GUJARAT INDUSTRIES POWER COMPANY LIMITED
SURAT LIGNITE POWER PLANT (SLPP)

VOLUME II — S1 : Project details, Broad scope & Other Details of Package-A, B, C and D

Design, Engineering, Supply, and Construction of Package A, B, C & D
New Lignite Feeding System, Associated Works, Contingency Feeding Arrangement & Dismantling

Tender No.: GIPCL/SLPP/R&M/LHS/FB-RE/LOCATION/EPC/2026

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Gujarat Industries Power Company Limited

Surat Lignite Power Plant (SLPP), Village: Nani Naroli, Taluka: Mangrol, Dist.: Surat, Gujarat

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1. PROJECT SYNOPSIS AND SITE DATA

1.1 About GIPCL and SLPP

Gujarat Industries Power Company Limited (GIPCL) was incorporated in 1985 as a Public Limited Company registered under the Companies Act, 1956 with its registered and corporate office at P.O. Ranoli, Vadodara – 391 350, Gujarat, India. GIPCL functions under the umbrella of Energy and Petrochemicals Department, Govt. of Gujarat; its equity shares are listed on BSE and NSE.

GIPCL is in the business of Electrical Power Generation with an installed capacity of 1,859.4 MW comprising Thermal (Lignite and Gas) and Renewable (Wind and Solar) Power Plants. GIPCL also operates captive Lignite and Limestone Mines.

Surat Lignite Power Plant (SLPP) with four units of 125 MW each is located at Village: Nani Naroli, Taluka: Mangrol, District: Surat, Gujarat based on Circulating Fluidized Bed Combustion (CFBC) technology. SLPP Phase-I (Units 1 & 2) was commissioned in 1999 and entered Commercial Operation in February 2000;

1.2 Site Location and Connectivity

Parameter	Details
Plant Location	Village: Nani Naroli, Taluka: Mangrol, District: Surat, Gujarat – 394 112
Latitude / Longitude	Approx. 21°09'N / 73°16'E
Nearest Railway Station	Kim (approx. 25 km); Surat (approx. 50 km)
Nearest Highway	NH-48 (Mumbai–Ahmedabad); State Highway Mangrol–Navsari
Nearest Airport	Surat Airport (approx. 65 km)
Port	Hazira Port / Magdalla Port (Surat) – approx. 70 km
Climate Zone	Hot & Humid Tropical; Monsoon: June–September

1.3 Ambient and Design Conditions

Parameter	Value / Specification
Maximum Ambient Temperature (Design)	+50°C (for equipment thermal design)
Minimum Ambient Temperature	5°C
Average Annual Rainfall	Approx. 1,200 mm (predominantly June–September)
Maximum Relative Humidity	95% (monsoon season)
Wind Speed (Design)	47 m/s (Basic Wind Speed as per IS:875 for Surat zone)

Parameter	Value / Specification
Seismic Zone	Zone III as per IS:1893
Elevation above MSL	Approx. 8–10 m
Dust / Environment	Heavy dust; lignite fines; moderately corrosive industrial environment

2. INTENT OF SPECIFICATION

This specification covers Site Assessment, Topography, Soil investigation, Design, Engineering, Supply, Transport, Recipt, Construction and Commissioning (EPC/Turnkey) of project for Package-A, B and C and dismantling of the system vide Package-D (Buy back).

The Works are structured in four Packages: Package A (new Feeder Breaker system at Plant End, including Civil ramp, conveyors, and all associated civil/structural/electrical/C&I works); Package B (associated works including weigh bridge, approach road, culvert, drainage, RFID, firefighting extension, and lighting); Package C (contingency surface feeder for temporary/interim feeding during construction of Package A); and Package D (dismantling and disposal of the existing Phase-I LHS equipment on "As-is, Where-is" basis. Package D (dismantling) is included in the scope. All four packages are considered as a single Turnkey EPC Contract.

The Contractor shall be responsible for providing a complete, reliable, and maintainable system. All equipment, sub-systems, and components shall conform to high standards of engineering, design, and workmanship, and shall be capable of performing under continuous commercial operation in the lignite handling environment.

