as to meet all the liabilities that may arise on account of third-party risks from the commencement of contract till the Owner takes over the care, custody, and control of the Plant, to the exclusion of Successful Bidder.

9.5 Insurance against Accident, etc. to Workmen; Other Insurance

The Successful Bidder shall, at its sole expense, insure and shall maintain insurance as required by Indian and all other applicable laws for all actions, suits, claims, demands, costs, charges, and expenses arising in connection with the death of or injury to any person employed by the Successful Bidder or its Sub-Contractor for the purpose of the performance of the Work.

9.6 Disclosure

Each Party shall, upon request, promptly furnish the other Party any information which is reasonably available and is related to the fulfillment of the contractual obligations as is necessary to enable the other Party to comply with its disclosure obligations under the insurance which it has taken out, the terms of which have been disclosed to the other Party in writing.

At the Owner's request, the Successful Bidder shall provide evidence of insurance covers, or a certificate of all insurances maintained.

9.7 Remedy on Failure to Insure

If the Successful Bidder fail to effect and keep in force the insurance for which it is responsible under the Contract, Owner may effect and keep in force any such insurance, and pay such premiums as may be necessary for that purpose, and from time to time, after receipt of a reimbursement request therefore accompanied by relevant supporting documentation, deduct the amount so paid by Owner from any amounts due or which may become due to the Successful Bidder under the Contract or otherwise from the Owner.

9.8 Limitation of Liability

Notwithstanding any other provisions, except in cases of criminal negligence or willful misconduct,

1. Whether expressed or implied, in no event, whether as a result of breach of contract, warranty, indemnity, tort (including negligence) strict liability or otherwise, shall either Party be liable to the other for loss of contract, loss of profit or revenue, loss of use, loss of data or information, loss of power, cost of replacement power, increased cost of operation and cost of capital or for any indirect, special, collateral or consequential damages
2. The aggregate liability of the Successful Bidder to the GMDC, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Value, provided that this limitation shall not apply to any obligation of the Successful Bidder to indemnify the GMDC with respect to patent infringement.

9.9 Claims for losses/damages

1. Successful Bidder/Sub-Contractor shall make all claims with the underwriter/s and undertake all formalities/step required for settlement of claims
2. Successful Bidder/Sub-Contractor shall hold harmless the Owner for non-settlement/short settlement/part settlement or repudiation of claims by the underwriter/s
3. Successful Bidder shall be obliged to replace / repair the Equipment/ components/parts/spares etc., without waiting for loss settlement by the underwriter/

10. Non fulfilment of terms and conditions and Termination of Contract

1. If at any time during the currency of this contract, if any breach occurs due to the reasons attributed to the Successful Bidder, the Owner shall be at liberty to terminate this contract without assigning any reasons, whatsoever, for such termination and any losses and/or damages occurring due to such termination shall be borne by the Successful Bidder.
2. If the Successful Bidder fails to carry out the work as per terms and conditions of the contract to the satisfaction of the Owner, the Owner shall be entitled to forfeit the Performance Security paid by the Successful Bidder as per Section 7.3 of Part 3 of this document. This, however, shall not absolve the Successful Bidder from its obligation to fulfill the contract. In such event, the Owner shall have a right to complete and / or to get

the work completed at the cost & risk of the Successful Bidder and the Successful Bidder shall be responsible to pay such cost incurred by the Owner to complete the work and / or to get the work completed

3. Likewise, if the Successful Bidder does not fulfill the terms and conditions of the Contract and does not carry out the work up to the entire satisfaction of the Owner, the Owner has the right to forthwith terminate the Contract at its sole discretion, without assigning any reason, Under such events, the Owner shall be entitled to forfeit the Performance Security paid by the Successful Bidder as per Section 7.3 of Part 3 of this document, and the Owner shall have a right to complete the work and / or to get the work completed at the risk and cost of the Successful Bidder
4. For any reasons, if it is required, the Owner reserves rights to cancel, terminate, amend and / or alter the Contract and / or bifurcate and / or increase and/or reduce the Contract work at any time without giving any notice or reason to the Successful Bidder and without incurring any responsibility.

11. General terms and conditions

11.1 Statutory Obligations

1. That the Successful Bidder shall obtain license under the Factories Act 1948 and any other applicable laws, and it shall pay wages and benefits in accordance with the applicable laws and shall not pay less than as notified by the Government Authorities from time to time and shall maintain the employment records as required under applicable laws
2. That the Successful Bidder shall get his own License under Contract Labor (Regulation and Abolition) Act. It shall be binding to get the same renewed from time to time and shall maintain all the records as per the act
3. That the Successful Bidder shall be responsible to enroll his employees, deduct, add and deposit in the relevant accounts the contributions as required under the Employees State Insurance Act, 1952 and the Employees Provident Funds and Miscellaneous Provisions Act 1952 and any other enactment's covered under the various applicable labor laws as well as maintain all books of records for the staff and employees deputed by it for this contract such as required under any laws applicable. The Successful Bidder shall also furnish a copy of such statements as documentary proof to the Owner
4. That if the Successful Bidder is not covered under the Employees State Insurance Act, 1952 then it shall be the duty of the Successful Bidder to take appropriate insurance cover under the Workmen Compensation Act and take Group Personal Accident Policy for all the employees deputed at the project site
5. The Successful Bidder has to issue to the employee's Identity card with their photos and shall also maintain relevant register
6. That the Successful Bidder shall give leave/holiday to its workforce as per the provisions of labor laws applicable
7. Every person deployed by the Successful Bidder in a Plant must wear safety gadgets to be provided by the Successful Bidder
8. Any statutory clearance, permission required for the work, its completion, commissioning shall be in the Successful Bidder’s scope

9. The Successful Bidder will be required to obtain License from the office of the Labor Commissioner for the required strength of labor, before commencement of work at site and the same shall be maintained updated and valid throughout the currency of the contract
10. If any amount becomes payable by the Owner as a result of any claim or application in terms of the provisions or non-compliance of provision of the any Acts, and the Rules and Regulations, By-laws or the Orders made there under, applicable from time to time, such amounts shall be recoverable from the Successful Bidder for which the Owner will not be responsible for any compensation
11. That the Successful Bidder would obey with all applicable laws and maintain all such necessary records as necessitated under such enactments
12. The Successful Bidder shall also indemnify the Owner against any claims, compensations, damages, loss, liquidated damages etc. for breach and / or non-fulfillment of the prevailing Rules and Regulations and other statutory provisions in force from time to time and applicable to the work during the currency of contract
13. The Successful Bidder shall comply with other statutory provisions of Law. The Successful Bidder shall comply with all applicable laws, ordinances, approved standards, rules and regulations, and shall procure all necessary municipal and governmental permits, licenses and inspection and shall pay all fees and charges in connection with the items covered by the contract. The Successful Bidder shall serve the Owner harmless as a result of any in factions thereof. Successful Bidder will be solely liable for all non-compliances. The following are some of the major Government of India Acts and Regulations to be complied with by the Successful Bidder. The List is illustrative and not exhaustive.
    a. The Factories Act of 1948 (63 to 1948) and Amendments and Rules (Amended up to date)
    b. The Electricity Act, 2003 and rules made there under
    c. The Indian Boiler Regulation Act, 1950 and rules made there under
    d. The Minimum Wages Act, 1948
    e. The Employees Compensation Act 1923 and Amendment Act 2010
    f. The Payment of Wages Act 1936 and Amendment Act 2012
    g. Payment of Bonus Act 1965 and Amended up to date
    h. Contract Labor Regulations& Abolition Act 1970
    i. Interstate Migrant Workmen (Regulations) Act 1979

11.2 Bankruptcy

1. If the Successful Bidder commits an act of Bankruptcy or goes into liquidation except for construction purposes, or if its business is carried on by a receiver, such receiver, liquidator or any person in whom the contract may become vested shall forthwith give notice thereof in writing to the Owner and in reasonable time during which he shall take all reasonable steps to prevent stoppage of performance of the contract, have the option of carrying out the contract subject to his or their providing such guarantees as may be required by the Owner but not exceeding the value of the work for the time being remaining unexecuted
2. In the event of stoppage of performance under the contract, the period of option under this clause shall be decided by the Owner considering the situation, provided that the

above option is not exercised, the Owner may terminate the contract by serving notice in writing to the Successful Bidder. The power and provision so reserved to the Owner on taking of the work out of the Successful Bidder's hands shall apply as far as they may be when the contract is so terminated

11.3 Notice

Written notice shall be deemed to have been duly served if delivered to the individual or to Successful Bidder or to the Signing Authority of the Owner from whom it is intended, or if delivered at or sent by mail or post, to the last business address known to him who gives the notice.

11.4 Canvassing not Permitted

1. Successful Bidder should not canvass their offer personally or otherwise by approaching the Chairman or the Member of the Owner. If any Successful Bidder wants to make any representation regarding his offer, he should write to the General Manager (Power), if he desires, but personal and oral representations are not permitted
2. In spite of the above clear instructions, any Successful Bidder is found to canvass his offer or against his competitor's offer through personal approach to the competent authority or the officials of the Owner, their offer will be rejected without assigning any reason and the firm even is blacklisted

11.5 Indemnification

The Successful Bidder shall fully indemnify, save harmless and defend Owner, Owner's shareholders, the Owner, and the directors, agents and employees of the Owner (the "Owner Indemnified Parties") from and against any and all claims, including reasonable legal costs, (collectively the "Damages") by third Parties in respect of death or bodily injury or in respect to loss or damage to any property (other than the Plant or part there of not yet taken over) which arises out of or in consequence of the Services whilst the Successful Bidder has responsibility for the care of the works to the extent resulting from Successful Bidder's or their agents or employees intentional act, negligence, or strict liability or omission in the performance of the Services hereunder; provided that the foregoing obligation shall not apply to the extent the Owner Indemnified Parties are contributory negligent or strictly liable or to the extent such damages are caused by the intentional acts or omissions of the Owner Indemnified Parties. The Successful Bidder shall provide Undertaking of Indemnity, in the form of Annexure 16 of this document.

11.6 Arbitration

All questions, disputes, differences whatsoever which may at any time arises between the parties to this RFP and subsequent contract in connection with the RFP and subsequent contract or any matter arising out of or in relation thereto, shall be referred to Sole Arbitrator as per the provisions of Arbitration and Conciliation Act, 1996 and subsequent amendment thereto and the venue of arbitration proceedings shall be at Ahmedabad only. The Language of the Arbitration shall be in English only.

11.7 Governing Law

This RFP and subsequent Contract shall be construed and interpreted in accordance with and governed by the laws of India.

11.8 Jurisdiction

The matter related to any dispute or difference arising out of this RFP and subsequent contract shall be subject to the exclusive jurisdiction of Court at Ahmedabad only.

11.9 Completion of Work

1. Upon the Successful Bidder fulfilling the entirety of its obligations under the Contract to the satisfaction of the Owner and subject to terms and conditions of the Contract, it shall become eligible to apply for a Completion Certificate. The General Manger of the Owner shall formally issue the Completion Certificate, after verifying from the completion documents and satisfying himself that the Works under the Contract have been completed in accordance with all the provisions of this Contract. The Successful Bidder, after obtaining the Completion Certificate shall become eligible to present the final bill for the Works executed by it under the Contract
2. Upon completion of Works under the Contract and before the application for the Completion Certificate, the Successful Bidder shall clear the project of the Owner of all rubbish, dirt, structures, scrap, oily rags etc. Failure to clear the project may constrain the Owner to clear the said site at the risk and cost of the Successful Bidder
3. The Successful Bidder shall provide the Owner with any and all documents/records/proofs that may be demanded before issuance of Completion Certificate

11.10 Accident and Responsibilities of Successful Bidder

1. The entire responsibility on account of any accidents, damage or personal injury which may occurred to any of the Successful Bidder's vehicles/ equipment or his/its employees, or any outside party shall be exclusively that of the Successful Bidder and no claim whatsoever shall be entertain by the Owner on this account. The Successful Bidder shall keep the Owner indemnified from all the consequence
2. In the event of any breakdown or accident during the course of any operation, the Successful Bidder shall notify the facts to the Project Authority, or any other officer immediately present there of such incidence and shall simultaneously make adequate remedial arrangements on his/its own cost and risk and as per the instruction of the Project Authority
3. The Successful Bidder shall pay all claims, damages and compensation with cost arising out of or resulting there from to the third party(s) and in case the Owner would be required to face any proceedings all to pay any amount on the aforesaid account, it shall be deemed to have been discharge on behalf of the Successful Bidder, the same amount shall be recovered half-an hour rest interval in between. The Successful Bidder shall ensure that the attendance of all the supplied manpower shall be taken through biometric attendance machine

11.11 Foreclosure

1. In case of any necessity arising due to local working conditions or any unforeseen reason not in the control of the Owner or of the Successful Bidder, Committee comprising of representative of the Owner, Successful Bidder and Outside Expert from Technical and Financial background shall be constituted and Committee will look into the reasons/causes and analyze the conditions as to whether the work awarded is feasible to continue with the existing terms and conditions of the contract or any other available option or to Fore Close the contract in the interest of both the Owner and the Successful Bidder
2. If after study of the prevailing conditions of the contract under execution, committee recommends to Foreclose the contract keeping in view the financial implication to both the Owner and Successful Bidder, guideline/Modality of the Fore Closure of the contract shall be decided by the committee considering the work executed and unexecuted, period of the contract completed and balance period of the contract, value of the work executed and value of the work unexecuted etc.

