

TENDER FOR Package LSTK-2

Package Description: Bauxite Grinding

SYNOPSIS OF TENDER

SR. NO.	VOLUME NO.	NO. OF SECTIONS	DESCRIPTION
1	1	6	COMMERCIAL
			Contains Instructions To Bids (ITB), General Condition of LSTK Contract (GCC), Special Conditions of Contract (SCC), Letter Inviting Bid and Acknowledgement-Cum-Consent Letter, Proposal Forms, Schedule of Prices (SP) Form, Commercial Questionnaire and Technical Questionnaire
2	2	8	PROJECT MANAGEMENT, SCOPE OF SUPPLIES & SCOPE OF WORK
			Project Management & Planning, Scheduling & Monitoring System, Vendor List, Spare Philosophy, Battery Limit, Scope of Work & Scope of Supplies.
3	3	3	QA PLANS, CONSTRUCTION SPECIFICATIONS & COMMISSIONING
			QA Plan For Engineering & Shop Inspection, Construction Specifications, Construction QA & QC Requirements, Construction HSE Requirements, Construction Management Guideline, Commissioning & Performance Test Run
4	4	7	TECHNICAL DOCUMENTS
			Design Basis, System Description , Equipment List , PFDs, Equipment Datasheets, Technical Specifications, General Engineering Specifications, Overall Plot Plans (Conceptual), Piping Specification, Civil Standard drawings, Single Line Diagrams, Installation Standards etc.
5	5	1	REFERENCE DOCUMENTS
			Licensor BEP and Other Reference Documents

VOLUME - 1

COMMERCIAL

SECTION NO.	PART NO.	DOCUMENT NO.	DESCRIPTION	REV.
1			Notice Inviting Tender	0
2		6695-PPM-0003	Acknowledgement-Cum- Consent Letter	0
3		6695-PPM-0004	Proposal Forms A - P	0
4		6695-PPM-0005	Instructions To Bidders - (I.T.B.)	0
5		6695-PPM-0006	Special Conditions of Contract (Part A & Part B)	0
6		6695-PPM-0007	Schedule of Prices (SP) Forms	0
7		6695-PPM-0008	Commercial Questionnaire	0
8		6695-EQS-502-CA-0004	Technical Questionnaire	01
9			General Terms And Conditions Of Contract	0
10			General Conditions Of Contract	0

SECTION NO.	PART NO.	DOCUMENT NO.	DESCRIPTION	REV.
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VOLUME - 2

PROJECT MANAGEMENT, SCOPE OF SUPPLIES & SCOPE OF WORK

1			Project Management	
	1	6695-PMG-G00-BD-0005	Project Execution Plan Requirement For Contractor	02
	2	6695-EQS-502-AB-0001	Document Matrix	01
	3	6695-PDM-G00-BD-0002	Vendor's Documentation	0
	4	6695-PMG-G00-BD-0006	IT & Software Requirements	0
2			Project Planning, Scheduling & Monitoring System	
	1	6695-PSC-G00-BE-0006	Project Planning, Scheduling & Monitoring System For Contractor	02
3			Vendor List & Spare Philosophy	
	1	6695-PPM-502-BA-0001	Equipment Vendor List for package	0
	2	6695-EQS-502-CA-0005	Spare Philosophy	01
4			Job Instruction	
	1	6695-EQS-502-CA-0003	General Job Instructions to Contractor	01
5			Battery Limit Documents	
	1	6695-PRC-502-CA-0003	Battery Limit Documents - Process	01
	2	6695-ELT-502-CA-0002	Battery Limit & Interfaces - Electrical	01
	3	6695-INS-502-CA-0001	Battery Limit & Interfaces - Instrumentation	0
6			Scope Of Work	
	1	6695-EQS-502-CA-0002	Scope Of Work For Contractor - General	01
	2	6695-EQS-502-CA-0001	Scope Of Work For Contractor - Static Equipment	00
	3	6695-EQM-502-CA-0013	Scope Of Work For Contractor - Rotating Equipment	00
	4	6695-PIP-502-CA-0001	Scope of Work for Contractor - Piping & Material Handling	00
	5	6695-CVC-502-CA-0001	Scope Of Work For Contractor - Civil, Structural & Architectural	01
	6	6695-ELT-502-CA-0001	Scope Of Work For Contractor - Electrical	01
	7	6695-INS-502-CA-0002	Scope Of Work For Contractor - Instrumentation	00

