



VOLUME – IA Part I & II

TECHNICAL CONDITIONS OF CONTRACT (TCC)

BHARAT HEAVY ELECTRICALS LIMITED



TECHNICAL CONDITIONS OF CONTRACT (TCC)

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VOLUME-IA PART – I CHAPTER – I

PROJECT INFORMATION

The Bidder shall acquaint himself by a visit to the site, if felt necessary, with the conditions prevailing at site before submission of the bid. The information given here in under is for general guidance and shall not be contractually binding on BHEL/Owner. All relevant site data /information as may be necessary shall have to be obtained /collected by the Bidder.

1.1	Project Title	:	3 x 800 MW NLC Talabira Thermal Power Project
1.2	Plant capacity	:	3 x 800 MW
1.3	Type of project	:	Green Field
1.4	Owner	:	NLC India Limited
1.5	Plant site location	:	The plant and township of the project proposed to be located near Kumbhari and Tareikela villages on south west of Brijraj Nagar town on Sambalpur Rourkela highway in Jharsuguda district and ash disposal area is located near Thelkolai village in Sambalpur district.
1.6	Location co-ordinates	:	21° 46' 56.11" N 83° 58' 50.54" E
1.7	Nearest Village	:	Kumbhari and Tareikela villages on south west of Brijraj Nagar town
1.8	Nearest Town & City	:	Sambalpur
1.9	State Capital	:	Bhubaneswar (350 Km)
1.10	Nearest Railway Station	:	Jharsuguda (11 Km)
1.11	Nearest Airport	:	Raipur (290 Km)
1.12	Nearest Seaport	:	Paradip (385 Km)
1.13	Nearest Road access	:	Sambalpur – Jharsuguda highway after crossing Bedhan River via state PWD road
2.0	Meteorological Condition		
2.1	Altitude	:	203 M above MSL
2.2	Ambient Temperature	:	
a.	Annual Maximum Mean Temperature	:	33.1°C
b.	Annual Minimum Mean Temperature	:	20.7°C
c.	Mean Wet Bulb Temperature	:	26.3 °C

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2.3	Mean Relative humidity		66% at 8:30 Hrs
2.4	Annual Rainfall		
	Average	:	1445 mm (avg.)
2.5	Basic Design Wind Pressure	:	In accordance with IS-875 for a basic wind speed of 50 m/sec, up to a height of 10 meters above mean ground level.)
2.6	Seismic zone	:	Zone III as per IS:1893 (latest edition)

VOLUME-IA PART-I CHAPTER-II
SCOPE OF WORKS

THE SCOPE OF THE WORK WILL COMPRISE OF BUT NOT LIMITED TO THE FOLLOWING

(All the works mentioned hereunder shall be carried out within the accepted rate unless otherwise specified.)

- 1.2.1 The scope of works covers Civil works involved in engineering, design, Construction of complete Ash dyke including drainage system, overflow lagoon, decantation well & associated civil works as per the specifications including grading of ash pond area at 3x800MW Talabira Power project, Jharsuguda District., Odisha, including supply of all materials, labour, tools and plants.
- 1.2.2 The scope of work is given below, but not limited to the given below:
- 1.2.2.1 Engineering, Design, Construction of complete Ash dyke including drainage system, overflow lagoon, decantation well & associated civil works including grading works
- 1.2.2.2 Construction of garlanding pedestals on Dyke including thrust blocks
- 1.2.2.3 Construction of Settling Tank & Sump
- Note: The above provided list is for the bidder's guideline. **Any other building / structure/ foundation not mentioned above, but required for completion of the scope of work in total, deemed to have been included in the bidder scope under this contract.**
- 1.2.3 The works to be performed under this contract shall include providing all labour, supervision, material, scaffolding, construction equipment, tools and plants, temporary works, supplies including POL, transportation and all incidental items not shown or specified but reasonably implied or necessary for the proper completion of work in all respects. Testing of all materials, concrete, earthwork, other allied works, preparation of bar bending schedules on the basis of construction drawings, preparation of fabrication drawings etc. are included in the scope of work. Works shall only be carried out with approved structural fabrication drawings.
- 1.2.4 The area of work shall be cleared of all vegetation, rubbish and other objectionable matter. The materials removed shall be disposed of as directed by the Engineer-in-Charge. No separate payment for these operations shall be made. The cost of all these operations shall be deemed to have been included in the quoted price.