11.12 Force majeure

1. Force majeure is herein defined as any cause which is beyond the control of the Successful Bidder or the Owner as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as:
2. Natural phenomena such as flood, draughts Cyclone, earthquake and epidemics, declaration of war
3. Acts of any government, including but not limited to war, declared or undeclared priorities, quantities, embargoes, providing either party shall within fifteen (15) days from the occurrence of such a cause notify the other in writing of such cases
4. The Successful Bidder will advise, in the event of his having resort to this clause by a registered letter duly certified by the statutory authorities, the beginning and end of the cause of delay, within fifteen days of the occurrence and cessation of such Force Majeure condition. In the event of delay lasting over two months, if arising out of Force Majeure, the contract may be terminated at the discretion of the Owner
5. For delay arising out of Force Majeure, the Successful Bidder will not claim extension in completion date for a period exceeding the period of delay attributable to the causes of Force Majeure and neither company nor the Successful Bidder shall be liable to pay extra costs (like increase in rates, remobilization, advance, idle charges for labor and machinery etc.) provided it is mutually established that the Force Majeure conditions did actually exist
6. If any of the Force Majeure conditions exists in the place of operation of the Successful Bidder even at the time of submission of bid, he will categorically specify them in his bid and state whether they have been taken into consideration in their quotations
7. The Successful Bidder or the Owner shall not be liable for delays in performing his obligations resulting from any Force Majeure cause as referred to and/ or defined above. The date of completion will, subject to hereinafter provided, be extended by a reasonable time

Part 3: Instruction to Bidders

1. Introduction

1.1 Bidding process overview

GMDC has adopted a single stage two packet envelope Bidding system separately for Technical Bid and Price Bid with evaluation as per Quality cum Cost Based System (QCBS) method as detailed out in Section 5.4 of Part 3 of this document.

Technical Bid and Price Bid shall be submitted online through https://gmdc.nprocure.com.

The Bids for which the Price Bid is submitted in hard copy / physical form shall be rejected as non-responsive.

Complete Bid shall be submitted on or before the time and date fixed for submission of technical and price Bids as detailed in Section 1.6 of Part 3 of this document. Bids delivered after the due dates will be rejected.

The Bidders need to offer their Bids which conform to the scope of work and terms and conditions detailed in Part 2 of this document.

As a first step, evaluation of Technical Bid will be conducted as per Section 6.2 of Part 3 of this document. Post the evaluation of Technical Bids, the Price Bids of only those Bidders meeting the pre-qualification and technical criteria detailed in Sections 5.1 and 5.2 of Part 3 of this document shall be opened.

Subsequently, a Price Bid evaluation of technically qualified Bidders will be carried out as per Section 6.3 of Part 3 of this document. The Bids will finally be ranked from the highest to lowest according to their combined technical and price scores (described as 'Composite Score') derived based on the Quality cum Cost Based Score (QCBS) specified Section 5.4 of Part 3 of this document. The Bidder obtaining the highest composite score shall be considered as the 'Preferred Bidder'.

1.2 Due diligence

Before Bidding, the Bidder shall undertake and shall be deemed before Bidding to have undertaken a thorough study of the proposed work, the job(s) involved, the Plant conditions, the labor, power, water, material and equipment availability, transport and communication facilities and temporary offices and accommodation quarters, and all other factors, constraints, and facilities necessary for the formulation of the Bid, supply of materials and the performance of the work.

The Bidder shall inspect and examine the Plant and its surroundings and shall satisfy themselves before submitting their Bid as to the nature of the ground present, physical conditions and all roads, approaches and lands which may be used temporarily otherwise in connection with the works, means of access to the Plant accommodation they may require

and in general shall themselves obtain all necessary information as to risks, contingencies & other circumstances which may influence or affect their Bid.

The intending Bidders shall be deemed to have visited the Plant and familiarized themselves thoroughly with the working conditions at the Plant before submitting the Bid. Non-familiarity with the Plant conditions will not be considered a reason either for extra claims or for not carrying out the work in strict conformity with the specifications.

It will be imperative on each Bidder to acquaint himself of all local laws, conditions and factors which may have any effect on the execution of works and supplies under the Bid document. In their own interest, Bidder is requested to familiarize themselves with (but not limited to) the Indian Income Tax Act 1961, Indian Companies Act 2013, Customs Act 1962, Factory Act, Contract Labor Act 1970, Arbitration Act 1996, EPF Act 1952, Employees State Insurance Act (ESI) 1948 & other related applicable Acts and Laws & Regulations of India, with their latest amendments, as prevalent in India. Owner shall not entertain any request for clarification from the Bidder regarding such local conditions.

It must be understood and agreed that such factors have properly been investigated and considered while submitting the Bid. No claim for financial and other adjustments to the Contract price, on account of lack of clarity or proper understanding of such factors, shall be entertained.

1.3 Acknowledgement by Bidder

By submitting the Bid, the Bidder acknowledges that:

1. It has made a complete and careful examination of the scope of work and terms and conditions mentioned in Part 2 of this document
2. It has made available all the relevant information requested by GMDC
3. It accepts the risks of inadequacy, or error due to improper due diligence on its part as described in Section 1.2 of Part 3 of this document
4. It does not have any conflict of interest
5. It is bound by the undertakings provided by it under and in terms hereof

GMDC shall not be liable for any omission, mistake, or error in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to the RFP or the Bidding Process, including any error or mistake therein or in any information or data given by GMDC.

1.4 Cost of Bidding

The Bidders shall be responsible for all of the costs associated with the preparation of their Bids and their participation in the Bid Process. GMDC will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the Bidding Process.

1.5 RFP Fee

Bidder shall have to submit non-refundable RFP Document Fee of INR 17,700 (i.e., RFP fee of INR 15,000 plus 18% GST). The RFP Document Fee shall be submitted in the form of a

Demand Draft in favor of "**Gujarat Mineral Development Corporation Limited**" and **payable at Ahmedabad** along with the Bid as per marking and sealing section. This Demand Draft for RFP document shall be non-refundable. Bids that are not accompanied by the RFP Fee in acceptable amount and form shall be considered non-responsive and shall be consequently rejected.

Relaxation in terms of submission of RfP fee shall be given to the bidder who is holding valid Certificate issued under the MSME Act, 2006 on the date of submission of Tender.

1.6 Schedule of Bidding

The key activities and timelines for the Bidding process have been detailed below. While GMDC shall endeavor to adhere to the timelines, it is subject to approvals and other external contingencies.

Category	Activity	Schedule
RFP release	Issuance of Bid package to Bidders	RFP shall be available from 20th June 2023 from the website http://www.gmdcltd.com and https://gmdc.nprocure.com
Bid queries	Deadline for receiving queries from Bidder	Bidders may send their queries by 4th July 2023 up to 1700 hrs. on the following e-mail ID: jndave@gmdcltd.co.in, power@gmdcltd.co.in
	Pre-Bid meeting	The pre-Bid meeting shall be held at 1100 hrs. on 7th July 2023 at the following address: Gujarat Mineral Development Corporation Ltd Khanij Bhavan, 132-Ring Road, Gujarat University Ground, Vastrapur, Ahmedabad- 380052
Bid submission and evaluation	Online submission of Price Bid	Bidders shall submit their Price Bids online on https://gmdc.nprocure.com on or before 24th July 2023
	Submission of Technical Bid (hard copy), RFP Fee and EMD in person	Bidders shall submit their Technical Bids after the submission of the Price Bid but on or before 25th July 2023 up to 1800 hrs. at the following address: Gujarat Mineral Development Corporation Ltd Khanij Bhavan, 132-Ring Road, Gujarat University Ground, Vastrapur, Ahmedabad- 380052 The Technical Bid, RFP fee, and EMD shall be made by Speed Post / RPAD / Hand / Courier
	Technical presentations by Bidders	To be informed to the Bidder in advance
Vendor selection	Evaluation of Technical and Price Bids and selection of Vendor	To be informed to the Bidder after the Bid submission date

2. Bid requirements

2.1 Bid validity

Bids shall remain valid for a period of not less than 180 (one hundred and eighty) days from the Bid submission date (described as 'Bid Validity Period'). The Bid shall be considered non-responsive if such Bid is valid for a period less than the Bid Validity Period.

In exceptional circumstances, prior to expiry of the original Bid Validity Period, relevant authority from GMDC may request the Bidders to extend the period of validity for a specified additional period. The request and the responses thereto shall be made in writing. A Bidder may refuse the request without forfeiting its Bid Security / EMD. A Bidder agreeing to the request will not be required or permitted to modify his Bid but will be required to extend the validity of his Bid Security/EMD for the period of the extension, and in compliance with Section 2.5 of Part 3 of this document in all respects.

2.2 Number of Bids by Bidder

No Bidder shall submit more than one Bid pursuant to this RFP. If a Bidder submits or participates in more than one Bid, such Bids by the Bidder shall be disqualified.

2.3 Governing law and jurisdiction

The Bidding process shall be governed by and construed in accordance with the Indian laws and the courts at Ahmedabad, Gujarat shall have exclusive jurisdiction over all disputes arising under, pursuant to, and / or in connection to the Bidding process.

2.4 GMDC's right to accept and reject any Bids or all Bids

Notwithstanding anything contained in this RFP, GMDC reserves the rights to accept or reject any Bid and to annul the Bidding process / Bid evaluation process and reject all Bids at any time without any liability or any obligations for such acceptance, rejection, or annulment, without assigning any reasons thereof.

It shall be deemed that by submitting the Bids, the Bidder agrees and releases GMDC, its employees, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and / or performance of any obligations hereunder, pursuant hereto and / or in connection to the Bidding process and waives, to the fullest extent permitted by Applicable Laws, any and all rights and/or claims it may have in this respect, whether actual or contingent, whether present or in future.

Without prejudice to the generality of the above terms, GMDC reserves the right to reject any Bid if:

1. The Bid does not meet the technical eligibility and qualification criteria specified in this RFP
2. A material misrepresentation is made or discovered at any time, or if the Bidder is found to be indulging in fraudulent and corrupt practices

3. The Bidder does not provide, within the time specified by GMDC, the supplemental information sought by GMDC for evaluation of the Bid
4. The Bidder submits a conditional Bid

If such disqualification / rejection occurs after the Bids have been opened and the Preferred Bidder as per award criteria gets disqualified / rejected, then GMDC reserves the right to consider the next best Bidder or take any other measure as may be deemed fit in the sole discretion of GMDC, including annulment of the process.

2.5 Earnest Money Deposit (EMD) / Bid Security

The Bidder shall furnish a separate Bid Security (described as 'Earnest Money Deposit') as part of its Bid as per the given format. The Bid Security / EMD shall be sealed in separate sealed envelope along with the RFP fee, as described in Section 4.4 of Part 3 of this document. An amount of INR 90 Lakhs shall be approved as EMD from the banks approved by Government of Gujarat, except cooperative banks, in favor of "Gujarat Mineral Development Corporation Ltd." The list of approved banks has been listed in Annexure 21.

The EMD shall be in any of the below mentioned format:

1. Account payee Demand Draft / Banker's Cheque
2. An irrevocable Bank Guarantee, as per Annexure 19, payable at Ahmedabad and valid for a period of 210 (two hundred and ten) days from the Bid submission date in the prescribed format. The validity of the bank guarantee may be extended as per mutual agreement between GMDC and the Bidder, as per Section 2.1 of Part 3 of this document

Any Bid not accompanied with valid Earnest Money Deposit and RFP fee in the acceptable amount, form, and validity period will be summarily rejected by GMDC as being non-responsive and Bids of such Bidder shall not be evaluated further. The Bidder shall also submit a blank cheque along with the bid submission, providing the Bidder's bank details to GMDC.

GMDC shall not be liable to pay any interest on the Bid Security/EMD deposit and the same shall be interest free.

The EMD shall be furnished in Indian Rupees only.

The Bid Security of unsuccessful Bidders will be returned by GMDC, as promptly as possible on acceptance of the Bid of the Preferred Bidder or if and when GMDC cancels the Bidding process. Where Bid Security has been paid by Demand Draft/ Banker's Cheque deposit, the refund thereof shall be in the form of an account payee demand draft in favor of the unsuccessful Bidder(s). Bidders may, by specific instructions in writing to GMDC, give the name and address of the person in whose favor the said demand draft shall be drawn by GMDC for refund, failing which it shall be drawn in the name of the Bidder and shall be mailed to the address given on the Bid.

The Preferred Bidder's EMD will be returned, without any interest, upon the Preferred Bidder signing the Agreement and furnishing the Performance Security in accordance with the provision thereof or if and when GMDC cancels the Bidding.

GMDC shall be entitled to forfeit and appropriate the Bid Security as damages inter alia in any of the events specified below. The Bidder, by submitting its Bid, shall be deemed to have acknowledged and confirmed that GMDC will suffer loss and damage on account of withdrawal of its Bid or for any other default by the Bidder during the period of Bid validity as specified in this RFP. No relaxation of any kind on Bid Security shall be given to any Bidder.

