

## TENDER FOR Package LSTK-6

**Package Description: Lime handling, storage & preparation (Slaking)**

### SYNOPSIS OF TENDER

SR. NO.	VOLUME NO.	NO. OF SECTIONS	DESCRIPTION
1	1	6	<b>COMMERCIAL</b>
			Contains Instructions To Bids (ITB), General Condition of LSTK Contract (GCC), Special Conditions of Contract (SCC), Notice Inviting Tender and Acknowledgement-Cum-Consent Letter, Proposal Forms, Schedule of Prices (SP) Form, Commercial Questionnaire and Technical Questionnaire
2	2	8	<b>PROJECT MANAGEMENT, SCOPE OF SUPPLIES &amp; SCOPE OF WORK</b>
			Project Management & Planning, Scheduling & Monitoring System, Vendor List, Spare Philosophy, Battery Limit, Scope of Work & Scope of Supplies.
3	3	3	<b>QA PLANS, CONSTRUCTION SPECIFICATIONS &amp; COMMISSIONING</b>
			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	<b>TECHNICAL DOCUMENTS</b>
			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	<b>REFERENCE DOCUMENTS</b>
			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-556-CA-0004	Technical Questionnaire	01
			General Terms and Conditions Of Contract	0
9			General Conditions Of Contract	0

### VOLUME - 2

#### PROJECT MANAGEMENT, SCOPE OF SUPPLIES & SCOPE OF WORK

1			<b>Project Management</b>	
	1	6695-PMG-G00-BD-0005	Project Execution Plan Requirement For Contractor	02
	2	6695-EQS-556-AB-0001	Document Matrix	01
	3	6695-PDM-G00-BD-0002	Vendor's Documentation	00
	4	6695-PMG-G00-BD-0006	IT & Software Requirements	00

SECTION NO.	PART NO.	DOCUMENT NO.	DESCRIPTION	REV.
<b>2</b>			<b>Project Planning, Scheduling &amp; Monitoring System</b>	
	1	6695-PSC-G00-BE-0006	Project Planning, Scheduling & Monitoring System For Contractor	02
<b>3</b>			<b>Vendor List &amp; Spare Philosophy</b>	
	1	6695-PPM-556-BA-0001	Equipment Vendor List for LSTK6	00
	2	6695-EQS-556-CA-0005	Spare Philosophy	01
<b>4</b>			<b>Job Instruction</b>	
	1	6695-EQS-556-CA-0003	General Job Instructions to Contractor	00
<b>5</b>			<b>Battery Limit Documents</b>	
	1	6695-PRC-556-CA-0002	Battery Limit Documents - Process	01
	2	6695-ELT-556-CA-0002	Battery Limit & Interfaces - Electrical	01
	3	6695-INS-556-CA-0001	Battery Limit & Interfaces - Instrumentation	00
<b>6</b>			<b>Scope Of Work</b>	
	1	6695-EQS-556-CA-0002	Scope Of Work For Contractor - General	01
	2	6695-EQS-556-CA-0001	Scope Of Work For Contractor - Static Equipment	00
	3	6695-EQM-556-CA-0013	Scope Of Work For Contractor - Rotating Equipment	00
	4	6695-PIP-556-CA-0001	Scope of Work for Contractor - Piping & Material Handling	00
	5	6695-CVC-556-CA-0001	Scope Of Work For Contractor - Civil, Structural & Architectural	01
	6	6695-ELT-556-CA-0001	Scope Of Work For Contractor - Electrical	00
	7	6695-INS-556-CA-0002	Scope Of Work For Contractor - Instrumentation	01
<b>VOLUME - 3</b>				
<b>QA &amp; HSE PLANS</b>				

<b>1</b>			<b>Quality Assurance Plan Requirement</b>	
	1	6695-EQS-556-CA-0006	Inspection Categorization Plan	00
	2	6695-IEX-G00-EC-0001	Project Inspection & Test Plan For Shop Inspection - Static Equipment & Packages (For Electrical, refer respective ELTech Specs)	00
	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-INS-G00-QA-0002	Quality Assurance plan for Instrumentation Erection	01
	7	6695-ELT-G00-QA-0001	QAP for Site Installation, testing & Commissioning - Electrical	00
<b>2</b>			<b>Health, Safety &amp; Environmental Requirements</b>	
	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
<b>3</b>	1	6695-CMG-G00-CA-0004	Construction Management Requirements	01