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- 1.2.5 All the works areas shall be adequately flood lighted to the satisfaction of the Engineer-in-Charge when the work is in progress during the night shifts.
- 1.2.6 The price shall include all material, equipment, fixtures, labour, T&P's, temporary works and everything whether of permanent or temporary nature necessary for the completion of job in all respects.
- 1.2.7 The bidder should fully apprise himself of the prevailing conditions at the proposed site, climatic conditions including monsoon pattern, local conditions, soil strata and site specific parameters and shall include for all such conditions and contingent measures in the bid, including those which may have not been specifically brought out in the specifications.
- 1.2.8 The bidder shall be responsible for all statutory, obligatory, mandatory requirements of various authorities for the scope of work and take the same into account in the quoted contract price for the work.
- 1.2.9 Technical Vetting is to be taken from IIT before submission of drawings to BHEL/Customer. Vendor shall utilize the online system provided by BHEL for submission and comments for drawing approval
- 1.2.10 Hard copy of Drawings (Nos. as required) are to be submitted to BHEL/Customer for approval and work.
- 1.2.11 Special arrangements to be made for tackling pandemic – Contractor shall make arrangements for stay of workers within their premises as far as possible and/ or adjacent building and for implementation of **STANDARD OPERATING PROTOCOL (SOP)** as per government order. The transportation of workers to work place shall be arranged by the contractor in dedicated transport by ensuring social distance. Any person violating the pandemic measures published vide government order time to time will be liable for legal action as per the government order. Following shall be observed in work place:
 - 1.2.11.1 All work places shall have adequate arrangements for temperature screening and provide sanitizers at convenient places.
 - 1.2.11.2 Work places shall have a gap of one hour between shifts and will stagger the lunch breaks of staff, to ensure social distancing.
 - 1.2.11.3 Use of AROGYA SETU will be encouraged for all employees both private and public.
 - 1.2.11.4 Contractor shall sanitize their work place between shifts.
 - 1.2.11.5 Large meetings to be prohibited. Spitting shall be strictly prohibited. Wearing of face cover is compulsory.
 - 1.2.11.6 Government order (state/ center) being issued time to time for protective measures of pandemic shall be complied with strictly until

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- government (state/ center) declares end of pandemic.
- 1.2.11.7 Standard operating procedure for social distancing for workplace and offices
- 1.2.11.8 The following measures shall be implemented by contractor for their office and workplaces:
- 1.2.11.9 All areas in the work premises including the following shall be disinfected completely using user friendly disinfectant mediums:
- 1.2.11.10 Entrance gate of work place, office, if any
- 1.2.11.11 Cafeteria and canteens, if any
- 1.2.11.12 Meeting room, conference halls/ open area available/ verandah/ entrance gate of site, bunkers, porta cabins, buildings, etc.
- 1.2.11.13 Equipment and lifts
- 1.2.11.14 Washroom, toilet, sink, water points, etc
- 1.2.11.15 Wall/ all other surfaces
- 1.2.11.16 For workers coming from outside, special transportation facility shall be arranged without any dependency on the public transport system. These vehicles shall be allowed to carry man power as per existing Govt norms.
- 1.2.11.17 All vehicles and machinery entering the premise should be disinfected by spray mandatorily.
- 1.2.11.18 Mandatory thermal scanning of everyone entering and exiting the work place to be done.
- 1.2.11.19 Medical insurance for the workers to be made mandatory.
- 1.2.11.20 Provision for hand wash & sanitizer preferably with touch free mechanism shall be made at all entry and exit points and common areas. Sufficient quantities of all the items should be available.
- 1.2.11.21 Large gatherings or meetings of 10 or more people to discouraged. Seating at least 6 feet away from others on job sites and in gatherings, meetings and training sessions.
- 1.2.11.22 Not more than 2/4 persons (depending on size) will be allowed to travel in lifts or hoists.
- 1.2.11.23 Use of staircase for climbing should be encouraged.
- 1.2.11.24 There should be strict ban of gutka, tobacco, etc. and spitting should be strictly prohibited.
- 1.2.11.25 There should be total ban on non-essential visitors at sites.
- 1.2.11.26 Hospitals/ clinics in the nearby areas, which are authorized to treat pandemic patients, should be identified and list should be available at work place all the times.