1. If a Bidder engages in corrupt, fraudulent, coercive, undesirable, or restrictive practices as specified in Section 8 of Part 3 of this document
2. If a Bidder withdraws its Bid during the Bid validity period as specified in this RFP and as extended by mutual consent of the respective Bidder(s) and GMDC
3. In the case of a Successful Bidder if it fails within the specified time limit:
    a. to sign and return the duplicate copy of LOA
    b. to sign the Agreement within the time period specified by GMDC
    c. to furnish the Performance Security within the period prescribed therefore in the RFP, or commits any breach prior to furnishing the Performance Security

Relaxation in terms of submission of EMD shall be given to the bidder who is holding valid Certificate issued under the MSME Act, 2006 on the date of submission of RFP.

3. Pre-Bid activities

3.1 Content of the RFP

This RFP comprises of the content listed below and may additionally include any addenda issued in accordance with Section 3.4 of Part 3 of this document.

Part 1: Introduction

Part 2: Terms of reference / Scope of work

Part 3: Instructions to Bidders

Part 4: Annexures

3.2 Clarification to RFP document

Bidders requiring any clarification on the RFP may notify GMDC in writing through email at the address provided in Section 1.6 of Part 3 of this document.

Bidders must send in their queries on or before the date mentioned in Section 1.6 of Part 3 of this document in order to enable GMDC to have adequate notice of the said queries so that the same can be addressed at the Pre-Bid Meeting or shortly later.

GMDC shall endeavor to respond to the queries within a short span of time prior to the Bid submission date.

GMDC is not bound to take cognizance of any queries raised after the date specified in Section 1.6 of Part 3 of this document.

GMDC shall endeavor to respond to the questions raised or clarifications sought by the Bidders. However, GMDC reserves the right not to respond to any question or provide any

clarification, at its sole discretion, and nothing in this section shall be taken or read as compelling or requiring GMDC to respond to any question or to provide any clarification.

GMDC may also on its own motion, if deemed necessary, issue interpretations and clarifications and amendment to RFP. All clarifications and interpretations issued by GMDC shall be deemed to be part of the Bidding documents. Verbal clarifications and information shall not in any way or manner be binding on GMDC.

3.3 Pre-Bid meeting

A pre-Bid meeting would be held at time and an address specified in Section 1.6 of Part 3 of this document. Bidders are advised to attend the meeting and will do so at their own expense.

During the course of pre-Bid meeting, the Bidders will be free to seek clarifications and make suggestions for consideration of GMDC. GMDC shall endeavor to provide clarifications and such further information as it may, in its sole discretion, considered appropriate for facilitating a fair, transparent and competitive Bidding process.

Responses to Bidders' clarification would be shared by uploading such responses online on GMDC's website (i.e. http://www.gmdcltd.com and https://gmdc.nprocure.com), if required, in the form of an addendum and or corrigendum.

Non-attendance at the pre-Bid meeting shall not be a cause for disqualification of a Bidder. However, terms and conditions of the addendum(s) shall be legally binding on all the Bidders irrespective of their attendance at the pre-Bid meeting.

3.4 Amendment of Bidding documents

At any time prior to the Bid submission date, GMDC may, for any reason, whether at its own initiative or in response to clarifications requested by a Bidder, modify the RFP by the issuance of an addenda/corrigendum.

Any addendum/corrigendum issued hereunder will be in writing and shall be uploaded on GMDC's website http://www.gmdcltd.com and https://gmdc.nprocure.com.

In order to afford the Bidders a reasonable time for taking an addendum into account, or for any other reason, GMDC may, in its sole discretion, extend the Bid submission date.

4. Preparation and submission of Bids

4.1 Language of Bid

The Bids and all related correspondence and documents in relation to the Bidding process shall be in English language. All supporting documents and printed literature furnished by the Bidders with the Bid may be in any other language provided that they are accompanied by translations in the English language, duly authenticated and certified by the Bidder.

The Bidders shall ensure that any number mentioned in the Bid shall be followed by words in relation to such numerical format of the number, and in the event, there is a conflict in the numerical and the word format of the number, the number provided in words shall prevail.

4.2 Bid currency

All prices quoted in the Bid shall be quoted in Indian National Rupee(s) (INR).

4.3 Format and signing of Bid

The Bidder shall provide all the information sought under this RFP. GMDC will evaluate only those Bids that are received in the required formats and complete in all respects.

The Bid must be properly signed by the authorized signatory as detailed below:

1. Proprietor, in case the Bidder is a proprietary firm, or
2. Duly authorized person holding a Power of Attorney, in case Bidder is either a Limited Company or a Limited Liability Partnership firm

In case of the Bidder being Company incorporated under Indian Companies Act 1956/2013, the Power of Attorney shall be supported by a Board Resolution in favor of the person vesting power to the person signing the Bid.

4.4 Sealing and marking of Bids

4.4.1 EMD and RFP fee

The original instruments of the Bid Security of the required value and in the approved format as specified in Section 2.5, along with the RFP fee as specified in Section 1.5 shall be sealed in an envelope on which the following shall be superscribed:

"**RFP No. GMDC/Power/ATPS/04/23-24 for DCS and Instrumentation Upgradation of GMDC's 250 (2x125) MW Akrimota Thermal Power Station (ATPS), Gujarat– EMD and RFP Fee".**

4.4.2 Technical Bid

The technical Bid shall be submitted in hard copy and shall include the following documents:

S. No	Reference	Document details
1	Annexure 8	Letter of Bid submission signed by authorized signatory of Bidder
2	Annexure 9	Bidder's experience and credentials – Certificate of incorporation, MoA, AoA, GSTIN registration – Evidence for work experience of similar nature – copy of work order, Contract and completion certificate, or Contract awarded, and threshold amount received if client documents are confidential

S. No	Reference	Document details
3	Annexure 10	Declaration of Key Personnel as per requirements of the RFP
4	Annexure 11	Statutory auditor/registered chartered accountants statement specifying revenue for last three financial years, net worth, and working capital for last financial year
5	Annexure 12	No blacklisting certificate on stamp paper
6	Annexure 13	No deviation certificate
7	Annexure 14	Authorization of signatory in the form of Board Resolution/ or Power of Attorney (POA notarized and Applicable in case of Bid not being signed by the person directly authorized by the firm), as applicable
8	Annexure 15	Undertaking
9	Annexure 16	Undertaking of Indemnity
10	Annexure 17	Undertaking for Post Upgradation Support
11		RFP documents issued along with updated addendums/amendments thereto, duly signed by the Bidder through its authorized signatory on all pages.

The documents required as part of the Technical Bid shall be submitted in hard copy in person as per the required format. All the documents shall be placed and sealed in an envelope on which the following shall be superscribed:

"**RFP No. GMDC/Power/ATPS/04/23-24 for DCS and Instrumentation Upgradation of GMDC's 250 (2x125) MW Akrimota Thermal Power Station (ATPS), Gujarat– Technical Bid".**

Both envelopes specified in Sections 4.4.1 and 4.4.2 shall be placed in an outer envelope and the following shall be superscribed:

"**RFP No. GMDC/Power/ATPS/04/23-24 for DCS and Instrumentation Upgradation of GMDC's 250 (2x125) MW Akrimota Thermal Power Station (ATPS), Gujarat– Bid Submission".**

4.4.3 Price Bid

Price Bid shall be duly filled by the Bidder at designated places on https://gmdc.nprocure.com as per the format provided in the Annexure 18.

4.5 Bid submission date

The last date and time of submission of the Bids (the "Bid submission date") are specified in Section 1.6. The Bidders shall duly submit their Technical and Price Bids according to the dates specified.

GMDC may, in its sole discretion, extend the Bid submission date by issuing an addendum uniformly for all Bidders as per Section 3.4. In such event, the extended Bid submission date shall be applicable for all Bidders. Any such change in the Bid submission date shall be notified to the Bidders by uploading the addenda on GMDC's website http://www.gmdcltd.com and https://gmdc.nprocure.com.

4.6 Late submission

Physical submissions for Technical Bid and EMD and RFP fee received by GMDC after the specified time and date shall not be eligible for consideration and shall be summarily rejected.

GMDC shall not be responsible for any delay or non-receipt / non-delivery of any documents/ or technical issues pertaining to online Bid. The Bidder is expected to take its registration for e-tendering well in time and complete all procedure relating to e-submission well in time so that there is time for handling any technical glitches. Bidders who are not familiar with the procedure for online Bidding may use the training made available by e Bidding platform nProcure. The contact details of nProcure are as follows:

nCode Solutions (A Division of GNFC Ltd.)
403, GNFC Infotower, Bodakdev,
Ahmedabad - 380054. India
Sales : 079- 4000 7323
Support : 079- 4000 7300
Email : nprocure@ncode.in

4.7 Modification and withdrawal of Bids

Bidder shall not be able to modify any part of its Bid after the Bid submission date. In order to avoid forfeiture of Bid Security, a Bidder may withdraw its Bid after online submission thereof. The Bidder may modify, substitute, or withdraw its Bid online after submission, prior to the Bid submission date.

Any alteration/ modification in the Bid or additional information supplied subsequent to the Bid submission date, unless the same has been explicitly sought for by GMDC, shall be disregarded.

5. Bid evaluation criteria

5.1 Pre-qualification criteria

The document verification shall be done of only those Bidders who are considered to be responsive as per section 6.2.1. A Bidder must meet the following pre-qualification criteria in order to progress to the next stage of the evaluation process:

Category	Parameter	Supporting docs
Statutory	Registered in India under Indian Companies Act 1956/2013 or Limited Liability Partnership firm registered under LLP act in India	Registration certificate/certificate of Incorporation of business

Category	Parameter	Supporting docs
	At least one office in India which has been operational for the last three years or more	Certificate of incorporation, MoA, AoA, GSTIN registration
	Not blacklisted by any Public Sector Undertaking (PSU) / Central or State Government in India / Central or State Government undertaking	- No blacklisting certificate - On 300 Rs. Stamp paper
	Consortiums are not permitted to participate in the Bidding process	
Financial	Average audited annual revenue of INR 100 Cr per annum for last three years (FY2020 to FY2022)	- Revenue and net worth statement - On auditor's / CA's letterhead, signed with seal
	Positive net worth as on 31st March 2022	- Revenue and net worth statement - On auditor's / CA's letterhead, signed with seal
Operational	At least one Contract of similar works[1] of value > INR 24 Cr, or two Contracts of value > INR 15 Cr, or three Contracts of value > INR 12 Cr in the last seven years (FY2017 to FY2023)	Relevant portions of the work order /Contract / completion certificate for Contracts undertaken. In case the client serviced is confidential, the Bidder shall provide a self-certification with document evidence including work order / relevant sections of the contract / agreement. In case the similar work has been done in-house, self-certification with a logical methodology to assess the value of the work. (Annexure 9, Part A)

[1] Similar works include – Installation / Upgradation of DCS for energy industries (power, oil & gas), carried out under a single LOI / work order / agreement

5.2 Technical Score

The Technical Bids of Bidders meeting pre-qualification criteria shall be considered for evaluation and assignment of technical scores. The technical evaluation will be based on the evaluation of technical bids The Technical Score (TeS) will be computed as the total score in the technical Bid.

5.2.1 Technical Bid

The score of the Bidder's Technical Bid shall be evaluated as per the scoring system detailed below.

Category	Criteria	Thresholds	Score	Verification
Prior experience	Number of installation / upgradation projects for DCS undertaken in energy industries (power, oil & gas) in India with a contract value > 20 crores	5 points - >= 5 projects 4 points - 4 projects 3 points - 3 projects 2 points - 2 projects 1 point - 1 project	5	Document evidence including relevant portions of the work order / Contract / completion certificate for contracts undertaken (Annexure 9, Part B)
	Portfolio of experience in the installation / upgradation of main DCS in energy industries (power, oil & gas) in India	5 points - >= 800 MW 4 points - >= 700 MW 3 points - >= 600 MW 2 points - >= 500 MW 1 point - < 400 MW	5	
	Largest individual project undertaken for installation / upgradation of DCS for Boiler / Turbine in a coal / lignite based thermal power plant in India	10 points - >= 125 MW 8 points - >= 100 MW 6 points - >= 75 MW 4 points - >= 50 MW 2 point - < 50 MW	10	
	Prior experience in undertaking projects offered by PSU companies involving installation / upgradation of DCS in energy industries (power, oil & gas) in India	5 points - Yes 0 points - No	5	
On-ground team capabilities	DCS Package leader's years of experience	15 points - >= 15 years' exp. 10 points - < 15 years' exp. 0 points - < 12 years' exp.	15	Self-declaration of workforce capabilities (Annexure 10)

Category	Criteria	Thresholds	Score	Verification
	Electrical and Instrumentation lead's years of experience	5 points - 10+ years' exp. (for each lead) 3 points - <10 years' exp. (for each lead) 0 points - <7 years' exp.	10	
Service capabilities	Established operations in India with at least one service center	10 points – Yes 0 points – No	10	Document evidence including relevant certificates of registration / lease agreements for the service center (Annexure 9, Part B)
	Total		**60**	

5.2.2 Technical Presentation

The Technical Bid will be accompanied by a Technical Presentation to the Bid evaluation committee. Bidders shall prepare a presentation in PPT format and will be evaluated along the parameters detailed below. The Bidder shall, therefore, ensure appropriate details are incorporated in the presentation to be evaluated comprehensively.

The score of the Bidder's Technical Presentation shall be evaluated as per the scoring system detailed below.

