

6695-CMG-G00-CA-0022			
TENDER FOR LSTK Package LSTK-5			
Package Description: Evaporation			
SYNOPSIS OF TENDER			
SR. NO.	VOLUME NO.	NO. OF SECTIONS	DESCRIPTION
1	1	6	<b>COMMERCIAL</b>
			Contains Instructions To Bidders (ITB), General Terms & Conditions of Contract, General Conditions of Contract, Special Conditions (Part A) of LSTK Contract, Special Conditions (Part B) of LSTK Contract, Letter Inviting Bid, Acknowledgement-Cum-Consent Letter, Proposal Forms, Schedule of Prices (SP) Forms, 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		6695-CMG-G00-CA-0022	Notice Inviting Tender	--	
2		6695-CMG-G00-CA-0022	Acknowledgement-Cum- Consent Letter	00	
3		6695-CMG-G00-CA-0022	Instructions To Bidders - (I.T.B.)	00	
4		6695-CMG-G00-CA-0022	Special Conditions of Contract (Part A)	00	
5		6695-CMG-G00-CA-0022	Special Conditions of Contract (Part B)	00	
6		6695-CMG-G00-CA-0022	Schedule of Prices (SP) Forms	00	
7		6695-CMG-G00-CA-0022	Proposal Forms A - P	00	
8		6695-PRC-508-CA-0004	Technical Questionnaire	02	
9		6695-CMG-G00-CA-0022	Commercial Questionnaire	00	
10		-	GCC Import	--	
11		-	GCC Indigeneous	--	
12		-	FEMA circular	--	
13		-	RBI circular	--	
14		-	Bank Guarantee Formats	--	

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-PRC-508-AB-0001	Document Matrix	02	
	3	6695-PDM-G00-BD-0002	Vendor's Documentation	00	

SECTION NO.	PART NO.	DOCUMENT NO.	DESCRIPTION	REV.	
	4	6695-PMG-G00-BD-0006	IT & Software Requirements	00	
<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-508-BA-0001	Equipment Vendor List	01	
	2	6695-PRC-508-CA-0006	Spare Philosophy	02	
<b>4</b>			<b>Job Instruction</b>		
	1	6695-PRC-508-CA-0008	General Job Instructions to Contractor	01	
<b>5</b>			<b>Battery Limit Documents</b>		
	1	6695-INS-508-CA-0001	Battery Limit & Interfaces - Instrumentation - Evaporation	00	
	2	6695-ELT-508-CA-0002	Battery Limit & Interfaces - Electrical - Evaporation	03	
<b>6</b>			<b>Scope Of Work</b>		
	1	6695-PRC-508-CA-0005	Scope Of Work For Contractor- General	02	
	2	6695-PRC-508-CA-0003	Scope Of Work For Contractor - Process	02	
	3	6695-EQS-508-CA-0001	Scope Of Work For Contractor - Static Equipment	01	
	4	6695-EQM-508-CA-0013	Scope Of Work For Contractor - Rotating Equipment	00	
	5	6695-PIP-508-CA-0001	Scope of Work for Contractor - Piping & Material Handling	01	
	6	6695-CVC-508-CA-0001	Scope Of Work For Contractor - Civil, Structural & Architectural	02	
	7	6695-ELT-508-CA-0001	Scope Of Work For Contractor - Electrical	02	
	8	6695-INS-508-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-IEX-G00-EC-0001	Project Inspection & Test Plan For Shop Inspection - Static Equipment & Packages (For Electrical, refer respective ELTech Specs)	00	
	2	6695-CMG-G00-CA-0005	Construction Quality Assurance & Control Requirements	01	
	3	6695-EQM-G00-QA-0001	Inspection Test Plan Requirements For Rotating Equipment	01	
	4	6695-INS-G00-QA-0001	Inspection Test Plan Instrumentation	01	
	5	6695-INS-G00-QA-0002	Quality Assurance plan for Instrumentation Erection	01	
	6	6695-ELT-G00-QA-0001	QAP for Site Installation, testing & Commissioning - Electrical	00	
	7	6695-PRC-508-CA-0007	Inspection Categorization Plan	01	
<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	02	
<b>3</b>	1	6695-CMG-G00-CA-0004	Construction Management Requirements	01	