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Note :

- 1. Vendor shall visit site and quote lump sum price after referring the relevant chapters of Technical Conditions of Contract.**
- 2. FOR FURTHER DETAILED SCOPE OF WORKS REFER RELEVANT CHAPTERS IN THIS BOOK**

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VOLUME-IA PART-I CHAPTER-III FACILITIES & CONSUMABLES IN THE SCOPE OF CONTRACTOR / BHEL (SCOPE MATRIX)

Sl.No	Description	Scope to be taken care by		Remarks
		BHEL	Bidder	
1.3.1.1.0	PART I ESTABLISHMENT			
1.3.1.1.1	FOR CONSTRUCTION PURPOSE:			
A	Open space for office	Yes		
B	Open space for storage	Yes		
C	Construction of bidder's office, canteen and storage building including supply of materials and other services		Yes	
D	Bidder's all office equipment's, office / store / canteen consumables		Yes	
E	Canteen facilities for the bidder's staff, supervisors and engineers etc.		Yes	
F	Firefighting equipment's like buckets, extinguishers etc.		Yes	
G	Fencing of storage area, office, canteen etc. of the bidder		Yes	
1.3.1.1.2	FOR LIVING PURPOSES OF THE BIDDER			
A	Open space		Yes	
B	Living accommodation		Yes	
1.3.1.2.0	ELECTRICITY			
1.3.1.2.1	Electricity For construction purposes			
1.3.1.2.1.1	Single point source	Yes		chargeable
1.3.1.2.1.2	Further distribution for the work to be done which include supply of materials and execution		Yes	
1.3.1.2.2	Electricity for the office, stores, canteen etc of the bidder which include:		Yes	
1.3.1.2.2.1	Distribution from single point including supply of materials and service		Yes	
1.3.1.2.2.2	Supply, installation and connection of material of energy meter including operation and maintenance		Yes	

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Sl.No	Description	Scope to be taken care by		Remarks
		BHEL	Bidder	
	PART I			
1.3.1.2.2.3	Duties and deposits including statutory clearances for the above		Yes	
1.3.1.2.2.4	Demobilization of the facilities after completion of works		Yes	
1.3.1.2.3	Electricity for living accommodation of the bidder's staff, engineers, supervisors etc on the above lines.(in case BHEL provides this facility, the scope should be given without ambiguity)		Yes	
1.3.1.3.0	WATER SUPPLY			
1.3.1.3.1	For construction purposes:			
1.3.1.3.1.1	Making the water available at single point	Yes		
1.3.1.3.1.2	Further distribution as per the requirement of work including supply of materials and execution		Yes	
1.3.1.3.2	Water supply for bidder's office, stores, canteen etc.			
1.3.1.3.2.1	Making the water available at single point		Yes	
1.3.1.3.2.2	Further distribution as per the requirement of work including supply of materials and execution		Yes	
1.3.1.4.0	LIGHTING			
1.3.1.4.1	For construction work (supply of all the necessary materials) At office storage area At the preassembly area At the construction site / area		Yes	
1.3.1.4.2	For construction work (Execution of the lighting work / arrangements) At office storage area At the preassembly area At the construction site /area		Yes	
1.3.1.5.0	COMMUNICATION FACILITIES for site operations of the bidder	-		
1.3.1.5.1	Telephone, Fax, internet, intranet, email etc		Yes	