Category	Parameter	Score
Technical capabilities *(10 marks)*	Successful case studies of performance improvement of DCS and Instrumentation systems at coal or lignite based thermal power projects	10
	Successful case studies for modern and large scale DCS upgradation projects in energy industries (power, oil & gas)	
Key personnel *(10 marks)*	Personnel with prior experience in upgradation of DCS and Instrumentation systems at coal or lignite based thermal power plants	10
	Proposed team, including details of the 'DCS Package Leader' and Instrumentation & Electrical Leads	
Approach and methodology *(20 marks)*	Plan for Procurement of all equipment / material / spares / services / works for the Overhaul and estimated timelines	20
	Plan for timely execution of Overhaul activities at Plant post procurement, including potential risk mitigation measures	

Category	Parameter	Score
	Plan for testing (FATs, ICS CFAT, SATs, and Performance Guarantee Tests) and commissioning of the DCS and Instrumentation systems	
	Plan for post overhaul support for operations and maintenance of the upgraded DCS / PLC systems to ensure satisfactory performance of the upgraded DCS / PLC systems for 15 years	
	Total	**40**

5.3 Financial Score

The Bidders obtaining a Technical Score of minimum 60 (sixty) shall be considered as technically qualified Bidders. The Price Bid of only the technically qualified Bidders shall be opened.

The Bidders shall be required to quote the Lumpsum charges for DCS and Instrumentation Upgrade for the duration of the Contract, as per the format provided in Annexure 18, through online submission of Price Bids.

The Financial Score shall then be evaluated as follows:

$$\text{Financial Score (FiS)} = \frac{\text{FiL}}{\text{FiC}} \times 100$$

Where,

FiL is the L1 (Lowest Bidder)'s Lumpsum Charges for DCS and Instrumentation Upgrade

FiC is the Lumpsum Charges for DCS and Instrumentation Upgrade quoted by the Bidder

The Bidder recording the lowest aggregate Supply and Services charges for the tenure of the Contract among all technically qualified Bidders shall be given maximum score of 100.

5.4 Composite score

The Composite Score of the Bidders shall be computed using the Technical Score and the Financial Score as follows:

Composite Score (CS) = Technical Score (TeS) × 70% + Financial Score (FiS) × 30%

The technical criteria have been assigned a weightage of 70% while the commercial criteria have been assigned a weightage of 30%.

The Bidder obtaining the highest Composite Score shall be declared the Preferred Bidder. In case of a tie between two or more Bidders based on the Composite Score (i.e., two or more Bidder obtain the same Composite Score), the Bidder securing the higher Technical Score (TeS) among the tied Bidders shall be declared as the Preferred Bidder.

After discussions at the discretion of GMDC, the LOA would be granted to the Preferred Bidder who would then be the Successful Bidder with whom the Agreement shall be signed.

6. Bid evaluation process

6.1 Opening of technical Bid

The Bidder's names, the presence or absence of requisite RFP Fee and Bid Security and such other details, as GMDC in its sole discretion may consider appropriate, shall be announced at the opening of Technical Bid.

GMDC will subsequently examine and evaluate Technical Bids in accordance with the provisions set out hereunder in Section 6.2.

6.2 Evaluation of technical Bid

The Bidders shall be required to submit documents as per Section 4.4.2 along with supporting documents. GMDC shall examine and evaluate the Technical Bids as per the evaluation steps specified below.

6.2.1 Test of responsiveness

Prior to evaluation of the Technical Bids, GMDC shall determine whether each Bid is responsive to the requirements of the RFP. A Bid shall be considered responsive only if:

1. The EMD, RFP Fee, and Technical Bids are submitted in hard copy as per the appropriate formats in person as per Section 4.4.1 and 4.4.2 within the Bid submission date
2. The Price Bid is submitted online as per the appropriate format within the Bid submission date
3. It does not contain any conditionality
4. It is not non-responsive to the terms hereof and any other condition specified elsewhere in the RFP

GMDC reserves the right to reject any Bid which is non-responsive and no request for alteration, modification, substitution, or withdrawal shall be entertained by GMDC in respect of such Bid.

Evaluation of pre-qualification criteria and document checks of only those Bidders shall be carried out whose Bids determined to be responsive.

6.2.2 Assessment of pre-qualification criteria

GMDC shall examine and evaluate the pre-qualification of each Technical Bid upon determining its responsiveness as per Section 6.2.1.

The Bidder must meet pre-qualification criteria specified in Section 5.1 and have submitted all documents as per Section 4.4.2 in order to qualify for next stage of assessment.

Evaluation of Technical Bids to assign Technical Score of only those Bidders shall be carried out whose Bids are meeting the pre-qualification criteria and submitted all required documents.

6.2.3 Determination of technical score

GMDC shall examine and assign Technical Score to each pre-qualified Bid as per the scoring mechanism described in Section 5.2

Responsive and pre-qualified Bidders shall be called to make a Technical Presentation as per the parameters specified in Section 5.2.2 and shall be scored by the committee.

The Technical Score of each Bid shall be calculated as the sum of the scores obtained in Technical Bid and Technical Presentation.

The Bids of the Bidders determined to be responsive, meeting the pre-qualification criteria, and obtaining a Technical Score of minimum 70 will be declared as technical qualified Bids, and the Bidders thereby shall be declared as technically qualified Bidders.

6.3 Evaluation of Price Bid

The Bidders shall be required to submit documents as per Section 4.4.3. GMDC shall examine and evaluate the Price Bids as per the evaluation steps specified below.

6.3.1 Opening of Price Bid

The Price Bids of only the Bidders determined to be responsive and meeting the Pre-Qualification Criteria and obtaining required Technical Score in accordance with Section 6.2 shall be opened.

The time and date of opening of Price Bids shall be informed to the Bidders who are declared as technical qualified Bidders pursuant to Section 6.2.3 in advance. The name of Bidder, Bid rates, etc. will be announced at such opening.

6.3.2 Determination of financial score

GMDC shall determine the Financial Score for each technical qualified Bid as specified in Section 5.3.

6.4 Determination of composite score

The Technical Score and Financial Score obtained by the Bidder shall be combined as per the formula provided in Section 5.4.

The Bidder obtaining the highest Composite Score shall be declared the Preferred Bidder. In case of a tie between two or more Bidders based on the Composite Score (i.e., two Bidder obtain the same Composite Score), the Bidder securing the higher Technical Score (TeS) among the tied Bidders shall be declared as the Preferred Bidder.

After discussions at the discretion of GMDC, the LOA would be granted to the Preferred Bidder who would then be the Successful Bidder with whom the Agreement shall be signed.

6.5 Clarification of Bids and request for information

To facilitate evaluation of Bids, GMDC may, at its sole discretion, seek in writing, clarifications / documents / missing information from any Bidder pertaining to its Bid. If the

response from the Bidder is not received by GMDC before the expiration of the deadline prescribed in the written request, GMDC reserves the right to proceed with the evaluation process at the total risk and cost of the Bidder.

6.6 Verification and disqualification

GMDC reserves the right to verify all statements, information and documents submitted by the Bidder in response to the RFP and the Bidder shall, when so required by GMDC, make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification by GMDC shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of GMDC there under.

GMDC reserves the right to reject any Bid and / or appropriate EMD if:

1. At any time, a material misrepresentation in terms of misleading or false representation is made or uncovered, or
2. The Bidder does not provide, within the time specified by GMDC, the supplemental information sought by GMDC for evaluation of the Bid
3. In case of fraudulent Bid and the Bidder is found to be involved in fraudulent and corrupt practice as per Section 8
4. In case the Bidder has any conflict of interest as per Section 9
5. A Bidder makes an effort to influence GMDC in its decisions on the evaluation process / selection process
6. While evaluating the Bid, if it comes to GMDC's knowledge expressly or implied, that some Bidders may have compounded in any manner whatsoever or otherwise joined to form an alliance resulting in distorting competitive price discovery or delaying the processing of proposal
7. Record of poor performance such as abandoning the work, rescinding of Contract for which the reasons are attributable to the non-performance of the Bidder, consistent history of litigation awarded against the applicant or financial failure due to bankruptcy
8. A Bidder submits or participates in more than one Bid under this RFP

If such disqualification / rejection occurs after the Bids have been opened and the Preferred Bidder as per award criteria gets disqualified / rejected, then GMDC reserves the right to consider the next best Bidder or take any other measure as may be deemed fit in the sole discretion of GMDC, including annulment of the process.

In case it is found during the evaluation of Bids or at any time before signing of the Contract or after its execution and during the period of subsistence thereof, that one or more of the pre-qualification criteria / technical criteria have not been met by the Bidder, or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith if not yet appointed as the Bidder either by issue of the LOA or entering into the Contract, and if the Successful Bidder has already been issued the LOA or has entered into the Contract, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this RFP, be liable to be terminated, by a communication in writing by GMDC to the Successful Bidder or the Bidder, as the case may be, without GMDC being liable in any manner whatsoever to the Successful Bidder or the Bidder. In such an event, GMDC shall be entitled to forfeit and

appropriate the EMD or Performance Security, as the case may be, without prejudice to any other right or remedy that may be available to GMDC under the RFP and/or the Contract.

6.7 Contacts during Bid evaluation

Bids shall be deemed to be under consideration immediately after they are opened and until such time GMDC makes official intimation of award/ rejection to the Bidders. While the Bids are under consideration, Bidders and/ or their representatives or other interested Parties are advised to refrain, save and except as required under the Bidding documents, from contacting by any means, GMDC and/ or their consultants/ employees/representatives on matters related to the Bids under consideration.

6.8 Correspondence with Bidder

Save and except as provided in this RFP, GMDC shall not entertain any correspondence with any Bidder in relation to acceptance or rejection of any Bid.

6.9 Confidentiality

Information relating to the examination, clarification, evaluation, and recommendation for the Bidders shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising GMDC in relation to, or matters arising out of, or concerning the Bidding process. GMDC will treat all information, submitted as part of the Bid, in confidence and will require all those who have access to such material to treat the same in confidence. GMDC may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/ or GMDC or as may be required by law or in connection with any legal process.

7. Appointment of Bidder

7.1 Notification of award

Prior to expiry of the Bid Validity Period, GMDC shall notify the Preferred Bidder as the Successful Bidders through letter that their Bid has been accepted. This letter ("Letter of Award"/ "LOA") shall be issued, induplicate, and shall specify the sum which GMDC shall pay to the Successful Bidder and sum that the Successful Bidder shall pay to GMDC in consideration of scope as per the terms of Contract.

Successful Bidder shall, within 7 (seven) days of the receipt of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof. In the event the duplicate copy of the LOA duly signed by the Successful Bidder is not received by the stipulated date, GMDC may, unless it consents to extension of time for submission thereof, appropriate the Bid Security of such Bidder as damages on account of failure of the Successful Bidder to acknowledge the LOA, and the next eligible and qualified Bidder may be considered.

7.2 Signing of agreement

After acknowledgement of the LOA as aforesaid by the Successful Bidder, it shall cause the Successful Bidder, subject to furnishing the Performance Security as per the RFP provisions, to execute/sign the Agreement within the 30 (thirty) days from the date of LOA .

The Successful Bidder shall get correct amount of Stamp Duty adjudicated (Stamp Paper of Rs. 300 denominations can be used), at Ahmedabad in accordance with Applicable Law and submit the same in two copies duly stamped and executed within 30 (thirty) days from the dispatch of Letter of Award. GMDC shall return one copy duly sealed and signed as a token of acceptance of the Contract. Stamp Duty, and any other charges as may be levied under Applicable Law, shall be paid by the Successful Bidder.

After the signing of Agreement, the Successful Bidder shall be called the “Contractor”.

7.3 Performance Security

The Successful Bidder shall furnish Performance Security to GMDC for securing the due and faithful performance of its obligations under the Agreement, within 7 (seven) days from the date of acceptance of LOA, in the form of Demand Draft or an unconditional and irrevocable bank guarantee (Annexure 20) for amount of equivalent to 10% (Ten percent) of the Lumpsum Charges for DCS and Instrumentation Upgrade (without GST) quoted, payable to GMDC by the Successful Bidders (the “Performance Security”) from the banks approved by Government of Gujarat except Co-Operative banks . Such Performance Security shall be in favor of “Gujarat Mineral Development Corporation Ltd” and admissible and payable at Ahmedabad branch from approved bank to GMDC. The list of approved banks has been listed in Annexure 21.

The Successful Bidder will be bounded for conflict resolution for a period of 12 (twelve) months after the completion of the Contract. Hence, the Bidder shall maintain a valid and binding Performance Security for a period of 24 (twenty-four) months. The Bidder shall ensure that the Performance Security shall subsist in full force and effect in terms hereof, throughout the tenure of the Contract and thereafter until expiry of 24 (twenty-four) months. In case tenure of the Contract is extended then the Bidder shall have to renew Performance Security for a period of extended tenure.

If the Successful Bidder, fails to furnish the Performance Security, it shall be lawful for GMDC to forfeit the EMD and cancel the Contract or any part thereof.

GMDC shall be entitled to forfeit and appropriate the amount of the Performance Security in whole or in part:

1. in the event GMDC requires to recover any sum due and payable to it by the Bidder including but not limited to damages; and which the Bidder has failed to pay in relation thereof; and
2. in relation to Bidder’s breach in accordance with the terms contained in the Agreement

At any time during the Validity Period, the Performance Security has either been partially or completely been encashed by GMDC in accordance with the provision of the Agreement, the Bidder shall within 15 (fifteen) days of such encashment either replenish, or provide a

fresh Performance Security, as the case may be, failing which GMDC shall be entitled to terminate the Agreement.