<b>VOLUME - 4</b>					
<b>TECHNICAL DOCUMENTS</b>					
<b>1</b>			<b>PROCESS</b>		

SECTION NO.	PART NO.	DOCUMENT NO.	DESCRIPTION	REV.	
	1	6695-PRC-G00-EC-0001	<b>Project Design Basis</b>	02	
	2	6695-PRC-000-FB-0101 to 0105	<b>Legend sheet P&amp;ID's</b>	02	
	3	6695-PRC-508-CA-0001	<b>Process Flow Diagram</b>	02	
	4	6695-PRC-508-PD-0004	<b>Equipment List</b>	01	
	5		<b>Technical Specifications</b>		
	5.1	6695-PRC-508-EC-0001	Technical specification of Evaporation	02	
	5.2	Attachment 1	Technical Data to be submitted along with Bid	01	
	6	6695-PRC-000-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-0002	General Engineering Specification For Non API Pumps	01	
	1.3	6695-EQM-G00-EC-0003	General Engineering Specification For Liquid ring vacuum pumps & Compressor System	01	
	1.4	6695-EQM-G00-EC-0004	General Engineering Specification For Agitator & Mixer	02	
	1.5	6695-EQM-G00-EC-0006	General Engineering Specification For Centrifugal Blower	01	
	1.6	6695-EQM-G00-EC-0007	General Engineering Specification For Positive displacement pumps	01	
	1.7	6695-HVA-G00-EC-0001	General Engineering Specification For HVAC	01	
	1.8	6695-EQM-G00-EC-0008	General Engineering Specification For Non API Pumps - ITP	01	
	2		<b>Technical specifications</b>		
	2.1	6695-EQM-G00-EC-0011	Technical Specification For Centrifugal Slurry and Liquor Pumps	01	
	2.2	6695-EQM-G00-EC-0012	Technical Specification For Non API Centrifugal Pumps	00	
	2.3	6695-EQM-G00-EC-0013	Technical Specification For Agitators	01	
	2.4	6695-EQM-G00-EC-0014	Technical Specification For Blower	00	
	2.5	6695-EQM-G00-EC-0015	Technical Specification For LRVV Vacuum Pumps	00	
	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	
<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-0003	GES for Heat Exchanger	01	
	1.3	6695-EQS-000-EC-0004	GES for Storage 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 Plate Heat Exchangers	01	
<b>4</b>			<b>PIPING</b>		
	1		<b>Drawings</b>		
	1.1	6695-LAY-G00-LD-0001	Overall Plot Plan	01	
	1.2	6695-LAY-508-LD-0001	Part plan for Evaporation Area	01	

SECTION NO.	PART NO.	DOCUMENT NO.	DESCRIPTION	REV.	
	2		<b>Piping Specification</b>		
	2.1	6695-PIP-G00-EC-0003	Piping Specification	02	
	2.2	6695-PIP-G00-EC-0006	Technical Specifications For 3-D Model	00	
	2.3	6695-PIP-G00-EC-0007	Technical Requirement for Pipes,Fittings, Flanges, Gaskets & Fasteners	01	
	2.4	6695-PIP-G00-EC-0008	Technical Requirement for Valves	02	
	2.5	6695-PIP-G00-EC-0010	Technical Requirement for Special Parts	02	
	3		<b>General Engineering Specification</b>		
	3.1	6695-PIP-G00-EC-0001	GES for Above ground steel piping	01	
	3.2	6695-LAY-G00-EC-0001	GES for Plant Layout	01	
	3.3	6695-PIP-G00-EC-0002	GES for Piping Flexibility Analysis	01	
	3.4	6695-PIP-G00-EC-0004	GES for Material Handling Equipment	03	
	3.5	6695-HES-G00-EC-0001	GES for Fire Fighting System (LSTK Packages)	02	
	4.0		<b>Data Sheets</b>		
	4.1		Data Sheets for EOT	02	
	4.2		Data Sheets for HOIST	02	
<b>5</b>			<b>CIVIL</b>		
	1		<b>General Documents</b>		
	1.1	6695-CVC-G00-EC-0001	General Engineering Specification - Civil, Structural & Architectural	03	
	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_Vol 1	Geotechnological Investigation Report_April 2018	00	
		6695-CVC-G00-DD-0001_Vol 2	Geotechnological Investigation Report_15th Oct 2019	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	04	
	1.2	6695-ELT-G00-FA-0001	Overall Key SLD	05	
	1.3	6695-ELT-G00-FA-0003	Typical Detail Single Line diagram	02	
	1.4	6695-ELT-526-LH-5001	Substation arrangement layout - Substation US-501 (LSTK)	01	
	1.5	6695-ELT-G00-FA-0002	Block Diagram for earthing & lightning protection concept	00	
	1.6	6695-ELT-G00-EC-0003	Guidelines For Electrical Equipment Numbering System	02	
	1.7	6695-ELT-G00-FS-0001	Typical I/O list for SCADA	01	
	1.8	6695-ELT-G00-EB-0001	Standard Formats for Lists (Consumer, cable, feeder, LCS,Operation mode list)	00	
	1.9	6695-ELT-G00-EC-0004	Design Guidelines For Electrical Facilities	02	
	1.10	6695-ELT-G00-FA-0004	Typical SCADA Block diagram for unit substation level networking	02	

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	

SECTION NO.	PART NO.	DOCUMENT NO.	DESCRIPTION	REV.	
	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	02	

**VOLUME - 5**

**REFERENCE DOCUMENTS**

			Licensors BEP and Other Reference Documents (wherever applicable).		
	1	Z02-260-1-SP-0001	Technical Specification- Evaporator	D	
	2	-	State pollution control board order dated 21.04.17		
	3	-	Ministry of Environment, Forest and climate change order dated 12.04.17		