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Sl.No	Description	Scope to be taken care by		Remarks
		BHEL	Bidder	
	PART II			
	CONSTRUCTION FACILITIES			
1.3.2.1.0	Engineering works for construction			
1.3.2.1.1	Providing the construction drawings for all the equipment covered under this scope		Yes	Approval by BHEL
1.3.2.1.2	Drawings for construction methods		Yes	In consultation with BHEL
1.3.2.1.3	As-built drawings – wherever deviations observed and executed and also based on the decisions taken at site- example – routing of small bore pipes		Yes	”
1.3.2.1.4	Shipping lists etc. for reference and planning the activities		Yes	”
1.3.2.1.5	Preparation of site construction schedules and other input requirements		Yes	In consultation with BHEL, As per requirement of BHEL targets
1.3.2.1.6	Review of performance (Form-14) and revision of site construction schedules in order to achieve the end dates and other commitments		Yes	
1.3.2.1.7	Weekly construction schedules based on SI No 1.3.2.1.5		Yes	
1.3.2.1.8	Daily construction / work plan based on SI No 1.3. 2.1.7		Yes	For daily monitoring meeting at site
1.3.2.1.9	Periodic visit of the senior official of the bidder to site to review the progress so that works are completed as per schedule. It is suggested this review by the senior official of the bidder should be done once in every two months.		Yes	
1.3.2.1.10	Preparation of preassembly bay		Yes	
1.3.2.1.11	Laying of racks for gantry crane if provided by BHEL or brought by the contractor / bidder himself			Not applicable

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1.3.3 OPEN SPACE:

- 1.3.3.1 Area for fabrication, batching plant, office, storage area etc. for construction purpose shall be provided as per availability free of cost. Land will be allocated with certain time frame and to the extent available/ considered necessary, and will be reviewed by BHEL depending upon the area availability. The contractor will be responsible for handing back all lands, as handed over to him by BHEL. Availability of land within plant boundary is very limited and the contractor has to plan and use the existing land considering the use of land by other Civil /mechanical/ electrical contractors and the storage of plant machineries and materials. The existing land shall be shared by all executing agencies.

1.3.4 CONSTRUCTION WATER:

- 1.3.4.1 Water (Raw water) required for construction purposes will be provided at one single location (in the sump nearer to Construction water intake system located near the River Bhedan, provided by BHEL) free of cost. The contractor has to provide the pump at the sump of intake system, construct sump, at their own cost, for storage of water in the area allocated to contractor (preferably in working area), of adequate size (BHEL approval, for the size, shall be taken prior to construction). The required pumps & accessories, pipes for drawing water from the given point and further distribution will be arranged by the contractor at their cost to go on without interruptions.
- 1.3.4.2 Contractor shall make his own arrangements of water suitable for construction purpose till commissioning of the construction water intake system by BHEL. The construction water shall be made available fully for the work, as soon as the construction water intake system is commissioned by BHEL.
- 1.3.4.3 All the tools and plants required for satisfactory completion of the work have to be arranged by the contractor.

1.3.5 ELECTRICITY:

- 1.3.5.1 Contractor shall make his own arrangements of Electricity at his own cost for construction purpose through DG sets till commissioning of the construction Power system by BHEL.
- 1.3.5.2 Construction power, as given by customer, shall be provided to the contractor at one single point by BHEL on chargeable basis. The contractor has to provide necessary meter for measuring the power consumption. The contractor shall make his own arrangement for further distribution with necessary isolator/LCB etc. The scheme for Construction Power distribution shall be approved by BHEL before installation.

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- 1.3.5.3 Necessary “Capacitor Banks” to improve the Power factor to a minimum of 0.9 shall be provided by the contractor at his cost. Penalty if any levied by customer on this account will be recovered from contractor’s bills.
- 1.3.5.4 Any duty, deposit involved in getting the Electricity shall be borne by the bidder. As regards contractor’s office shed also all such expenditure shall be borne by the contractor.
- 1.3.5.5 Provision for distribution of electrical power from the given single central common point to the required places with proper distribution boards, approved cables and cable laying including supply of all materials like cables, switch boards, pipes etc., observing the safety rules laid down by electrical authority of the State / BHEL / their customer with appropriate statutory requirements shall be the responsibility of the tenderer / contractor.
- 1.3.5.6 Contractor has to make their own arrangements for electricity requirement for labour colony at his own cost.
- 1.3.5.7 As there are bound to be interruptions in regular power supply, power cut/ load shedding in any construction sites, contractor should make his own arrangement for alternative source of power supply through deployment of adequate number of DG sets at their cost during the power breakdown / failure to get urgent and important work to go on without interruptions. No separate payment shall be made for this contingency.
- 1.3.6 MATERIAL SUPPLY:**
All materials required for the work are in the scope of the contractor.
- 1.3.7 CONSUMABLES**
The contractor shall provide all consumables required for carrying out the work covered under this scope of work.
- 1.3.8 LIGHTING FACILITY:**
Adequate lighting facilities such as flood lamps, hand lamps and area lighting shall be arranged by the contractor at the site of construction, and contractor’s material storage area etc. at his cost.
- 1.3.9 CONTRACTOR'S OBLIGATION ON COMPLETION:**
On completion of work, all the temporary buildings, structures, pipe lines, cables etc. shall be dismantled and leveled and debris shall be removed as per instructions of BHEL by the contractor at his cost. In the event of his failure to do so, the expenditure towards clearance of the same will be recovered from the contractor. The decision of BHEL Engineer in this regard is final.