At the end of the tenure of the Contract, the Performance Security shall be returned to the Bidder without any interest, subject to any deductions which may be made by GMDC in respect of any outstanding dues under the terms of the Agreement.

7.4 Proprietary data

Subject to the provisions of Section 6.9, all documents and other information provided by GMDC or submitted by Bidder to GMDC shall remain or become the property of GMDC. Bidder is to treat all information as strictly confidential. GMDC will not return any Bid, or any information related thereto. All information collected, analyzed, processed or in whatever manner provided by the Bidder to GMDC in relation to the assignment pursuant to the scope of work / terms of reference shall be the property of GMDC.

7.5 Tax liability

The rates quoted in Price Bid Annexure 18 shall be inclusive of all taxes, duties, surcharge Levies etc. as applicable except applicable Goods and Service Tax. Applicable GST at the time of invoicing shall be reimbursed by GMDC.

GMDC shall be entitled to deduct tax at source as may be applicable. The TDS certificate(s) shall be submitted as per the due date specified in the Income Tax Act.

8. Fraudulent and corrupt practices

The Bidders and their respective officers, employees, agents, and advisers shall observe the highest standard of ethics during the Bidding process and subsequent to the issue of the LOA and during the subsistence of the Contract. Notwithstanding anything to the contrary contained herein, or in the LOA or the Contract, GMDC may reject a Bid, withdraw the LOA, or terminate the Contract, without being liable in any manner whatsoever to the Bidder, if it determines that the Bidder or as the case may be, has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice, or restrictive practice in the Bidding process. In such an event, GMDC shall be entitled to forfeit and appropriate the EMD, as the case may be, without prejudice to any other right or remedy that may be available to GMDC under the Bidding documents and/ or the Contract, or otherwise. In case of cancellation of Contract, if already awarded, GMDC shall be entitled to recover from the Bidder the amount of any loss arising from such cancellation in accordance with provisions of RFP document.

Without prejudice to the rights of GMDC hereinabove and the rights and remedies which GMDC may have under the LOA or the Contract or otherwise if a Bidder as the case may be, is found by GMDC to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bidding process, or after the issue of the LOA or the execution of the Contract and/or otherwise, such Bidder shall not be eligible to participate in any RFP or RFP issued by GMDC during a period of 2 (two) years from the date of identification of such practice.

For the purposes of this Section 8, the following terms shall have the meaning hereinafter respectively assigned to them:

1. "**Corrupt practice**" shall mean (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of GMDC who is or has been associated in any manner, directly or indirectly, with the Bidding process or the LOA or has dealt with matters concerning the Contract or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of GMDC, shall be deemed to constitute influencing the actions of a person connected with the Bidding process); or (ii) engaging in any manner whatsoever, whether during the Bidding process or after the issue of the LOA or after the execution of the Contract, any person in respect of any matter relating to the LOA or the Contract or otherwise, who at any time has been or is a legal, financial or technical adviser of GMDC in relation to any matter concerning the assignment
2. "**Fraudulent practice**" shall mean a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding process
3. "**Coercive practice**" shall mean impairing or harming, or threatening to impair or harm, directly or indirectly, any person or property to influence any person's participation or action in the Bidding process
4. "**Undesirable practice**" shall mean (i) establishing contact with any person connected with or employed or engaged by GMDC with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding process; or (ii) having a Conflict of Interest as per Section 9
5. "**Restrictive practice**" shall mean forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Bidding process

9. Conflict of interest

The Bidder shall not have a conflict of interest that may affect the selection process. Any Bidder found to have a conflict of interest shall be disqualified. In the event of disqualification, GMDC shall forfeit and appropriate the Bid Security, if available, or as mutually agreed genuine pre-estimated compensation and damages payable to GMDC for, inter alia, the time, cost, and effort of GMDC including consideration of such Bid, without prejudice to any other right or remedy that may be available to GMDC hereunder or otherwise.

GMDC requires that the appointed Bidder provide professional, objective, and impartial advice and at all times hold GMDC's interests paramount, avoid conflicts with other assignments or its own interests, and act without any consideration for future work. The Bidder shall not accept or engage in any assignment that would be in conflict with its prior or current obligations to other clients, or that may place it in a position of not being able to carry out the assignment in the best interests of GMDC.

Without limiting the generality of the above, shall be deemed to have a conflict of interest affecting the selection process, if the relationship between two Bidders is established through common holding, either directly or through associates, of at least 26% holding of equity/profit sharing in another company/firm, or in each other and other terms as specified hereunder:

1. The Bidder, its member or associate (or any constituent thereof) and any other Bidder, its member or associate (or any constituent thereof) have common controlling Ownership interest. Common controlling Ownership interest for Company, Limited Liability Partnership Firm is defined as follows. Associates of the Bidding firm shall mean parent and/or subsidiary and/or sister concerned firm having meaning specified in definition Section:
    a. **If Bidder is a Company**: In such case, the Bidder (including its associate or any shareholder thereof of Bidder and/or its associates) possessing over 26% of the paid up and subscribed capital in its own company or associate as the case may be, also holds:
        i. more than 26% of the paid up and subscribed equity capital in the other Bidder, its member or associate of such other Bidder or associates is company and/or
        ii. More than 26% of profit sharing in other Bidder or associates such other Bidder or associates is a Limited Liability Partnership firm and/or
    b. **If Bidder is a Limited Liability Partnership Firm:** In such case, the Bidder or its partners or associate having a profit sharing of more than 26% of such Bidder or its partners or associate as the case may be also holds:
        i. more than 26% of the paid up and subscribed equity capital in the other Bidder or associate of such other Bidder, its member or associates is company and/or
        ii. more than 26% of profit sharing in other Bidder or its associates such other Bidder or its associates is a Limited Liability Partnership firm and/or
2. A constituent of such Bidders is also a constituent of another Bidders, or
3. Such Bidders receive or has received any direct or indirect subsidy or grant from any other Bidder/s, or has provided any such subsidy to any other Bidders, or
4. Such Bidder has the same legal representative for purposes of this Bid as any other Bidders or
5. such Bidders have a relationship with another Bidders, directly or through common third Parties, that puts them in a position to have access to each other's' information about, or to influence the Bid of either or each of the other Bidders or
6. there is a conflict among this and other assignments of the Bidder (including its personnel and other members, if any) and any subsidiaries or entities controlled by such Bidder or having common controlling shareholders. The duties of the Bidder will depend on the circumstances of each case. While providing services to GMDC for this assignment, the Bidder shall not take up any assignment that by its nature will result in conflict with the present assignment
7. The Bidder shall furnish an affirmative statement as to the existence of, or potential for conflict of interest on the part of the Bidder due to prior, current Contracts, engagements, or affiliations with GMDC. Additionally, such disclosure shall address

any and all potential elements (time frame for service delivery, resource, financial or other) that would adversely impact the ability of the Bidder to complete the requirements as given in the RFP

Part 4: Annexures

List of annexures:

Annexure No.	Description
Annexure 1	System Architecture of all the DCS / PLC Systems
Annexure 2	Control Room Layout
Annexure 3	Bill of Quantities
Annexure 4	Operating parameters of remote DCS / PLC Systems to be monitored from CCR
Annexure 5	New parameters to be added in the DCS / PLC systems
Annexure 6	List of parameters to be checked in the Sequence of Events report
Annexure 7	List of critical loops for loop testing
Annexure 8	Letter of bid submission
Annexure 9	Bidders experience and credentials
Annexure 10	Declaration of key personnel
Annexure 11	Revenue and net worth statement
Annexure 12	No blacklisting certificate
Annexure 13	No deviation certificate
Annexure 14	Format for power of attorney
Annexure 15	Undertaking
Annexure 16	Undertaking of indemnity
Annexure 17	Undertaking for Post Upgradation Support
Annexure 18	Indicative format of Price bid
Annexure 19	Format for Bank Guarantee towards EMD
Annexure 20	Format for Bank Guarantee towards Performance Security
Annexure 21	List of approved banks for EMD, RFP fees, and Performance Security

Annexure 1: System architecture of all the DCS / PLC Systems

(Attached separately)

Annexure 2: Control room layout

(Attached separately)

Annexure 3: Bill of Quantities

(Attached separately)

Annexure 4: List of existing operating parameters of remote DCS / PLC systems to be monitored from CCR

Sr. No.	DCS / PLC	Area	Operating parameter	Applicable number of field instruments	Functional requirement
1	Allen Bradley SLC 5/04	CCR	Control valve feedback	2 Nos. of control valves	Monitoring
2	Allen Bradley SLC 5/04	CCR	Mov feedback	2 Nos. of Movs	Monitoring
3	Allen Bradley SLC 04	ACW/CCW	ACW pump on/off	03 Nos. of pumps	Monitoring and Control
4	Allen Bradley SLC 04	ACW/CCW	ACW pump discharge valve on/off	03 Nos. of pumps	Monitoring and Control
5	Allen Bradley SLC 04	ACW/CCW	ACW pump current	03 Nos. of pumps	Monitoring
6	Allen Bradley SLC 04	ACW/CCW	ACW motor winding temperature	03 Nos. of pumps	Monitoring
7	Allen Bradley SLC 04	ACW/CCW	ACW motor bearing temperature	03 Nos. of pumps	Monitoring
8	Allen Bradley SLC 04	ACW/CCW	ACW motor vibration	03 Nos. of pumps	Monitoring
9	Allen Bradley SLC 04	ACW/CCW	ACW suction pressure Switch	03 Nos. of pumps	Monitoring
10	Allen Bradley SLC 04	ACW/CCW	CCW pump on/off	03 Nos. of pumps	Monitoring and Control
11	Allen Bradley SLC 04	ACW/CCW	CCW pump discharge valve On/off	03 Nos. of pumps	Monitoring and Control
12	Allen Bradley SLC 04	ACW/CCW	CCW pump current	03 Nos. of pumps	Monitoring
13	Allen Bradley SLC 04	ACW/CCW	CCW motor winding temperature	03 Nos. of pumps	Monitoring
14	Allen Bradley SLC 04	ACW/CCW	CCW motor bearing temperature	03 Nos. of pumps	Monitoring
15	Allen Bradley SLC	ACW/CCW	CCW suction pressure Switch	03 Nos. of pumps	Monitoring

Sr. No.	DCS / PLC	Area	Operating parameter	Applicable number of field instruments	Functional requirement
	04				
16	Allen Bradley SLC 04	ACW/CCW	Ash Cooler Pump On/off	03 Nos. of pumps	Monitoring and Control
17	Allen Bradley SLC 04	ACW/CCW	Ash Cooler pump discharge valve on/off	03 Nos. of pumps	Monitoring and Control
18	Allen Bradley SLC 04	ACW/CCW	Ash Cooler Pump current	03 Nos. of pumps	Monitoring
19	Allen Bradley SLC 04	ACW/CCW	Ash Cooler winding temperature	03 Nos. of pumps	Monitoring
20	Allen Bradley SLC 04	ACW/CCW	Ash Cooler motor bearing temperature	03 Nos. of pumps	Monitoring
21	ABB AC800M	MHP	All conveyor ON/ off feedback	10 Nos. of conveyors	Monitoring
22	ABB AC800M	MHP	All conveyor current	10 Nos. of conveyors	Monitoring
23	ABB AC800M	MHP	Lignite Bunker level	4 Nos.	Monitoring
24	ABB AC800M	MHP	CBF- 1 feed rate TPH	1 No.	Monitoring
25	ABB AC800M	MHP	C-4A & C-4B feed rate TPH	2 Nos.	Monitoring
26	ABB AC800M	MHP	Impactor On/Off feedback	2 Nos.	Monitoring
27	ABB AC800M	MHP	Lime bunker	2 Nos.	Monitoring
28	ABB AC800M	MHP	Apron feeder on/off feedback	1 No.	Monitoring
29	ABB AC800M	MHP	Stacker/Reclaiming feed rate	1 No.	Monitoring
30	ABB AC800M	MHP	Overview of MHP lignite ,Lime feeding mimic status, and weighbridge monitoring data	NA	Monitoring
31	Siemens Teleperm XP DCS	SWTP	ALL TANK LEVEL	5 Nos.	Monitoring
32	Siemens Teleperm XP DCS	SWTP	MED flow	2 Nos.	Monitoring
33	Siemens Teleperm XP DCS	SWTP	CCW Make up pump Feedback	2 Nos.	Monitoring