SECTION NO.	PART NO.	DOCUMENT NO.	DESCRIPTION	REV.
VOLUME - 3				
QA & HSE PLANS				

1			Quality Assurance Plan Requirement	
	1	6695-EQS-502-CA-0006	Inspection Categorization Plan	01
	2	6695-IEX-G00-EC-0001	Project Inspection & Test Plan For Shop Inspection - Static Equipment & Packages (For Electrical, refer respective ELTech Specs)	0
	3	6695-CMG-G00-CA-0005	Construction Quality Assurance & Control Requirements	01
	4	6695-EQM-G00-QA-0001	Inspection Test Plan Requirements For Rotating Equipment	01
	5	6695-INS-G00-QA-0001	Inspection Test Plan Instrumentation	01
	6	6695-ELT-G00-QA-0001	QAP for Site Installation, testing & Commissioning - Electrical	0
	7	6695-INS-G00-QA-0002	Quality Assurance plan for Instrumentation Erection	01
2			Health, Safety & Environmental Requirements	
	1	6695-PRC-G00-BG-0001	Health, Safety & Environmental Requirements For Engineering	02
	2	6695-CMG-G00-CA-0003	Construction Health, Safety & Environmental Requirements	01
3	1	6695-CMG-G00-CA-0004	Construction Management Requirements	01

VOLUME - 4				
TECHNICAL DOCUMENTS				

1			PROCESS	
	1	6695-PRC-G00-EC-0001	Project Design Basis	01
	2	6695-PRC-000-FB-0101 to 105	Legend sheet P&ID's	01
	3		Process Flow Diagram	
	3.1	6695-PRC-502-CA-0001	Bauxite Grinding	01
	3.2	6695-PRC-502-CA-0002	Mill Slurry Transfer	01

SECTION NO.	PART NO.	DOCUMENT NO.	DESCRIPTION	REV.
	4	6695-PRC-502-PD-0001	Equipment List	01
	5	6695-PRC-G00-BG-0002	Commissioning & Performance Test Run	01
2			ROTATING	
	1		General Engineering Specifications & Other Technical Documents	
	1.1	6695-EQM-G00-EC-0001	General Engineering Specification For Slurry & Liquor Pumps	02
	1.2	6695-EQM-G00-EC-0002	General Engineering Specification For Non API Pumps	01
	1.3	6695-EQM-G00-EC-0004	General Engineering Specification For Agitator & Mixer	02
	1.4	6695-HVA-G00-EC-0001	General Engineering Specification For HVAC	01
	2		Technical specifications	
	2.1	6695-EQM-G00-EC-0011	Technical Specification For Slurry & Liquor Pump	01
	2.3	6695-EQM-G00-EC-0013	Technical Specification For Agitators	01
	2.6	6695-EQM-G00-EC-0016	Technical Specification For Vertical Sump Pumps	00
	2.7	6695-HVA-G00-EC-0001	Technical Specification For HVAC & pressurisation unit	00
3			STATIC EQUIPMENT	
	1		General Engineering Specifications	
	1.1	6695-EQS-000-EC-0001	GES for Pressure Vessel	01
	1.2	6695-EQS-000-EC-0003	GES for Heat Exchanger	01
	1.3	6695-EQS-000-EC-0004	GES for Tanks	01
	1.4	6695-EQS-000-EC-0007	GES for Painting	01
	1.5	6695-EQS-000-EC-0008	GES for Insulation	01
	1.6	6695-EQS-000-EC-0005	GES for PHE	01
	2		Technical specifications	
	2.1	6695-EQS-502-EC-0006	Technical Specification for Grinding package	01
4			PIPING	
4.1			Drawings	
	1	6695-LAY-G00-LD-0001	Overall Plot Plan	01
	2	6695-LAY-502-LD-0001	Part plan	0