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1.3.10 DEWATERING

Contractor shall ensure at all times that his work area & approach/ access roads are free from accumulation of water, so that the materials are safe and the erection/ progress schedule are not affected. No separate claim in this regard shall be admitted by BHEL. No separate payments for dewatering of subsoil, surface water or catchments water, if required, at any time during execution of the work including monsoon period shall be considered by BHEL.

1.3.11 BID DRAWINGS

Plot plan drawing enclosed is only tentative & for information purpose and this may get revised during execution.

VOLUME-IA PART – I CHAPTER – IV
T&PS and MMEs TO BE DEPLOYED BY
CONTRACTOR

- 1.4.1 All the tools and plants required for satisfactory completion of the work have to be arranged by the contractor.

VOLUME-IA PART – I CHAPTER - V
T&Ps AND MMEs TO BE DEPLOYED BY BHEL ON
SHARING BASIS

- 1.5.1 BHEL will not provide any T & Ps for this scope of work
- 1.5.2 All the tools and plants required for execution of the above work are in contractor's scope.
- 1.5.3 In case if the contractor fails to provide T&P and other equipment's, BHEL will arrange for the same and the cost will be recovered from the contractor's bill with BHEL overheads, as applicable from time to time which may vary during contract period.

VOLUME-IA PART – I CHAPTER-VI
TIME SCHEDULE

1.6.1 TIME SCHEDULE

1.6.1.1 The entire works of Engineering, Design, Construction of complete Ash dyke including drainage system, overflow lagoon, decantation well & associated civil works as detailed in the Tender Specification shall be completed within 30 (**Thirty**) **months** from the date of LOI.

1.6.1.2 During the total period of contract, the contractor has to carry out the activities in a phased manner as required by BHEL.

1.6.2 MOBILISATION

The Contractor has to subsequently augment his resources in such a manner to achieve the COMPLETION SCHEDULES as stipulated in the tender and as per site requirement.

1.6.3 In order to meet above schedule in general, and any other intermediate targets set, to meet customer / project schedule requirements, contractor shall arrange & augment all necessary resources from time to time on the instructions of BHEL

1.6.4 SUBMISSION OF L3 SCHEDULE

The contractor shall submit a detailed area/structure wise L2 and L3 schedule within 15 days in consultation with BHEL. The detailed L2 and L3 schedule shall be approved by BHEL and same shall be implemented. Bidder shall submit L2 and L3 schedule to meet the agreed schedule covering various mile stone activities and their split up details such as construction, procurement of materials, fabrication & erection activities. This schedule shall also clearly indicate the interface facilities/inputs

1.6.5 GUARANTEE PERIOD

Guarantee period of 12 months shall commence from the date of completion of the work in the scope certified by the BHEL Engineer.

VOLUME-IA PART – I CHAPTER-VII
TERMS OF PAYMENT

1.7.0 TERMS OF PAYMENT

1.7.1 Billing Break Up (BBU)

Bidder shall submit detailed Billing Break Up (BBU) up for the approval of BHEL/Customer.

1.7.2 Secured Advance

Not applicable

1.7.3 Advance for Mobilization

1.7.3.1 Interest bearing advance for Mobilization, limited to 5% of the contract value will be paid against submission of bank guarantee of at least 110% of the advance valid for the contract period, which will be recovered from the first running bill onwards. The advance for mobilization shall be paid as under.