Sr. No.	DCS / PLC	Area	Operating parameter	Applicable number of field instruments	Functional requirement
34	Siemens Teleperm XP DCS	SWTP	CCW Make up flow	3 Nos.	Monitoring
35	Siemens Teleperm XP DCS	SWTP	MED-1/2 production m3/hr	3 Nos.	Monitoring
36	Siemens Teleperm XP DCS	SWTP	Intake pump current	3 Nos.	Monitoring
37	Siemens Teleperm XP DCS	SWTP	Booster pump on/off status	3 Nos.	Monitoring
38	Siemens Teleperm XP PLC	CW pump house	CW pump on/off	5 Nos. of pumps	Monitoring and Control
39	Siemens Teleperm XP PLC	CW pump house	CW pump discharge valve on/off	5 Nos. of pumps	Monitoring
40	Siemens Teleperm XP PLC	CW pump house	CW pump discharge pressure	5 Nos. of pumps	Monitoring
41	Siemens Teleperm XP PLC	CW pump house	CW pump current	5 Nos. of pumps	Monitoring
42	Siemens Teleperm XP PLC	CW pump house	CW pump vibration	5 Nos. of pumps	Monitoring
43	Siemens Teleperm XP PLC	CW pump house	CW pump motor winding temperature	5 Nos. of pumps	Monitoring
44	Siemens Teleperm XP PLC	CW pump house	CW motor bearing temperature	5 Nos. of pumps	Monitoring
45	Siemens Teleperm XP PLC	CW pump house	CW pump thrust bearing temperature	5 Nos. of pumps	Monitoring
46	Siemens Teleperm XP PLC	CW pump house	CW pump motor vibration	5 Nos. of pumps	Monitoring
47	Siemens Teleperm XP PLC	CW pump house	CW pump discharge flow	5 Nos. of pumps	Monitoring
48	Siemens Teleperm XP PLC	CW pump house	CW pump sump level switches	5 Nos. of pumps	Monitoring
49	Siemens Teleperm	CW pump house	CW Interconnecting valve open/close	2 Nos. of MOVs	Monitoring

Sr. No.	DCS / PLC	Area	Operating parameter	Applicable number of field instruments	Functional requirement
	XP PLC		operation and Feedback		
50	Siemens Teleperm XP PLC	CW pump house	All CT Fan on/off	18 Nos.	Monitoring and Control
51	Siemens Teleperm XP PLC	CW pump house	All CT fan current	18 Nos.	Monitoring
52	Siemens Teleperm XP PLC	CW pump house	Forbay level	5 Nos.	Monitoring
53	Siemens Teleperm XP PLC	CW pump house	Condenser pass A and B inlet outlet temperature	8 Nos.	Monitoring
54	Allen Bradley Logix 1756	AHP	Compressor On/off	for 7 Nos. of compressors	Monitoring
55	Allen Bradley Logix 1756	AHP	Compressor motor winding temperature	for 7 Nos. of compressors	Monitoring
56	Allen Bradley Logix 1756	AHP	Compressor motor bearing temperature	for 7 Nos. of compressors	Monitoring
57	Allen Bradley Logix 1756	AHP	Compressor discharge temperature	for 7 Nos. of compressors	Monitoring
58	Allen Bradley Logix 1756	AHP	Silo level	for 5 Nos. of Silos	Monitoring
59	Allen Bradley Logix 1756	AHP	ESP cutoff valve feedback	For 58 Nos.	Monitoring
60	Allen Bradley Logix 1756	AHP	ESP ash inlet valve feedback	For 58 Nos.	Monitoring
61	Allen Bradley Logix 1756	AHP	ESP ash discharge valve feedback	For 58 Nos.	Monitoring
62	Allen Bradley Logix 1756	AHP	Transporter hi level feedback	For 58 Nos.	Monitoring
63	Allen Bradley Logix 1756	AHP	Intermediate silo level	for 5 Nos. of Silos	Monitoring
64	Allen Bradley Logix 1756	AHP	Overview of MHP lignite and Lime feeding mimic status	NA	Monitoring
65	Allen	AHP	ESP fields level	28 Nos.	Monitoring

Sr. No.	DCS / PLC	Area	Operating parameter	Applicable number of field instruments	Functional requirement
	Bradley Logix 1756		indication		
66	Allen Bradley Logix 1756	AHP	ESP fields on/off feedback	28 Nos.	Monitoring

Annexure 5: List of new parameters to be added in DCS / PLC systems

Sr. No.	Area	Operating parameter	Applicable number of field instruments	Functional requirement
1	ACW/CCW	ACW pump discharge pressure	03 Nos. of pumps	Monitoring
2	ACW/CCW	ACW pump vibration	03 Nos. of pumps	Monitoring
3	ACW/CCW	ACW pump DE/NDE bearing temperature	03 Nos. of pumps	Monitoring
4	ACW/CCW	ACW motor vibration	03 Nos. of pumps	Monitoring
5	ACW/CCW	CCW pump discharge pressure	03 Nos. of pumps	Monitoring
6	ACW/CCW	CCW pump vibration	03 Nos. of pumps	Monitoring
7	ACW/CCW	CCW pump DE/NDE bearing temperature	03 Nos. of pumps	Monitoring
8	ACW/CCW	CCW motor vibration	03 Nos. of pumps	Monitoring
9	ACW/CCW	Ash Cooler Pump discharge pressure	03 Nos. of pumps	Monitoring
10	ACW/CCW	Ash Cooler Pump vibration	03 Nos. of pumps	Monitoring
11	ACW/CCW	Ash Cooler Pump DE/NDE bearing temperature	03 Nos. of pumps	Monitoring
12	ACW/CCW	Ash Cooler motor vibration	03 Nos. of pumps	Monitoring
13	ACW/CCW	PHE CCW inlet pressure	03 Nos. PHE	Monitoring
14	ACW/CCW	PHE CCW outlet pressure	03 Nos. PHE	Monitoring
15	ACW/CCW	PHE sea water inlet pressure	03 Nos. PHE	Monitoring
16	ACW/CCW	PHE sea water outlet pressure	03 Nos. PHE	Monitoring
17	ACW/CCW	PHE CCW water I/L and O/L conductivity	03 Nos. PHE	Monitoring
18	MHP	Lignite impactor vibration	2 Nos.	Monitoring
19	MHP	Lime impactor vibration	2 Nos.	Monitoring
20	SWTP	Intake pump and motor vibration	12 Nos.	Monitoring
21	SWTP	MED HP steam flow TPH	3 Nos.	Monitoring
22	SWTP	MED condensate conductivity	2 Nos.	Monitoring
23	SWTP	Reject water PH	1 No.	Monitoring
24	SWTP	Reject water temperature	1 No.	Monitoring
25	SWTP	Reject water TSS	1 No.	Monitoring
26	SWTP	Reject pump vibration	3 Nos.	Monitoring
27	Compressor house	Oil pressure	For 9 Nos. of compressor	Monitoring
28	Compressor house	Diff. pressure	For 9 Nos. of compressor	Monitoring
29	Compressor	CCW suction line pressure	1 No.	Monitoring

Sr. No.	Area	Operating parameter	Applicable number of field instruments	Functional requirement
	house			
30	Compressor house	CCW suction line flow	1 No.	Monitoring
31	Compressor house	Interstate pressure	For 9 Nos. of compressor	Monitoring
32	Compressor house	Oil Temp	For 9 Nos. of compressor	Monitoring
33	Compressor house	First stage temp	For 9 Nos. of compressor	Monitoring
34	Compressor house	Second stage inlet temp	For 9 Nos. of compressor	Monitoring
35	Compressor house	HP outlet temp	For 9 Nos. of compressor	Monitoring
36	Compressor house	Air outlet temp	For 9 Nos. of compressor	Monitoring
37	Compressor house	Water temp	For 9 Nos. of compressor	Monitoring
38	Compressor house	Motor winding temp	For 9 Nos. of compressor	Monitoring
39	Compressor house	Motor bearing temp	For 9 Nos. of compressor	Monitoring
40	Compressor house	Motor current	For 9 Nos. of compressor	Monitoring
41	Compressor house	Compressor on/off status	For 9 Nos. of compressor	Monitoring and control
42	Compressor house	Compressor standby status	For 9 Nos. of compressor	Monitoring
43	Compressor house	Compressor vibration	For 9 Nos. of compressor	Monitoring
44	Switchyard	All breaker on/off feedback	8 Nos.	Monitoring
45	Switchyard	All isolator on/off feedback	34 Nos.	Monitoring
46	Switchyard	GT-1, GT-2, bus coupler on/off feedback	3 Nos.	Monitoring
47	Switchyard	switchyard line diagram status	for 7 Nos. of bays	Monitoring
48	Switchyard	Electrical board incomer	1 Nos.	Monitoring
49	Switchyard	Energy meter reading totalizer	2 Nos.	Monitoring
50	CCR: Boiler	All fans vibration reading to be provided on DCS	22 Nos.	Monitoring
51	CCR: Boiler	All BFP pumps vibration reading to be provide on DCS	12 Nos.	Monitoring
52	CCR: Condenser	All CEP pumps vibration reading to be provided on DCS	12 Nos.	Monitoring

Sr. No.	Area	Operating parameter	Applicable number of field instruments	Functional requirement
53	CCR: Boiler	All Hot water pumps vibration reading	12 Nos.	Monitoring
54	CCR: Boiler	HFO and LDO tank level	2 Nos for HFO and 1 for LDO	Monitoring
55	CCR: Turbine	De aerator dissolved oxygen measurement	2 Nos.	Monitoring
56	CCR: Turbine	All turbines extraction flow transmitter	12 Nos.	Monitoring
57	CCR: Turbine	CRH steam flow transmitters	12 Nos.	Monitoring
58	CCR: Turbine	HRH steam flow transmitters	12 Nos.	Monitoring
59	CCR: Boiler	Lime feeding in boiler TPH	2 Nos.	Monitoring
60	AC Control Room	AC System: Chiller compressor/pump current	8 Nos.	Monitoring
61	AC Control Room	AC System: Chiller compressor/pump on/off status	8 Nos.	Monitoring
62	AC Control Room	AC System: Chiller compressor/pump temperature (I/L & O/L)	8 Nos.	Monitoring
63	AC Control Room	AC System: AHU on/off status	3 Nos.	Monitoring
64	AC Control Room	AC System: AHU current	3 Nos.	Monitoring

Annexure 6: List of parameters to be checked in the Sequence of Events report

(Attached separately)

Annexure 7: List of critical loops for loop testing

Sr. No.	Loop Description
1	Startup Burner Air Control Loop for 8 Burners
2	Secondary Air Flow control Loop
3	SA Pressure Control Loop
4	Ash Cooler Air Flow Control Loop
5	Furnace Pressure Control Loop Through IGV
6	Furnace Pressure Control Loop Through Scoop
7	HFO Temperature control Loop
8	HFO Pressure control Loop
9	Startup Burner oil Flow control Loop
10	Drum Level Low Load Control Loop
11	Drum Level High Load Control Loop
12	Super Heater Temperature Control Loop Left & Right
13	Re Heater Temperature Control Loop Left & Right
14	Ash cooler cooling water temperature control Loop
15	PA Pressure control Loop
16	PA Flow Control Left & Right
17	Drag Link Conveyor speed control
18	Gravimetric Feeder Control
19	Master Pressure Control
20	Oxygen Trim Control
21	Feed water control station DP Control Through BFP A, B, C Control Loop
22	BFP Minimum Recirculation Flow control for A, B, C
23	Auxiliary PRDS Pressure Control Loop Low Load
24	Auxiliary PRDS Temperature Control Loop Low Load
25	Auxiliary PRDS Pressure Control Loop High Load
26	Auxiliary PRDS Temperature Control Loop High Load
27	Soot Blower Pressure Control Loop
28	Hag Dilution Air Control Loop
29	HAG Jack Shaft Actuator Control
30	HAG Draft Control through Recirculation Fan Damper
31	HP Heater 6 Level Drip to Deaerator control loop
32	HP Heater 6 Level Drip to Flash control loop

Sr. No.	Loop Description
33	HP Heater 6 Level Drip to HP Heater 5 control loop
34	HP Heater 5 Level Drip to Deaerator control loop
35	HP Heater 5 Level Drip to Flash control loop
36	CEP Minimum Recirculation Flow Control Valve
37	Condenser Level Control
38	Deaerator Level control Hi Load
39	Deaerator Level control Low Load
40	Deaerator pressure control (from CRH Pegging Steam)
41	Deaerator Pressure control (Aux PRDS)
42	Deaerator Excess Level Control loop
43	LP Heater 3 to LP2 Level Control Loop
44	LP Heater 3 to Flash Tank Level Control Loop
45	LP Heater 2to Flash Tank Level Control Loop
46	LP Heater 1 Level Control Loop
47	HP Bypass Pressure Control Loop
48	HP Bypass Temperature control loop
49	LP Bypass Pressure Control
50	LP Bypass Temperature control
51	Gland Steam Pressure Control
52	Gland Steam Temperature Control
53	Unit Master Control Loop

Annexure 8: Letter of bid submission

(To be printed on Bidder's letterhead)

Dated:

To,
General Manager (Power),
Gujarat Mineral Development Corporation Ltd
Khanij Bhavan,
132-Ring Road, Gujarat University Ground, Vastrapur,
Ahmedabad- 380052

Subject: Submission of Bid towards Request for Proposal (RFP) for DCS and Instrumentation Upgradation of GMDC's 250 (2x125) MW Akrimota Thermal Power Station (ATPS), Gujarat

Dear Sir/Madam,

We, the undersigned, offer to provide services and spares for [Insert title of assignment] in accordance with your Request for Proposal dated [Insert Date] and our Bid. We are hereby submitting our Bid, which includes this Technical Bid, and a Price Bid, as follows.

1. Physical submission of Technical Bid, RFP Fee, and EMD as per the requirement of the RFP
2. Online submission of Price Bid as per the requirement of the RFP

We are submitting our Bid in individual capacity. We hereby declare that all the information and statements made in this proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

If discussions are held during the period of validity of the Bid, i.e., before the date indicated in RFP, we undertake to negotiate on the basis of the proposed personnel. Our Bid is binding upon us and subject to the modifications resulting from Contract discussions.

We undertake, if our Bid is accepted, to initiate the Overhauling services related to the assignment not later than the period specified in the RFP.