Bidder shall consider the overall layout development of the plot plan of the system in AutoCAD- file comprising the package-A,B,C and existing LHS plot plan.

3. EXISTING SYSTEM DESCRIPTION

3.1 Phase-I Lignite Handling System mines area (LHS)

The Phase-I LHS was supplied and commissioned in 1999–2000. In present system, self-unloading trucks /dumpers carry the ROM lignite material and uses ramp for unloading of the material in feeder breaker hopper. From the Feeder Breaker (located at Vastan Mines end) crushed lignite (-250 mm, 98%) conveys to the BCN M1A , BCN M2A, Primary crusher (-50 mm) to Plant End via BCN M3A. At present, the dumper payload capacity is in between 20MT to 30MT. however in future, the payload capacity of the dumper/trucks is expected to increase up to 40MT and accordingly the size of the dumpers will increase.

Equipment	Technical Details
Feeder Breaker (Phase-I, existing)	Pan Width: 1,750 mm; Length: 19,000 mm c-to-c; Breaker Roll Dia: 1,400 mm; Capacity: 1,200 TPH; Location: Vastan Mines end (~3 km from plant)
BCN-M1A	Length: 2000 m approx. C to C; Drive: 650 kW; Steel cord belt ST-2500, BW 1400mm; Belt Speed: 2.74 m/s; Capacity: 1,200 TPH
BCN-M2A	Length: 1000 m Approx. C to C; Drive: 410 kW; Steel cord belt ST-1600, BW 1400mm; Belt Speed: 2.74 m/s; Capacity: 1,200 TPH

3.2 Phase-II External Lignite Handling System (ELHS)

The Phase-II ELHS was commissioned in 2011–12. It receives lignite from the plant boundary and conveys it through an Apron Feeder and a slow-speed conveyor BCN-M7, primary crusher (-50 mm) to the Phase-II conveying system. Lignite received from trucks/dumper and unload the material into the hopper above apron feeder. The ramp is used to unload the material on over ground hopper of apron feeder. In present system, self-unloading trucks /dumpers carry the lignite material and used ramp for unloading of the material in apron breaker hopper. Presently the dumper payload capacity is in between 20MT to 30MT. however in future, the payload capacity of the dumper/trucks is expected to increase upto 40MT and accordingly the size of the dumpers will increase.

Equipment	Technical Details
Apron Feeder (Phase-II)	1200TPH rated capacity, Located near Plant End; receives lignite from external supply; feeds to BCN-M7. Ramp is used by Trucks/dumpers to unload the material on over ground hopper.
BCN-M7	1600BW, 1200TPH rated, Slow-speed conveyor (1.8 m/s); fitted with stone picking posts

4. SCOPE OF WORK: OVERVIEW (ALL PACKAGES)

The scope constitutes a comprehensive Turnkey EPC Contract covering four Packages. All four packages are considered as a single Turnkey EPC Contract. Detailed discipline-wise specifications are provided in the respective Package-specific volumes.

4.1 Package A — New Lignite Feeding System (Relocation)

Design, engineering, manufacturing, supply, transportation, storage, preservation, shifting, erection, testing and commissioning work