1.7.3.2 2% of contract value after receipt of initial Security Deposit and additional security deposit as applicable if any, as per relevant clauses in the GCC/TCC along with unqualified acceptance of detailed Letter of Intent.

1.7.3.3 1.5% of contract value on completion of site Mobilization of Machinery & T&P as given below and on certification by site in-charge for compliance.

1. 3 nos. excavator equivalent to capacity of Pocklain CK90
2. 10 nos. dumper (Min 15 cum each)
3. 1 no. vibro earth compactor or Vibromax or equivalent
4. 2 Nos Chain dozer
5. 2 nos. Back hoe loader like JCB

1.7.3.4 1.5% of contract value on completion of site Mobilization of Machinery & T&P as given below in addition to the above, and on certification by site in-charge for compliance.

1. 2 nos. excavator equivalent to capacity of Pocklain CK90
2. 5 nos. dumper (Min 15 cum each)
3. 1 no. vibro earth compactor or Vibromax or equivalent
4. 2 Nos Chain dozer
5. 2 Nos. Back hoe loader like JCB

1.7.3.5 Payment and recovery of the advance will be as per clause 2.13 of GCC. Option of availing the interest bearing mobilization advance is left with the bidder.

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1.7.4 Interim Payment

1.7.4.1 Interim bills in the form of monthly running bills prepared by the contractor in soft as well as Hard copies shall be based on the quantities executed and measured.

1.7.4.2 Payment shall be as per mutually agreed Billing Break Up, and as detailed below.

- 85% progressive payment,
- 5% on Submission of quality documents,
- 5% on completion of punch points and signing of completion protocol,
- Balance 5% shall be retention amount.

1.7.4.3 Refund of the above 5% Retention Amount shall be made as follows:

- 50% of retention amount along with 'Final Bill'
- Balance 50% of retention amount shall be retained towards 'Performance Guarantee for Workmanship' and shall become refundable after expiry of Guarantee period, provided all the defects noticed during the guarantee period have been rectified to the satisfaction of BHEL Site Engineer/BHEL Construction Manager, and after deducting all expenses/other amounts due to BHEL under the contract/other contracts entered into by BHEL with them. This portion of the retention amount can be released on commencement of the Guarantee period, on submission of equivalent Bank Guarantee."

1.7.5 Royalty/ Seigniorage Charges

1.7.5.1 The quoted price shall be excluding Royalty for excavation which shall be reimbursed by BHEL based on documentary evidence submitted by the Contractor as per statutory provisions and this reimbursement shall be over and above the Contract Price. However, if there is a demand by statutory bodies at a later date from the Contractor for payment of royalty for Excavation, the same will be reimbursed to the Contractor at actual against submission of documentary evidence and any penalty levied by the Statutory bodies in this regard will be to Contractors account.

1.7.5.2 Royalty for any other materials is to the bidders account.

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1.7.6 Method of Measurement

Mode of measurement shall be as per relevant clauses of technical specification of this tender. In case the same is not available the relevant IS 1200 in conjunction of IS code 3385 shall be adopted. In case the same is also not available, the standard procedure adopted in CPWD shall be adopted. In case the same is also not available in CPWD, the measurement of the work done will be based on the mutual agreement between BHEL and contractor. In all the above cases, the interpretation of BHEL will be final and binding to the contractor.

NO CLAIM WHAT SO EVER MAY BE, WILL BE ENTERTAINED UNDER THIS CONTRACT, AFTER DULY SIGNING THE FINAL BILL ALONG WITH MEASUREMENT BOOKS AND ACCEPTED BY BHEL.