We understand you are not bound to accept any proposal you receive.

We remain,

Yours sincerely,

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name of Firm:

Address:

Annexure 9: Bidders experience and credentials

A – Pre-Qualification Criteria

1. Bidder's organization

[Provide here a brief description of the background and organization of your firm/entity. The brief description should include Ownership details, date, and place of incorporation of the firm, objectives of the firm etc. Provide supporting documents such as Certificate of Incorporation, MOA, AOA, GSTIN Registration, which may be applicable etc.]

2. Similar works by Bidder

[Using the format below, provide information on each project for which your firm, was legally contracted either individually as a corporate entity or as one of the major partners within an association, for carrying out job similar to the ones specified in Pre-Qualification Criteria set forth in the RFP (If possible, the Bidder shall specify exact job for which experience details may be submitted)]

Parameter	Response
Name of work	
Description of work	
Value of the Contract (in INR)	
Duration of the work (in months)	
Start date (month and year)	
End date (month and year)	

Similar works include – Installation / Upgradation of DCS and Instrumentation systems for coal or lignite-based thermal power plants of 250 MW capacity or higher, and each unit of 100 MW or higher, carried out under a single LOI / work order / agreement

The Bidder must provide document evidence including relevant portions of the work order / Contract / completion certificate for contracts undertaken.

B – Technical Criteria

1. Experience in EPC/Upgradation of DCS and instrumentation systems at coal or lignite based thermal power plants

   [Using the format below, provide information on each work for which your firm, was legally contracted either individually as a corporate entity or as one of the major partners within an association, as per the Technical Criteria set forth in the RFP]

Parameter	Response
Name of work	
Description of the work	
Capacity of Contract (in MW)	
Value of the Contract (in INR)	
Duration of the work (in months)	
Start date (month and year)	
End date (month and year)	

   The Bidder must provide document evidence including relevant portions of the work order / Contract / completion certificate for contracts undertaken.

2. Adequate after sales capabilities

   1. Certificate of registration / lease agreements for the service center

Annexure 10: Declaration of key personnel

Format of Curriculum Vitae (to be provided by all the Key Personnel as mentioned in Section 5.2 of Part 3 of this document)

1. Name of the Personnel: _____
2. Proposed Position for the Project: _____
3. Date of Birth: _____
4. Nationality: _____
5. Education Qualifications: _____

School/College	Degree/Certification	Year of Graduation

6. Languages: _____
7. Years of experience: _____
8. Employment Record: _____

Name of the firm	From – To Date	Designation/Position

9. Work(s) Undertaken that illustrates the capabilities to handle the tasks defined in Part 2 of this document
    a. Name of the assignment: _____
    b. Year: _____
    c. Location: _____
    d. Client: _____
    e. Position(s) held: _____
    f. Key activities performed: _____
10. Any Relevant Certifications (e.g. – PMP): _____

Note: Kindly submit any other copies of CV (if needed) and appropriate certifications with this sheet. Additional sheets may be used to provide any additional information

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name of Firm:

Address:

Annexure 11: Revenue and net worth statement

(To be printed on Statutory Auditor's/ Registered Chartered Accountant's letterhead)

I hereby declare that I have scrutinized and audited the financial statement of M/s. _____. Following is the audited revenue for the last three years, net worth and working capital for the last year.

Years	Revenue (INR Cr)
2019-2020	
2020-2021	
2021-2022	

Years	Net worth (INR Cr)
As on 31st March 2022	

Annexure 12: No blacklisting certificate

(To be printed on stamp paper of value INR 300)

Format for Affidavit certifying that the Entity/Promoter/s / Director/s of Bidder are not blacklisted

No-Blacklisting Affidavit

I M/s. _____ (Name of the Bidder), (the names and addresses of the registered office) hereby certify and confirm that we or any of our promoter/s / director/s are not barred by Government of Gujarat (GoG) / any other entity of GoG or blacklisted by any state government or central government / department / Local Government / agency in India or from abroad from participating in Project/s, either individually or as member of a Consortium as on the _____ (Bid submission date).

We further confirm that we are aware that our Bid for the captioned Project would be liable for rejection in case any material misrepresentation is made or discovered with regard to the requirements of this RFP at any stage of the Bidding Process or thereafter during theagreement period.

Dated this _____ Day of _____,2023.

Name of the Bidder:

Signature of the Authorized person:

Name of the Authorized person:

Annexure 13: No deviation certificate

(To be printed on Bidder's letterhead)

Dated:

To,
General Manager (Power),
Gujarat Mineral Development Corporation Ltd
Khanij Bhavan,
132-Ring Road, Gujarat University Ground, Vastrapur,
Ahmedabad- 380052

Subject: No deviation certificate regarding Bid towards Request for Proposal (RFP) for DCS and Instrumentation Upgradation of GMDC's 250 (2x125) MW Akrimota Thermal Power Station (ATPS), Gujarat

Dear Sir/Madam,

We _____ (Name of the Bidder), confirm our acceptance to all terms and conditions mentioned in the RFP document, and all subsequent clarifications, in totality and withdraw all deviations raised by us, if any.

We remain,

Yours sincerely,

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name of Firm:

Address:

Annexure 14: Format for power of attorney

(On stamp paper of value INR 300)

KNOW ALL MEN by these presents that we, _____ [name of the firm], a FIRM incorporated under the and having its Registered Office/ office at _____[Address of the Company] (hereinafter referred to as "Company/firm"):

WHEREAS in response to the RFP for _____ [Name of the Assignment] ("Project"), the Company/ firm is submitting Bid comprising Technical Bid physically while Price Bid through online submission for the project and GMDC and is desirous of appointing an attorney for the purpose thereof.

WHEREAS the Company deems it expedient to appoint Mr. _____ son / daughter of _____ resident of _____, holding the post of _____ as the Attorney of the Company/firm.

NOW KNOW WE ALL BY THESE PRESENTS, THAT _____ [name of the company/firm] do hereby nominate, constitute and appoint _____ [name & designation of the person] _____as its true and lawful Attorney of the Company/ firm to do and execute all or any of the following acts, deeds and things for the Company/ firm in its name and on its behalf, that is to say:

To act as the Company's/firm's official representative for submitting the Bid comprising Technical Bid and Price Bid for the said project and other relevant documents in connection therewith;

To sign all the necessary documents, papers, testimonials, applications, representations and correspondence necessary and proper for the purpose aforesaid;

To RFP documents, receive and make inquiries, make the necessary corrections and clarifications to the Proposal and other documents, as may be necessary;

To do all such acts, deeds, and things in the name and on behalf of the Company as necessary for the purpose aforesaid.

The common seal of [name of the company/firm] was here unto affixed pursuant to a resolution passed at the meeting of Committee of Directors held on _____Day of, 2023 in the presence of [name & designation of the person] and countersigned by [name& designation of the person] of the Company/firm of[name of the company]	_____ [name & designation of the person] _____ [name & designation of the person]

Annexure 15: Undertaking

It is certified that the information furnished here in and as per the document submitted is true and correct and nothing has been concealed or tampered with. We have gone through all the conditions of RFP, and we are liable to any punitive action for furnishing false information / documents.
Dated this _____ day of 2023.

Signature

(Company Seal)

In the capacity of duly authorized to sign Bids for and on behalf of:

Signed by

Authorized Signatory with designation

Annexure 16: Undertaking of indemnity

(To be printed on Bidder's letterhead)

Dated:

To,
General Manager (Power),
Gujarat Mineral Development Corporation Ltd
Khanij Bhavan,
132-Ring Road, Gujarat University Ground, Vastrapur,
Ahmedabad- 380052

Dear Sir/Madam,

We M/s. ---------- hereby undertake that, we shall at all times, indemnify and keep indemnified that GMDC Limited from any and all liability for damages resulting from or arising out of or in any way connected with the operations covered by the RFP No. _____. We shall be responsible for all risk arising in connection with or on account of the operations covered by the contract covered by the above RFP and shall make good all losses and damages arising there from. In case, the GMDC Limited shall incur any cost or expense or suffer any loss on account of any claim demand or course of action brought against us and arising out of the operations covered by the Bidder/RFP, the GMDC Limited shall have the power (without being bound to do so) to define, contest or compromise any such claim demand or cause of action. Any amount that may become payable by GMDC Limited and any cost expense etc. that may be incurred by the GMDC Limited in this behalf, shall also be recoverable from us, without prejudice to your other rights.

We remain,

Yours sincerely,

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name of Firm:

Address:

Annexure 17: Undertaking for Post Upgradation Support

(On stamp paper of value INR 300)

We M/s. ---------- hereby undertake that, we shall provide an active spares and services support to GMDC, for all the hardware / software supplied, for a minimum of 15 years after the completion of the Overhaul. We shall respond to any request for support registered by GMDC within 5 working days, as and when needed, for a period of 15 years after the completion of the Overhaul. GMDC also reserves a right, but not an obligation, to invite us to execute a inspection of the upgraded DCS / PLC systems, once in every 3 years for 15 years after the completion of the Overhaul, including running a system diagnosis to identify any existing / future potential issues with the upgraded system. We shall provide all the necessary support to fulfil GMDC's request in a timely manner.

Dated this _____ day of 2023.

Signature

(Company Seal)

In the capacity of duly authorized to sign Bids for and on behalf of:

Signed by

Authorized Signatory with designation

Annexure 18: Indicative format of Price bid

(This is indicative format for Bidder's reference only. The PRICE PROPOSL SHOULD BE SUBMITTED ONLINE ONLY at designated places through http://gmdc.nprocure.com. Price Bid should not be submitted in hard copy and or placed with Technical Bid. Prices submitted in hard copy and or placed with Technical Bid shall result in outright rejection of Bid)

Dated:

To,
General Manager (Power),
Gujarat Mineral Development Corporation Ltd
Khanij Bhavan,
132-Ring Road, Gujarat University Ground, Vastrapur,
Ahmedabad- 380052

Subject: Price Bid for Request for Proposal (RFP) for DCS and Instrumentation Upgradation of GMDC's 250 (2x125) MW Akrimota Thermal Power Station (ATPS), Gujarat

Dear Sir,

After thoroughly reading and accepting the RFP terms, understanding the requirements, and scope of work under this RFP, and its terms and conditions, we hereby agree to provide our services at the following rates

Price Bid Description	Total Amount (in INR, excl. GST)	Brief Description of Activities[2]
Lumpsum Charges for supply of material (A = A1 + A2 + A3 + A4)		
Lumpsum Charges for Supply of material for the Front – End of Central DCS for Boiler and Turbine (A1)		
Lumpsum Charges for Supply of material for the Back – End of Central DCS for Boiler and Turbine (A2)		
Lumpsum Charges for Supply of material for the Front – End of Remote DCS / PLC Systems(A3)		
Lumpsum Charges for Supply of material for the Back – End of Remote DCS / PLC Systems (A4)		
Lumpsum Charges for execution (B = B1 + B2 + B3 + B4)		
Lumpsum Charges for upgradation execution for the Front – End of Central DCS for Boiler and Turbine (B1)		
Lumpsum Charges for upgradation execution for the Back – End of Central DCS for Boiler and Turbine (B2)		

[2] Key activities / initiatives to be undertaken by the Successful Bidder for during the Supply of material / Overhaul execution

Lumpsum Charges for upgradation execution for the Front – End of Remote DCS / PLC Systems (B3)		
Lumpsum Charges for upgradation execution for the Back – End of Remote DCS / PLC Systems (B4)		
Lumpsum Charges for DCS and Instrumentation Upgrade (A + B)		

Note:

The Bidder to quote charges inclusive of all other taxes except applicable GST. Applicable GST, over and above approved Lumpsum Charges for DCS and Instrumentation Upgrade, at the time of invoicing shall be reimbursed by GMDC subject to submission of proof of depositing the same with the GST Authority. The risk of applicability of any taxes, duties, and levies except GST, shall rest with the Bidder.

GMDC shall be entitled to deduct tax at source as may be applicable. The TDS certificate(s) shall be submitted as per the due date specified in the Income Tax Act.

Each Bidder must quote their rates after through reading of this RFP document and estimates of its cost through detailed due diligence of the Plant, statutory laws/regulations. GMDC reserves right to seek any clarifications regarding price quoted from Bidders before any decisions.

Please note the following details for Compulsory e-confirmation for Bank Guarantee through ICICI Bank through SFMS under our:

Gujarat Mineral Development Corporation Limited (GMDC)
132 Ft Ring Road, Near University Ground Vastrapur, Ahmedabad.
Bank Name: ICICI Bank Ltd
IFS Code: ICIC0000024
UIC GMDC530265584 for Field 7037 MT760

Annexure 19: Format for Bank Guarantee towards EMD

(On Non-judicial Stamp paper to be submitted along with submission of bids)

……. (Name of the Bank)

Address…….

Guarantee No…….

A/C Messrs…….. (Name of Bidder)

Date of Expiry……

Limit to liability (currency & amount) ……..

Invitation For RFP No…….. Dated…… (bidding document)

For……. (Name of Facilities)

Subject: Earnest Money Deposit Bank Guarantee.

Date……2023

To,

General Manger (____),
Gujarat Mineral Development Corporation Ltd.
132 Ft Ring Road,
Near University Ground
Vastrapur,
Ahmedabad.

Dear Sir,

In consideration of Gujarat Mineral Development Corporation (hereinafter called "GMDC") which expression shall unless repugnant to the subject of context include his successors and assigns having agreed to exempt M/s…….