Discipline	Key Scope Items
Mechanical	1 no. Feeder Breaker (VFD, 1200 TPH); Hopper with Grizzly & three side enclosed shed at New RCC Ramp; 01 no. Belt Conveyor (1200 TPH, BW ≥1800mm, Speed ≤1.5 M/s); Transfer chutes; dust suppression with plain water; Stone picking posts; All structural work (galleries, platforms, walkways, JNT); Interface with existing Phase-I conveyor system etc including modification/ dismantling /revival in existing for development/completion of the project.
Electrical	New HT Switchboard (6.6KV), Service Transformers 6.6 / 0.415 KV (2 Nos.), LT MCC/PCC (415V, 3-Phase, 50 Hz); HT & LT Motors (IE3); VFDs for Feeder Breaker; DC System (Battery Bank, Charger, DCDB): XLPE armoured Power & Control Cables; GI cable trays; Earthing & lightning protection; Lighting system - LED Illumination; cable rack, High Mast at feeder breaker area; Misc. Electrical panels like LCP, LPB, LP etc.; Interface with existing Phase-I electrical panels etc etc including modification/ dismantling /revival in existing for development/completion of the project. Hooter provision. Signal system at dump hopper area. **Construction Power:** 415V, 3-Phase 3-wire, 50 Hz supply to be taken from existing new PCH MCC (near JNT-13). Contractor to extend power from this point with necessary electrical protections to location with required transformer, power distribution boards, lighting provision etc.
C&I	Belt weighers; New PLC-based RIO Panel (same make as existing plant PLC); Integration with existing plant SCADA/HMI; New SCADA process graphics; All field instruments; Interlock & sequence logic; including modification/ dismantling /revival in existing for development/completion of the project.
Firefighting Extension	1. Extension of existing plant firefighting system (fire hydrant network) to cover new Feeder Breaker area, ramp, New JNT; JNT-13 etc 2. Fire sprinkler line along the conveyor in both side i.e. carrying and return side. Tapping of the water from nearby. 3. Fire sprinkler line in JNT
IT & Communication	Installation of CCTV (by relocating the same from existing system) at ramp, feeder breaker, Stone picking area inside the conveyor gallery, JNT-13/New JNT, (Total 3 locations, 1 no's PTZ and 2 no's fixed camera) including all cabling & network; IT infrastructure require. Removal / relocation of the existing IT network etc. as require.
Civil & Structural	New RCC Ramp, dump platform, All equipment foundations; slabs, JNT, conveyor gallery & technological structures;

Discipline	Key Scope Items
	structural fabrication, erection, New Electrical & C&I Building in G+1 configuration, transformer foundation/yard with fencing, Cable tray structure & foundation (MCC to FB & FB to JNT); crossover structure and civil foundation from Existing PCH MCC to New Feeder Breaker MCC. Structural steel modifications at Phase-I interface; Cable trenches; Roads and drainage; approach roads including round about area, Hopper sheds etc including modification/ dismantling /revival/diversion/temporary arrangement etc in existing for development/completion of the project. Area/road development near JNT, MCC & Nallah diversion if required. Design & construction of new system with consideration of the existing weigh bridge area and existing fleet movement system.
Survey & Engineering and design basis report	Topographic site survey; Sub-soil investigation; area drainage study, Condition assessment of Phase-I system near JNT-13; Design basis report; detailed development of the plot plan and flow diagram including demarcation of the existing system, Detailed design & engineering calculations; Drawing submission & GIPCL/PMC approval; L1/L2 PERT/CPM schedule
Supply, Fabrication & Erection	Supply of all the items, Complete fabrication, construction and erection of the complete system in all respect.
Commissioning	Pre-commissioning; Cold commissioning; Hot commissioning; Trial Operation; PG Tests; Modification if any, Stabilization, O&M training; As-Built documentation; Handing over; site clearance
Dismantling/ modification/ diversion/ rerouting/ temporary work etc	For completion of the package, all necessary statutory / legal work irrespective of discipline shall be carried-out and shall be in contractors' scope only.

4.2 Package B — Associated Works for New Lignite feeding system

Design, engineering, manufacturing, supply, transportation, storage, preservation, shifting, erection, testing and commissioning work

Sub-Package	Key Scope Items
Weigh Bridge	Supply, installation & commissioning of automatic electronic weigh bridge; weigh bridge house; document storage; including removal of existing weigh bridge and shifting & installation at newly constructed location. Area/ramp development including RCC around weigh bridge, washroom/toilet block, transformer room, rest room at weigh bridge.