VOLUME-IA PART – I CHAPTER-VIII
TAXES AND DUTIES

1.8.1. Goods and service Tax (GST) & Cess

- 1.8.1.1. The successful bidder shall furnish proof of GST registration under GST Law in the State in which the Project is being executed, covering the supply and services under this contract. Registration should also bear endorsement for the premises from where the billing shall be done by the successful bidder on BHEL for this project/ work. The bidder to specify in their offer the category of registration under GST i.e. Registered dealer and composite dealer.
- 1.8.1.2. Contractor's price/rates shall be exclusive of GST & Compensation Cess (if applicable) (herein after termed as GST). GST along with Cess (as applicable) legally leviable & payable by the successful bidder as per GST Law, shall be paid by BHEL. Hence Bidder shall not include GST along with Cess (as applicable) in their quoted price
- 1.8.1.3. However, Seller / Contractor require to specify the applicable GST in the offer and require to ensure that GST mentioned, is as per the existing tariff on the date of the offer and all benefits as per existing laws have been considered.
- 1.8.1.4. Price quoted by the composite dealer shall be considered as inclusive of GST. In the event of any GST quoted separately by the composite dealer, the same shall be considered for evaluation and ordering purpose. In the event of any change in the status of vendor from composite to regular dealer after the submission of the bid but before the supply, no reimbursement of additional GST will be made. However, the vendor has to raise the invoice strictly, as per the law, by adjusting their ex-works price.
- 1.8.1.5. It is the responsibility of the seller/ Contractor to issue the Tax Invoice complying with GST Invoice Rules (Section 31 of GST Act & Rules referred there under) and comply to the timelines for issue of the same. Invoices shall be submitted on time to the concerned BHEL Engineer In Charge. Vendor to indicate the proper GSTIN registration / HSN /SAC code in their TAX Invoice on the basis of which BHEL will claim the input tax credit in its return. In case of raising any Debit / Credit Note, bidder shall issue the same containing all the details as referred to in Section 34 read with Rule 53.
- 1.8.1.6. E-invoicing under GST has been implemented by GOI for all the taxable persons having turnover more than the threshold limit in any preceding financial year from 2017-18 onwards. Therefore, for all the taxable persons falling under the purview of E-invoice, it is mandatory to mention a valid unique Invoice Reference No. (IRN) and QR code as generated from E-Invoicing portal of the Government for the purpose of issuing a valid Tax Invoice. Only an E-invoice issued in the manner prescribed under rule 48(4) of CGST Rules shall be treated as valid invoice for reimbursement of GST amount. If the successful Bidder is not falling under the

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preview of E-Invoicing, then he has to submit a declaration in that respect along with relevant financial statements. BHEL shall reimburse GST only if all the provisions of E-invoicing are complied with.

- 1.8.1.7. Bidder should mention the "Bill To" details as below in the Tax Invoice for the supply goods and supply of services respectively

Bill To:

-----,

GSTN of BHEL : -----

- 1.8.1.8. All payments against Tax Invoice to vendors/contractors shall be released only after:

- i. Vendor/ contractor declaring such invoice in the returns as per GST law prevailing at appropriate times.
- ii. The tax component charged by the vendor in the invoice should match with the details uploaded by vendor in the GST Returns.
- iii. Confirmation of payment of GST and filing of Quarterly / Monthly returns as applicable by vendor on GSTN portal.

- 1.8.1.9. In case, any GST credit is delayed/denied to BHEL or BHEL has to incur any liability (like interest / penalty) due to non/delayed receipt of goods and/or tax invoice or expiry to timeline prescribed in the relevant GST Act for availing such ITC, or any other reasons not attributable to BHEL, tax amount shall be recoverable from the vendor/contractor along with interest levied/ leviable on BHEL.

- 1.8.1.10. Bidder shall declare the Invoices raised on BHEL in the GST returns and file returns within the prescribed time as given in the GST Act. Bidder shall note that in case of delay in declaring such invoice in your return and GST credit availed by BHEL is denied or reversed subsequently as per GST Law, GST amount paid by BHEL towards such ITC reversal as per GST law shall be recoverable from the bidder along with interest levied / leviable on BHEL.

- 1.8.1.11. E-way bills / Transit passes / Road Permits: Successful Bidder has make their own arrangement for E-waybill for any transfer of goods for the execution of the contract. The Bidder has to make their own arrangement at their cost for completing the formalities, if required, with Issuing Authorities, for bringing materials, plants & machinery at site for execution of the works under this contract, and BHEL will not issue any Road Permit/ Way Bill for this purpose.