SECTION NO.	PART NO.	DOCUMENT NO.	DESCRIPTION	REV.
	3	6695-LAY-502-LD-0002	Part plan: Sectional Elevation	0
4.2			Piping Specification	
	1	6695-PIP-G00-EC-0003	Piping Specification	02
	2	6695-PIP-G00-EC-0006	Technical Specifications For 3-D Model	00
	3	6695-PIP-G00-EC-0007	Technical Requirement for Pipes, Fittings, Flanges, Gaskets & Fasteners	01
	4	6695-PIP-G00-EC-0008	Technical Requirement for Valves	02
	5	6695-PIP-G00-EC-0010	Technical Requirement for Special Parts	02
4.3			General Engineering Specification	
	1	6695-PIP-G00-EC-0001	GES for Above ground steel piping	01
	2	6695-LAY-G00-EC-0001	GES for Plant Layout	01
	3	6695-PIP-G00-EC-0002	GES for Piping Flexibility Analysis	01
	4	6695-PIP-G00-EC-0004	GES for Material Handling Equipment	02
	5	6695-HES-G00-EC-0001	GES for Fire Fighting System (LSTK Packages)	02
4.4			Datasheets of Major Equipments	
	1	-	Datasheet for Belt Conveyor	0
	2	-	Datasheet for Electric Hoist	01
	3	-	Datasheet for Apron feeder	01
	4	-	Data sheet for EOT crane	01
5			CIVIL	
	1		General Documents	
	1.1	6695-CVC-G00-EC-0001	General Engineering Specification - Civil, Structural & Architectural	02
	1.2	6695-CVC-G00-EC-0002	Technical Specifications for Construction Works - Civil, Structural & Architectural	0
	1.3	6695-CVC-G00-EC-0003	Standard Instruction Design Calculation Documentation	01
	1.4	6695-CVC-G00-EB-0005	Standard Drawings - Architectural	0
	1.5	6695-CVC-G00-EB-0006	Standard Drawings - RCC	0
	1.6	6695-CVC-G00-EB-0007	Standard Drawings - Structural Steel	01
	2		Reference Document	
	2.1	6695-CVC-G00-DD-0001_Part A	Soil Investigation Report_DFR stage	0

SECTION NO.	PART NO.	DOCUMENT NO.	DESCRIPTION	REV.
		6695-CVC-G00-DD-0001_Part B	Geotechnological Investigation Report_April 2018	0
	2.2	6695-CVC-G00-DD-0002_Part A	Traverse & Topographic Survey (Contour Plan) Report	0
		6695-CVC-G00-DD-0002_Part B	Contour and Topographical Survey Report_April 2018	0
6			ELECTRICAL	
	1		General	
	1.1	6695-ELT-G00-EC-0002	General Engineering Specification - Electrical	3
	1.2	6695-ELT-G00-FA-0001	Overall Key SLD	4
	1.3	6695-ELT-G00-FA-0003	Typical Detail Single Line diagram	2
	1.4	6695-ELT-526-LH-0002	Substation arrangement layout - Substation US-502 (LSTK)	0
	1.5	6695-ELT-G00-FA-0002	Block Diagram for earthing & lightning protection concept	0
	1.6	6695-ELT-G00-EC-0003	Guidelines For Electrical Equipment Numbering System	2
	1.7	6695-ELT-G00-FS-0001	Typical I/O list for SCADA	1
	1.8	6695-ELT-G00-EB-0001	Standard Formats for Lists (Consumer, cable, feeder, LCS, Operation mode list)	0
	1.9	6695-ELT-G00-EC-0004	Design Guidelines For Electrical Facilities	2
	1.10	6695-ELT-G00-FA-0004	Typical SCADA Block diagram for unit substation level networking	1
	2		Technical Specifications of Electrical equipments	
	2.1	6695-ELT-G00-EC-0006	Technical Specifications - Distribution Transformers (Energy Efficient)	0
	2.2	6695-ELT-G00-EC-0007	Technical Specifications - High Voltage Switchgear Panels	2
	2.3	6695-ELT-G00-EC-0009	Technical Specifications - Low Voltage Switchgear Panels	2
	2.4	6695-ELT-G00-EC-0010	Technical Specifications - Low Voltage Busduct	1
	2.5	6695-ELT-G00-EC-0011	Technical Specifications - High Voltage Induction Motors	0
	2.6	6695-ELT-G00-EC-0012	Technical Specifications - Low Voltage Induction Motors	0