Sub-Package	Key Scope Items
	Dismantling of the existing weigh bridge, ramp, foundation & operator cabin and shifting of the same with consideration of existing fleet movement system. Fabrication and erection of Sample collection structure.
Approach Road & Culvert/other work	New approach road, culverts, and road extension to lignite stockpile; weigh bridge to new ramp and development of the stockpile area, fencing, pedestal for lightings, fire line, civil work for IT network, including Pota cabin and all other civil work required. Development of the common area with RCC paving vide package-A for fleet movement for existing feeder ramp as well as new feeder ramp.
Electrical	Taking 3-ph power supply from dedicated point & distribution with transformers & distribution board (in transformer room), LP, LDB, Earthing, lightning protection, Cable laying, Lighting, ramp lighting, Weighbridge & its Operator Cabins electrification (with AC, lighting and network point etc.). Area lighting like street lighting, High mast at weigh bridge, stockpile area, Extension of lighting, construction and laying of the cables, racks, underground cabling, power supply and other electrical work for Package B facilities like IT network supply, lighting, fan/AC, water cooler, sanitation area, rest area etc. **Construction Power:** 415V, 3-Phase 3-wire, 50 Hz supply to be taken from existing new PCH MCC (near JNT-13). Contractor to extend power from this point with necessary electrical protections to location with required transformer, power distribution boards, lighting provision etc.
IT network & RFID System & Communication	RFID-based truck identification at weigh bridge entry/exit; stockpile entry/exit; integration with weigh bridge data; development of the IT network for the same. LAN/network cabling extension; CCTV at weighbridge.
Firefighting Extension	Extension of existing plant firefighting system (fire hydrant network) to cover weigh bridge, stockpile and extended stockpile above ground floor. Rerouting/dismantling of the existing Fireline.
Dismantling/ modification/ diversion/ rerouting/ temporary work etc	For completion of the package, all necessary work irrespective of discipline shall be carried-out and shall be in contractors' scope only.

4.3 Package C — Contingency Surface Feeder Arrangement

Package C covers Design, engineering, manufacturing, supply, transportation, storage, preservation, shifting, erection, testing and commissioning work of a Surface Feeder (1,000 TPH rated capacity) for contingency/temporary feeding of

lignite to the Phase-I system during the construction period of Package A. including all civil, mechanical, electrical, C&I and IT related work. After commissioning of the package-A, surface feeder shall be shifted to other suitable location of the LHS as directed by GIPCL.

- Surface Feeder: 1 No., 1,000 TPH; suitable for feeding lignite from dozer/payloader-fed;
- Associated Works: All civil foundations, RCC paving in surrounding area, structural support, electrical cable connections, C&I instruments, commissioning and integration with existing Phase-I system.
- All necessary structural modification considering suitable discharge chute, skirt board and stringer and short post modification etc.
- The surface feeder shall be capable of being redeployed at another suitable location after Package A commissioning.

Sub-Package	Key Scope Items
Mechanical	Supply, installation & commissioning of the surface feeder including all necessary system related modification for seamless integration of the system.
Civil & Structural work	Construction of the tail pulley foundation of the BCN-M1A at relocated area. Fabrication and erection of the tail pulley structure of the BCN-M1A. Construction of the surface feeder foundation, pedestal, surrounding area RCC as per approved drawing, All structural modification of the conveyor system including technological structure, fabrication and erection of the skirt boards, chutes etc. Approach to surface feeder including levelling, grading of the area.
Electrical	Procurement and laying of the cable from NEW PCH to designated location. all electrical interface of surface feeder with existing electrical system. **Construction Power:** 415V, 3-Phase 3-wire, 50 Hz supply to be taken from nearby BCN-M1a pump house ACDB. Contractor to extend power from this point with necessary electrical protections to location with required transformer, power distribution boards, lighting provision etc.
C&I	Supply, installation and commissioning of all field instruments for temporary feeding arrangement and cable laying, glanding, termination, in field as well as in I/O panel. Installation of I/O rack panel in Porta cabin MCC room, Fabrication of Electronic earthing for PLC and I/O rack. Re-route existing communication cable (FO / Profibus) from existing Mines MCC to temporary I/O rack panel for communication of I/O rack with Main PLC CPU. Power supply cable from Temporary MCC panel to PLC I/O rack panel.

Sub-Package	Key Scope Items
	I/O rack commissioning shall be in the scope of GIPCL. I/O rack consists of various Siemens PLC modules, power supply module, etc. and shall be provided to bidder by GIPCL.
IT network & RFID System & Communication	Relocation of the existing PTZ camera from feeder breaker to installation location of the surface feeder including network extension from nearest GIPCL network point. Any requirement as per system requirement will be in contractors' scope only.
Firefighting Extension	Extension of existing plant firefighting system (fire hydrant network) to surface feeder with fire hydrant.
Dismantling/ modification/ diversion/ rerouting/ temporary work etc	For completion of the package, all necessary work irrespective of discipline shall be carried-out and shall be in contractors' scope only.