(herein after called “Bidder”) from demand under the terms and conditions of “Technical Bid Document” (hereinafter called the said “Bidding Document”) issued by the GMDC vide RFP No._____for the work_____

(Name of the facilities) from Earnest Money Deposit (EMD) of Bid for the due fulfillment by the Bidder of the terms and conditions contained in the said Bidding Document on production of Bank Guarantee for INR _____

(_____ only) (figure in words).

1. We the _____ (Name of Bank) hereinafter referred to as “Bank” having our registered office at _____ (address of Bank) do hereby undertake and agree to indemnify and keep indemnified GMDC to extent of INR _____(_____ only) (figures in words) against any losses, damage cost, charges and expenses caused to or suffered by or that may be caused or suffered by GMDC by reason of any breach or breaches by the Bidder of any of the terms and conditions contained in the said Bidding Document and unconditionally pay the amount claimed by GMDC on demand and without demur to the extent aforesaid.

2. We _____ (Name of Bank) do hereby undertake to pay the amounts due and payable under the guarantee without any demur merely on a demand by you stating that the amount claimed is due by way of loss or damage caused to or would be caused or suffered by you by reason of any breach by the said Bidder of any of the terms or conditions contained in the said Bidding Document by reason of the Bidder’s failure to fulfill the conditions of said Bidding Document. Any such demand on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding INR_____ _____.

3. We _____ (Name of Bank) further agree that GMDC shall be the sole judge of and as to whether the Bidder has committed any breach or breaches of terms and conditions of the said Bidding Document and the extent of loss, damages, costs, charges and expenses caused to or suffered by or that may cause to or suffered by GMDC on account hereof to the extent of the Bid Security required to be deposited by the Bidder in respect of the said document and the decision of GMDC that the Bidder has committed such breach or breaches and as to the amount or amounts of loss, damages, costs, charges, and expenses caused to or suffered by or that may be caused to or suffered by GMDC shall be final and binding on us.

4. We _____ (Name of Bank) further agree that guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance on the said Bidding Document and that it shall continue to be enforceable till you certify that terms and conditions of the said Bidding Document have been fully and properly carried out by the said Bidder and accordingly discharge the guarantee. Unless a demand or claim under this guaranteed is made on us in writing on or before the (date) _____ we shall be discharged from all liability under this guarantee.

5. We _____ (Name of Bank) further agree with you that you have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Bidding Document or to extend time of performance by the said Bidder from time to time or to postpone for any time or from time to time any of the powers exercisable by you against

the said Bidder and to forbear or enforce any of the terms and conditions relating to the said Bidding Document and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Bidder or for any forbearance act or omission on your part or any indulgence by you to the said Bidder or any such matter or thing whatsoever under the law relating to sureties would but for this provision have effect of so relieving us.

6. It shall not be necessary for GMDC to proceed against the Bidder before proceeding against the Bank and the Guarantee herein contained shall be enforceable against the Bank, notwithstanding any security which GMDC may have obtained from the Bidder at this time when proceeding are taken against Bank hereunder be outstanding or unrealized.
7. We _____ (Name of Bank) further undertake to unconditionally pay the amount claimed by GMDC merely on demand and without demur to the extent aforesaid.
8. We, the said Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of GMDC in writing.
9. This Guarantee will not be discharged due to the change in the constitution of the Bank or the said bidder.
10. The Bank has under its constitution power to give this guarantee and Mr. _____who has signed it on behalf of the Bank have authority to do so.

Yours faithfully

For……

(Name of the Bank)

Notwithstanding anything contained hereinabove

(I) Our liability under this Bank Guarantee shall not exceed **Rs _____/- (Rupees _____ only)**

(II) This Bank Guarantee is valid up to _____ (Date)**.**

(III) We are liable to pay the guarantee amount or any part thereof under this bank Guarantee only and only if you serve upon us a written claim or a demand on or before _____(date).

(IV) This bank guarantee is operative only when accompanied with SFMS advice from us.

Yours faithfully

For _____(Name of the Bank)

Yours faithfully

For……

(Name of the Bank)

Please note the following details for Compulsory e-confirmation for Bank Guarantee through ICICI Bank through SFMS under our:

Gujarat Mineral Development Corporation Limited (GMDC)
132 Ft Ring Road, Near University Ground Vastrapur, Ahmedabad.
Bank Name: ICICI Bank Ltd
IFS Code: ICIC0000024
UIC GMDC530265584 for Field 7037 MT760

Annexure 20: Format for Bank Guarantee towards Performance Security

Name of the Bank :

Address :

Guarantee No :

Name of the Bidder : M/s _____

Date of Expiry :

Limit to liability : Rs _____/- (Rupees _____ only)

Ref: RFP bearing No. _____

Subject: Bank Guarantee towards Security Deposit.

Date……2023

To,

General Manger (____),
Gujarat Mineral Development Corporation Ltd.
132 Ft Ring Road,
Near University Ground
Vastrapur,
Ahmedabad.

Dear Sir,

In consideration of Gujarat Mineral Development GMDC (hereinafter called “GMDC”) which expression shall unless repugnant to the subject of context include his successors and assigns

having agreed to exempt **M/s _____**(hereinafter called "Bidder") from demand under the terms and conditions of "Technical Bid Document" (hereinafter called the said "Bidding Document") issued by the GMDC vide RFP _____**. The present** Bank Guarantee is towards Security Deposit (SD) of Bid in terms of Clause No. _____ of Chapter – _____of the afore-said bidding document for the due fulfillment by the Bidder of the terms and conditions contained in the said Bidding Document on production of Bank Guarantee for **Rs _____/- (Rupees _____ only)**

1) We the _____ (Name of the Bank) hereinafter referred to as "Bank" having our registered office at _____ do hereby undertake and agree to indemnify and keep indemnified GMDC to extent of **Rs _____/- (Rupees _____ only)** against any losses, damage cost, charges and expenses caused to or suffered by or that may be caused or suffered by GMDC by reason of any breach or breaches by the Bidder of any of the terms and conditions contained in the said Bidding Document and unconditionally pay the amount claimed by GMDC on demand and without demur to the extent aforesaid.
2) We _____ (Name of the Bank) do hereby undertake to pay the amounts due and payable under the guarantee without any demur merely on a demand by you stating that the amount claimed is due by way of loss or damage caused to or would be caused or suffered by you by reason of any breach by the said Bidder of any of the terms or conditions contained in the said Bidding Document by reason of the Bidder's failure to perform according to the terms and conditions of said Bidding Document. Any such demand on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding **Rs _____/- (Rupees _____ only).**
3) We _____ (Name of the Bank) further agree that GMDC shall be the sole judge of and as to whether the Bidder has committed any breach or breaches of terms and conditions of the said Bidding Document and the extent of loss, damages, costs, charges and expenses caused to or suffered by or that may caused to or suffered by GMDC on account hereof to the extent of the Bid Security required to be deposited by the Bidder in respect of the said document and the decision of GMDC that the Bidder has committed such breach or breaches and as to the amount or amounts of loss, damages, costs, charges, and expenses caused to or suffered by or that may be caused to or suffered by GMDC shall be final and binding on us.
4) We _____ (Name of the Bank) undertake to pay to the GMDC any money so demanded notwithstanding any dispute or disputes raised by the said Bidder (s) in any suit or proceeding pending before any forum of law relating thereto our liability under this present being absolute and unequivocal. The payment so made by us underthis bond shall be a valid discharge of our liability for payment there under and the said Bidder (s) shall have no claim against us for making such payment.
5) We _____ (Name of the Bank) further agree that guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance on the said Bidding Document and that it shall continue to be enforceable till you certify that terms and conditions of the said Bidding Document have been fully and properly carried out by the said Bidder and accordingly discharge the guarantee. Unless a demand or claim under this guaranteed is made on us in writing on

or before the (date)_____we shall be discharged from all liability under this guarantee thereafter.

6) We _____ (Name of the Bank) further agree with you that you have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Bidding Document or to extend time of performance by the said Bidder from time to time or to postpone for any time or from time to time any of the powers exercisable by you against the said Bidder and to forbear or enforce any of the terms and conditions relating to the said Bidding Document and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Bidder or for any forbearance act or omission on your part or any indulgence by you to the said Bidder or any such matter or thing whatsoever under the law relating to sureties would but for this provision have effect of so relieving us. The Bank further agrees that in case this guarantee is required for a longer period, the bank may extend the same.
7) We _____ (Name of the Bank) further undertake to unconditionally pay the amount claimed by GMDC merely on demand and without demur to the extent aforesaid.
8) We, the said Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of GMDC in writing.
9) This Guarantee will not be discharged due to the change in the constitution of the Bank or the said Bidder.
10) The Bank has under its constitution power to give this guarantee and Mr. _____who has signed it on behalf of the Bank have authority to do so.

Yours faithfully

For……

(Name of the Bank)

Notwithstanding anything contained hereinabove

(I) Our liability under this Bank Guarantee shall not exceed **Rs _____/- (Rupees _____ only)**

(II) This Bank Guarantee is valid up to _____ (Date)**.**

(III) We are liable to pay the guarantee amount or any part thereof under this bank Guarantee only and only if you serve upon us a written claim or a demand on or before _____(date).

(IV) This bank guarantee is operative only when accompanied with SFMS advice from us.

Yours faithfully

For _____(Name of the Bank)

Annexure 21: List of approved banks for EMD, RFP fees, and Performance Security

The following list of banks can get updated from time to time as per the latest notice provided by the Government of Gujarat. The Bidder can provide EMD / RFP Fee / Performance Security from any of the approved banks by the Government of Gujarat in the latest notice, except for the co-operative banks

Acceptance of Bank Guarantee as Security Deposit and Earnest Money Deposit.

Government of Gujarat

Finance Department

GR. No.: FD/MSM/e-file/4/2023/0057/D.M.O.

Date: 21/04/2023

Read: FD GR. No.: EMD/4/2022/0002/DMO Dt. 20/05/2022

Preamble:

Tendering authorities of the State Government and its Boards/Corporations/PSUs frequently take Bank Guarantee from the bidders towards Security Deposit and Earnest Money Deposit. The State Government had issued the list of eligible banks vide above read resolutions of this department dated 20/05/2022.

After careful consideration, the Government has decided to approve the list of Banks whose Bank Guarantees would be accepted for the purpose mentioned above. It has now been decided to resolve as follows:

Resolution:

Government Departments and State Government Boards / Corporations / PSUs would accept Bank Guarantee (towards Security Deposit and Earnest Money Deposit) issued by any of the banks included in the **Annexure I**, attached to this Resolution.

The tendering authority will be required to ascertain the authenticity of the Bank Guarantee and set up necessary internal control procedures.

By order and in the name of the Governor of Gujarat.

(S. Chhakchhuak)
Additional Secretary (Budget)
Finance Department

To,

The Secretary to His Excellency Governor of Gujarat, Raj Bhavan, Gandhinagar
Principal Secretary to Hon. Chief Minister
PS to Hon. Finance Minister
PS to all Hon. Ministers, State Ministers and Deputy Ministers
PS to Chief Secretary
PS to Principal Secretary, Finance Department
PS to Secretary (EA), Finance Department
PS to Secretary (Expenditure), Finance Department
PS to Additional Secretary (B), Finance Department
All Administrative Departments, Sachivalaya, Gandhinagar
System Manager, Finance Department for put up on GSWAN website
Select File DMO-Finance Department

Annexure I.

Finance Department, GR. No.: FD/MSM/e-file/4/2023/0057/D.M.O.

Date: 21/04/2023

(A) Guarantees issued by the following banks will be accepted as SD/EMD on permanent basis:

- **All Nationalized Banks**

(B) Guarantees issued by the following Banks will be accepted as SD/EMD for the period up to March 31, 2024. The validity cut-off date in the GR is with respect to the date of issue of Bank Guarantee irrespective of the date of termination of Bank Guarantee.

Sr No	Name of Banks	Sr No	Name of Banks
1	AXIS Bank	17	Kotak Mahindra Bank
2	AU Small Finance Bank	18	South Indian Bank
3	Bandhan Bank	19	Standard Chartered Bank
4	BNP Paribas	20	Tamilnadu Mercantile Bank
5	City Union Bank	21	Utkarsh Small Finance Bank
6	CSB Bank	22	The Kalupur Commercial Co-op. Bank
7	DBS Bank India Limited	23	Ahmedabad Mercantile Co-op. Bank
8	DCB Bank	24	Nutan Nagarik Sahakari Bank Ltd.
9	Equitas Small Finance Bank	25	Rajkot Nagarik Sahakari Bank Ltd.
10	FEDERAL Bank	26	Saraswat Co-Operative Bank Ltd
11	HDFC Bank	27	SVC Co-Operative Bank LTD.
12	HSBC Bank	28	The Gujarat State Co-operative Bank
13	ICICI Bank	29	The Mehsana Urban Co-Op. Bank Ltd
14	IndusInd Bank	30	The Surat District Co-Operative Bank Ltd
15	Karnataka Bank	31	The Surat People's Co-Op. Bank Ltd
16	Karur Vysya Bank	32	Saurashtra Gramin Bank

All the eligible banks are instructed to collect the original documents/papers of guarantee from the concerned tendering authority.

(S. Chhakchhuak)
Additional Secretary (Budget)
Finance Department

-------XXXXX-------