SECTION NO.	PART NO.	DOCUMENT NO.	DESCRIPTION	REV.
	2.7	6695-ELT-G00-EC-0013	Technical Specifications - HV power factor improvement Capacitors	0
	2.8	6695-ELT-G00-EC-0015	Technical Specification for Un-Interruptible Power Supply System (UPS)	0
	2.9	6695-ELT-G00-EC-0016	Technical Specifications - VRLA	0
	2.10	6695-ELT-G00-EC-0017	Technical Specifications - Battery Charger	0
	2.11	6695-ELT-G00-EC-0018	Technical Specifications - High Voltage Cables	0
	2.12	6695-ELT-G00-EC-0019	Technical Specifications - Low Voltage Cables	0
	2.13	6695-ELT-G00-EC-0020	Technical Specifications - Miscellaneous Low Voltage Switchgear	0
	2.14	6695-ELT-G00-EC-0021	Technical Specifications - Local Control Stations	0
	2.15	6695-ELT-G00-EC-0022	Technical Specifications - Industrial Light Fittings	0
	2.16	6695-ELT-G00-EC-0024	Technical Specifications - LV Variable Frequency Drive	1
	2.17	6695-ELT-G00-EC-0025	Technical Specifications - Goods cum Passenger Elevator/Lift	1
	2.18	6695-ELT-G00-EC-0026	Technical Specifications - EOT Crane	1
	2.19	6695-ELT-G00-EC-0027	Technical Specifications - Electrical Installation	0
	2.20	6695-ELT-G00-EC-0028	Technical Specifications - Lighting Transformers (Dry Type)	0
	2.21	6695-ELT-G00-EC-0029	Technical Specifications - Electric hoist	1
	2.22	6695-ELT-G00-EC-0030	Technical Specifications - GI Cable Trays	1
	2.23	6695-ELT-G00-EC-0031	Technical Specifications - High mast for lighting	0
	2.24	6695-ELT-G00-EC-0032	Technical Specifications - HV Variable Frequency Drives	2
	2.25	6695-ELT-G00-EC-0033	Technical Specifications - Bulk Material	0
	2.26	6695-ELT-G00-EC-0023	Technical Specifications - Neutral Grounding Resistor	0
	2.27	6695-ELT-G00-EC-0034	Technical Specifications - Distribution Transformer	0
	2.28	6695-ELT-G00-EC-0035	Technical Specifications - LV Power factor Capacitor	0

SECTION NO.	PART NO.	DOCUMENT NO.	DESCRIPTION	REV.
7			INSTRUMENTATION	
	1		General	
	1.1	6695-INS-G00-EC-0001	General Engineering Specification For Instrumentation & Control	03

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REFERENCE DOCUMENTS

			Licenser BEP and Other Reference Documents	
	1	Z02-232-1-SP-001	Technical Specification - Grinder	B
	2	Z02-232-5-LI-001	Equipment List - Grinding	B
	3	-	State pollution control board order dated 21.04.17	-
	4	-	Ministry of Environment, Forest and climate change order dated 12.04.17	-