NOTE: ***Package C is critical from a project timeline perspective. must precede start of Package D Part-1 dismantling works.***

Package-C is critical for the system and it is intent that it has to be completed in best shortest possible time. The present location shown of the surface feeder in plot plan/flow diagram is indicative only. Considering criticality of the package-C, contractor shall have to evaluate/examine the best possible location of the installation and integration with phase-1 system. At the same time, it shall meet all the required things like lignite storage area nearby, weigh bridge and IT system for reconciliation of the lignite before feeding to the system.

However, GIPCL reserves the right to instruct the contractor to install and commission the system at any location of the lignite handling system.

4.4 Package D — Dismantling & Disposal of Existing LHS Equipment

Package D covers dismantling and disposal of the existing Phase-I LHS equipment on an "As-is, Where-is" basis.

1. Scope of Dismantling

Sub-Package	Key Scope Items
Mechanical, Structural, electrical, C&I etc	• Feeder Breaker (Phase-I, existing at Vastan Mines end) – complete with pan, flights, chains, breaker roll, drive, guards and accessories, operator room. • BCN-M1A Yard Conveyor – belt, structure, pulleys, idlers and all associated items. (in Two part) • Stacker-cum-Reclaimer (outplant) – complete machine including rail, boom, travel, slewing mechanism, drives, electrical panels and accessories. • Electrical Switch Gears, Transformers, VFD Containers, MCCs and associated electrical equipment at Vastan Mines end including cable, lighting poles, Various lighting masts, cable racks etc • PLC / Control Containers, Junction Boxes and field instruments at Vastan Mines end. • Balance BCN-M1A Conveyor, Drive, take up, pulleys, idlers, Gallery, trestles and support structures up to JNT-13 inlcuding all electrical items, C&I items, pipes, etc.
Civil	For Dismantling of the equipment, structure, and any other system, any breaking/ dismantling required will be in contractor's scope.
C&I	• PLC / Control desk, Junction Boxes and all field instruments, cables, associated with the Phase-I Vastan Mines end system.
IT network & RFID System & Communication	All IT infrastructure system shall be retained by GIPCL
Firefighting system	As per system requirement in concurrence of GIPCL.
Dismantling/ modification/ diversion/ rerouting/ temporary work etc	For completion of the package, all necessary work irrespective of discipline shall be carried-out and shall be in contractors' scope only.
Usable/ recoverable items	**List of items provided in the tender document, that to dismantle /remove from the system and shall be kept at designated location decided by GIPCL is in contractor scope. However, the lists are indicative. GIPCL reserves the right to add/delete the items.**
Exclusion	**1. Any civil foundation, building, ramp, rail foundation, feeder breaker foundation etc. not hurdling Dismantling.**

2. Schedule of Execution – Package D

Part	Scope	Timeline
Part-1	Removal of Feeder Breaker, BCN-M1A Yard Conveyor and Stacker-cum-Reclaimer outplant	Within 12 months from LOI (Execution commence after Package C commissioning)
Part-2	Removal of BCN-M1A Conveyor Gallery and trestles up to JNT-13	Within 30 months from LOI (Execution commence after Package A commissioning)

4.5 Timeline for package-A, B, C and D in months

SN	Item	In Months from the date of LOI
1	Package-A	24
2	Package-B	12
3	Package-C	8
4	Package-D	12 Months (Part-1) 30-months (Part-2)

Note: Package-D is critical for GIPCL which is required to give to give clear space/clearance to other contractor for power project execution in this area.

4.6 Coordination and Site Working Obligations

- All works shall be executed within the operating SLPP plant premises. Strict PTW compliance is mandatory.
- Close coordination with GIPCL's O&M team; minimal disruption to fuel supply throughout the Contract period.
- The Contractor shall submit a detailed construction methodology and traffic management plan for truck movements during construction.