SECTION NO.	PART NO.	DOCUMENT NO.	DESCRIPTION	REV.
<b>VOLUME - 4</b>				
<b>TECHNICAL DOCUMENTS</b>				
<b>1</b>			<b>PROCESS</b>	
	1	6695-PRC-G00-EC-0001	<b>Project Design Basis</b>	01
	2	6695-PRC-000-FB-0101 to 105	<b>Legend sheet P&amp;ID's</b>	01
	3		<b>Process Flow Diagram</b>	
	3.1	6695-PRC-556-CA-0001	Lime slaking	01
	3.2	6695-PIP-556-FB-0001	Lime handling: Solid Part	01
	4	6695-PRC-556-PD-0001	<b>Equipment List</b>	01
	5	6695-PRC-G00-BG-0002	<b>Commissioning &amp; Performance Test Run</b>	01
<b>2</b>			<b>ROTATING</b>	
	1		<b>General Engineering Specifications &amp; Other Technical Documents</b>	
	1.1	6695-EQM-G00-EC-0001	General Engineering Specification For Slurry & Liquor Pumps	02
	1.2	6695-EQM-G00-EC-0004	General Engineering Specification For Agitator & Mixer	02
	1.3	6695-HVA-G00-EC-0001	General Engineering Specification For HVAC	01
	2		<b>Technical specifications</b>	
	2.1	6695-EQM-G00-EC-0011	Technical Specification For Slurry & Liquor Pump	01
	2.2	6695-EQM-G00-EC-0013	Technical Specification For Agitators	01
	2.3	6695-HVA-G00-EC-0001	Technical Specification For HVAC & pressurisation unit	00
<b>3</b>			<b>STATIC EQUIPMENT</b>	
	1		<b>General Engineering Specifications</b>	
	1.1	6695-EQS-000-EC-0001	GES for Pressure Vessel	01
	1.2	6695-EQS-000-EC-0004	GES for Tanks	01
	1.3	6695-EQS-000-EC-0007	GES for Painting	01
	1.4	6695-EQS-000-EC-0008	GES for Insulation	01
	2		<b>Technical specifications</b>	
	2.1	6695-EQS-556-EC-0004	Specification for Lime <i>Handling</i> , Storage & Preparation (Slaking) package	01
<b>4</b>			<b>PIPING</b>	
<b>4.1</b>			<b>Drawings</b>	
	1	6695-LAY-G00-LD-0001	Overall Plot Plan	01
	2	6695-LAY-556-LD-0001	Conceptual part plan	01
<b>4.2</b>			<b>Piping Specification</b>	
	1	6695-PIP-G00-EC-0003	Piping Specification	02
	2	6695-PIP-G00-EC-0008	Technical Requirement for Valves	02
	3	6695-PIP-G00-EC-0007	Technical Requirement for Pipes, Fittings, Flanges, Gaskets & Fasteners	01

SECTION NO.	PART NO.	DOCUMENT NO.	DESCRIPTION	REV.
	4	6695-PIP-G00-EC-0010	Technical Requirement for Special Parts	02
	5	6695-PIP-G00-EC-0006	Technical Specifications For 3-D Model	00
<b>4.3</b>			<b>General Engineering Specification</b>	
	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
<b>4.4</b>			<b>Datasheets of Major Equipments</b>	
	1	-	Datasheet for Belt Conveyor	00
	2	-	Datasheet for Electric Hoist	01
	3	-	Datasheet for Crusher	00
	4	-	Datasheet for Belt weigh feeder	00
	5	-	Datasheet for Slide gate valve	00
	6	-	Datasheet for Table Feeder	00
	7	-	Datasheet for Pipe Conveyor	00
<b>5</b>			<b>CIVIL</b>	
	1		<b>General Documents</b>	
	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	00
	1.3	6695-CVC-G00-EC-0003	Standard Instruction Design Calculation Documentation	01
	1.4	6695-CVC-G00-EB-0005	Standard Drawings - Architectural	00
	1.5	6695-CVC-G00-EB-0006	Standard Drawings - RCC	00
	1.6	6695-CVC-G00-EB-0007	Standard Drawings - Structural Steel	01
	2		<b>Reference Document</b>	
	2.1	6695-CVC-G00-DD-0001_Part A	Soil Investigation Report_DFR stage	00
		6695-CVC-G00-DD-0001_Part B	Geotechnological Investigation Report_April 2018	00
	2.2	6695-CVC-G00-DD-0002_Part A	Traverse & Topographic Survey (Contour Plan) Report	00
		6695-CVC-G00-DD-0002_Part B	Contour and Topographical Survey Report_April 2018	00
<b>6</b>			<b>ELECTRICAL</b>	
	1		<b>General</b>	
	1.1	6695-ELT-G00-EC-0002	General Engineering Specification - Electrical	03
	1.2	6695-ELT-G00-FA-0001	Overall Key SLD	04
	1.3	6695-ELT-G00-FA-0003	Typical Detail Single Line diagram	02
	1.4	6695-ELT-526-LH-7001	Substation arrangement layout - Substation US-501 (LSTK)	01
	1.5	6695-ELT-526-LH-0008	Substation arrangement layout - Substation US-556 (LSTK)	01
	1.6	6695-ELT-G00-FA-0002	Block Diagram for earthing & lightning protection concept	00
	1.7	6695-ELT-G00-EC-0003	Guidelines For Electrical Equipment Numbering System	02
	1.8	6695-ELT-G00-FS-0001	Typical I/O list for SCADA	01
	1.9	6695-ELT-G00-EB-0001	Standard Formats for Lists (Consumer, cable, feeder, LCS, Operation mode list)	00
	1.10	6695-ELT-G00-EC-0004	Design Guidelines For Electrical Facilities	02
	1.11	6695-ELT-G00-FA-0004	Typical SCADA Block diagram for unit substation level networking	01

SECTION NO.	PART NO.	DOCUMENT NO.	DESCRIPTION	REV.
	2		<b>Technical Specifications of Electrical equipments</b>	
	2.1	6695-ELT-G00-EC-0006	Technical Specifications - Distribution Transformers (Energy Efficient)	00
	2.2	6695-ELT-G00-EC-0007	Technical Specifications - High Voltage Switchgear Panels	02
	2.3	6695-ELT-G00-EC-0009	Technical Specifications - Low Voltage Switchgear Panels	02
	2.4	6695-ELT-G00-EC-0010	Technical Specifications - Low Voltage Busduct	01
	2.5	6695-ELT-G00-EC-0011	Technical Specifications - High Voltage Induction Motors	00
	2.6	6695-ELT-G00-EC-0012	Technical Specifications - Low Voltage Induction Motors	00
	2.7	6695-ELT-G00-EC-0013	Technical Specifications - HV power factor improvement Capacitors	00
	2.8	6695-ELT-G00-EC-0015	Technical Specification for Un-Interruptible Power Supply System (UPS)	00
	2.9	6695-ELT-G00-EC-0016	Technical Specifications - VRLA	00
	2.10	6695-ELT-G00-EC-0017	Technical Specifications - Battery Charger	00
	2.11	6695-ELT-G00-EC-0018	Technical Specifications - High Voltage Cables	00
	2.12	6695-ELT-G00-EC-0019	Technical Specifications - Low Voltage Cables	00
	2.13	6695-ELT-G00-EC-0020	Technical Specifications - Miscellaneous Low Voltage Switchgear	00
	2.14	6695-ELT-G00-EC-0021	Technical Specifications - Local Control Stations	00
	2.15	6695-ELT-G00-EC-0022	Technical Specifications - Industrial Light Fittings	00
	2.16	6695-ELT-G00-EC-0024	Technical Specifications - LV Variable Frequency Drive	01
	2.17	6695-ELT-G00-EC-0025	Technical Specifications - Goods cum Passenger Elevator/Lift	01
	2.18	6695-ELT-G00-EC-0026	Technical Specifications - EOT Crane	01
	2.19	6695-ELT-G00-EC-0027	Technical Specifications - Electrical Installation	00
	2.20	6695-ELT-G00-EC-0028	Technical Specifications - Lighting Transformers (Dry Type)	00
	2.21	6695-ELT-G00-EC-0029	Technical Specifications - Electric hoist	01
	2.22	6695-ELT-G00-EC-0030	Technical Specifications - GI Cable Trays	01
	2.23	6695-ELT-G00-EC-0031	Technical Specifications - High mast for lighting	00
	2.24	6695-ELT-G00-EC-0032	Technical Specifications - HV Variable Frequency Drives	02
	2.25	6695-ELT-G00-EC-0033	Technical Specifications - Bulk Material	00
	2.26	6695-ELT-G00-EC-0023	Technical Specifications - Neutral Grounding Resistor	00
	2.27	6695-ELT-G00-EC-0034	Technical Specifications - Distribution Transformer	00
	2.28	6695-ELT-G00-EC-0035	Technical Specifications - LV Power factor Capacitor	00
<b>7</b>			<b>INSTRUMENTATION</b>	
	1		<b>General</b>	
	1.1	6695-INS-G00-EC-0001	General Engineering Specification For Instrumentation & Control	03

## VOLUME - 5

### REFERENCE DOCUMENTS

			<b>Licensors BEP and Other Reference Documents</b>	
	1	Z02-530-1-SP-001	TECHNICAL SPECIFICATION LIME SLAKER	A
	2	Z02-530-5-LI-001	EQUIPMENT LIST - LIME SLAKING	A
	3	-	State pollution control board order dated 21.04.17	-
	4	-	Ministry of Environment, Forest and climate change order dated 12.04.17	-
	5		EXISTING DRAWINGS - G.A. of Lime handling system	F