5. TERMINAL POINTS AND EXCLUSIONS

5.1 Terminal Points

Boundary	Description
Plot plan boundary	**Package-A & B:** 1. Approach and connectivity from existing lignite transportation route. 2. Approach and connectivity from existing stockpile 3. Approach and connectivity from existing PCH MCC 4. JNT-13 and Vastan side road **Package-C:** 1. Approach from nearest existing road.

Boundary	Description
Construction Power	415V, 3-Phase 3-wire, 50 Hz supply to be taken from existing new PCH MCC (near JNT-13). Contractor to extend power from this point to location of surface feeder including cable laying. **Construction power: Provided by GIPCL at identified one point at metered rate at Rs 8.5/kWh; internal distribution in Contractor's scope.**
Construction Water	Construction water shall be provided by Owner on free of charge basis at one point within the plant boundary and the bidder shall make his own arrangements for further distribution. The bidder shall make alternate arrangement in case of non-availability of construction water from Owner at his own cost.
Terminal Point – Control	Package – A: 1. PLC/AWRS at New PCH MCC 2. SCADA interface at LHS control room (Phase-1 LHS system) Package – C: 1. Profi-bus at location of the surface feeder. 2. SCADA interface at LHS control room (Phase-1 LHS system)
Terminal Point – IT	Package – A, B, C: IT network and RFID interface from nearest point

6. QUALITY ASSURANCE AND INSPECTION

The Contractor shall implement a comprehensive Quality Assurance (QA) programme covering design, procurement, manufacturing, fabrication, supply, erection, and commissioning stages. The QA programme shall be submitted to GIPCL/PMC for approval within 30 days of LoI/LoA/WO. Also, refer respective sections of the tender for quality assurance plan.

6.1 Inspection and Test Plans (ITPs)

Contractor shall prepare ITPs for all major items with the following categories of inspection points: Performed by Contractor; records submitted to GIPCL/PMC.

Key ITP Activities

Discipline / Activity	Key Inspection Activities
Civil – Concrete	As per approved QAP
Civil – Foundations	As per approved QAP
Civil – Grouting	As per approved QAP

Discipline / Activity	Key Inspection Activities
Structural Steel Fabrication	As per approved QAP
Feeder Breaker Manufacturing	As per approved QAP
Conveyor Components	As per approved QAP
Electrical – HT & LT MCC/PCC	As per approved QAP
Electrical – Motors	As per approved QAP
VFD Panels	As per approved QAP
DC System (Battery, Charger & DCDB)	As per approved QAP
PLC/RIO FAT	As per approved QAP
Instruments	As per approved QAP
Weigh Bridge & RFID (Pkg B)	As per approved QAP
Surface Feeder (Pkg C)	As per approved QAP

6.2 Factory Acceptance Test (FAT)

FAT shall be carried out for: Feeder Breakers, Gear box, scoop coupling, conveyor components, MCC/PCC, VFD panels, PLC/RIO panels, Surface Feeder, RFID,CCTV etc and any other major equipment as directed by GIPCL/PMC. GIPCL/PMC shall be given minimum 15 days advance notice for witnessing FAT. FAT test reports shall be submitted for approval before dispatch clearance.

7. ERECTION & COMMISSIONING REQUIREMENTS (OVERVIEW)

All Erection & Commissioning activities shall be conducted as per approved plan and as per provisions of tender document and mentioned respective schemes in coordination with GIPCL/ PMC.

7.1 Pre-commissioning and Cold Commissioning

a) All mechanical checks: alignment, grouting completeness, lubrication, guards in position, structural stability.
b) All electrical checks: motor rotation direction, insulation resistance tests, earth continuity, loop checks, panel interlock verification.
c) All C&I checks: instrument calibration verification, logic checks, interlock functional checks, SCADA/HMI screen verification, communication network tests, UPS battery backup test.
d) Cold run (dry run without material) of Feeder Breaker, conveyor, and surface feeder (Package C) as per minimum recommended running hours.
e) All cold commissioning checklist items shall be signed off by the Contractor, PMC, and GIPCL representative before proceeding to hot commissioning.

7.2 Hot Commissioning and Trial Operation

a) Hot commissioning: all equipment operated under actual lignite flow; monitoring of all process parameters, vibration levels, temperatures, and material flow rates.
b) Trial Operation: continuous operation of the completely new system under actual plant conditions as per minimum recommended running hours, monitored by GIPCL/PMC.
c) Feeder Breaker, surface feeder operated at different speed ratios to demonstrate flow rate control capability; verified by belt weigher readings.

7.3 Performance Guarantee (PG) Tests

PG Tests shall be conducted as per approved PG test plan.

7.4 Training of GIPCL O&M Personnel

a) Minimum 3 days formal training covering: system description, operating philosophy, SCADA operation, routine maintenance, troubleshooting.
b) Minimum 7 days on-the-job training (OJT) at site during hot commissioning and trial operation.
c) Training to cover all equipment across all packages (Feeder Breaker, conveyors, surface feeder, electrical, VFDs, PLC/SCADA, weigh bridge, RFID, dismantling methodology).
d) Training materials (slides, O&M manuals, quick reference cards) to be provided in English and Gujarati/Hindi.

8. DRAWINGS AND DOCUMENTS REQUIRED

The Contractor shall prepare and submit the following documents and drawings for GIPCL/PMC review and approval.

Sr.	Document / Drawing	Stage	Category
1	Overall Plant Layout (with new lignite feeding System Package-A + Package B areas)	With Bid	For Reference
2	Preliminary GA of Ramp + Feeder Breaker System + Conveyor system	With Bid	For Reference
3	Preliminary GA of Surface Feeder (Package C)	With Bid	For Reference
5	Brief write-up and preliminary project schedule for all packages A, B, C and D	With Bid	For Reference
6	Technical data sheet as per Package-A, B, C (If any)	With Bid	For Reference
	Civil document: As per civil section		

Sr.	Document / Drawing	Stage	Category
7	L1/L2 PERT Chart – preliminary schedule (all packages)	Within 30 days of LoI	Approval
8	Detailed GA Drawings – Belt Conveyors , Feeder Breaker etc	Within 45 days of LoI	Approval
9	Detailed GA Drawings – Surface Feeder (Package C)	Within 45 days of LoI	Approval
10	Structural Steel Drawings – Ramp, Gallery, JNT, Platforms	Within 45 days of LoI	Approval
11	Civil Structural Drawings – Ramp, Foundations, Building	Within 45 days of LoI	Approval
12	Foundation Loading Data – all equipment	Within 45 days of LoI	Approval
13	Single Line Diagram (SLD) – Electrical	Within 30 days of LoI	Approval
14	MCC/PCC GA Drawing	Within 45 days of LoI	Approval
15	Cable Schedule (Power and Control)	Within 45 days of LoI	Approval
16	Cable Tray Layout Drawings	Within 45 days of LoI	Approval
17	Earthing Layout Drawing	Within 45 days of LoI	Approval
18	Illumination Layout Drawing	Within 45 days of LoI	Approval
19	Control Philosophy / PLC Control Narrative	Within 30 days of LoI	Approval
20	PLC I/O List (complete – all packages)	Within 30 days of LoI	Approval
21	Instrument List / Instrument Index	Within 30 days of LoI	Approval
22	Interlock List and Logic Diagrams (CLDs)	Within 45 days of LoI	Approval
23	SCADA / HMI Screen Designs (preliminary)	Within 60 days of LoI	Approval
24	VFD Panel GA Drawing and Technical Data Sheet	Within 30 days of LoI	Approval
25	Package B – Weigh Bridge, RFID, Road, culvert, Firefighting Layout	Within 45 days of LoI	Approval

Sr.	Document / Drawing	Stage	Category
26	Erection Scheme (Structural and Mechanical)	45 days Before erection commencement	Approval
27	Pre-commissioning Checklists (all disciplines, all packages)	60 days Before commissioning	Approval
28	PG Test Procedure (all packages)	30 days before PG Test	Approval
29	As-Built Drawings – All disciplines (A, B, C)	Within 60 days of TOC	For Records
30	O&M Manuals – All equipment (A, B, C)	Within 60 days of TOC	For Records