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- 1.8.1.12. BHEL shall not reimburse any amount paid towards any interest / penalty etc., incurred by contractor. Any additional claim at a later date due to issues such as wrong rates / wrong classification by contractor shall not be paid by BHEL.
- 1.8.1.13. Wherein GST liability arises on BHEL under reverse charge, any interest levied/leviable due to any reasons not attributable to BHEL shall be recovered from the vendor/contractor.
- 1.8.1.14. The applicable TDS under GST/ Goods and Services (Compensation to States) Act will be deducted from the payments.

1.8.2. **All taxes and duty other than GST & Cess and BOCW Cess**

All taxes/ duties or other charges, except those specifically mentioned in the Contract (other than GST and BOCW (if applicable)) legally levied on the CONTRACTOR in connection with the contract work, shall be borne and paid by the CONTRACTOR and the same shall be deemed to be included in the offer Price.

The contractor shall pay all (except the specific exclusion viz GST & Cess and BOCW Cess both of which are dealt with separately) taxes, fees, license charges, deposits, duties, tools, royalty, commissions, Stamp Duties, or other charges / levies, which may be levied on the input goods & services consumed and output goods & services delivered in course of his operations in executing the contract and the same shall not be reimbursed by BHEL. In case BHEL is forced to pay any of such taxes, BHEL shall have the right to recover the same from his bills or otherwise as deemed fit.

1.8.3. **Statutory Variations**

- 1.8.3.1. In general, Statutory variation for GST is payable to the Seller during currency of the contract between Buyer and Seller. Further, for period beyond the currency of the contract, BHEL will reimburse the actual applicable tax even if the same is higher than the amount applicable within the contractual period in case BHEL is able to take the input tax credit. However, the decision of BHEL in this regard will be final and binding on the seller/contractor otherwise vendor/contractor has to bear the differential upward increase in tax and ex- works price is to be adjusted accordingly
- 1.8.3.2. No other variations (Except GST) including Custom Duty, exchange rate, minimum wages, prices of controlled commodities, any other input etc. shall be payable by the purchaser unless specifically agreed upon.

1.8.4. **New Taxes/Levies –**

In case Government imposes any new levy / tax after submission of bid during the tenure of the contract, BHEL shall reimburse the same at actual on submission of documentary proof of payment subject to the satisfaction of BHEL that such new levy / tax is applicable to this contract. The decision of BHEL in this regard

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will be final and binding on the seller/contractor.

Any benefit arising due to new Taxes or levies must be passed on to BHEL.

1.8.5. **Direct Tax**

1.8.5.1. Seller is required to update himself on its own and comply with provisions of Indian Income Tax Act as notified from time to time. Purchaser shall not be liable towards liability of income tax accruing to the Seller of whatever nature including variations thereof, arising out of this Order/ Contract, as well as tax liability of the Seller/ Contractor and his personnel

1.8.5.2. Deductions of Tax at source at the prevailing rates shall be effected by the Purchaser before release of payment, as a statutory obligation, if applicable. TDS certificate will be issued by the Purchaser as per statutory provisions. The Seller/Contractor has to mention their Permanent Account Number (PAN) and GSTIN in all invoices.

1.8.6. **TCS (Tax collected at Source) under Income Tax Act.**

If the vendor is mandated to collect the TCS from BHEL (for sale of Goods) as per the newly inserted sub section(1H) under Section 206C of the Income Tax Act, then the below conditions need to be adhered to:

1.8.6.1. Vendors should mention their TAN and PAN number in the Invoice submitted to BHEL.

1.8.6.2. Where the tender conditions do not specify any PQC on financial parameters, then the reimbursement of IT TCS to the Vendor can be made only on submission of below undertaking on yearly basis.

“I/We_____ have made a total sale, gross receipts or turnover from our business carried exceeds ten crore rupees during the financial year_____ (should be immediate preceding financial year)”

And on submission of TCS paid challan and TCS certificate for the TCS payments made in the last quarter.

1.8.6.3. Amount of TCS and Assessable value on which TCS has been calculated should be specified clearly in the invoice

1.8.6.4. PAN No of BHEL is AAACB4146P, same need to be considered by vendor while filing their TCS returns.

1.8.6.5. Vendor shall issue a TCS Certificate for the amount collected at source within the due dates as per the IT Act.

1.8.6.6. In event of failure to comply with the provisions of the Act or proper certificate was not issued or if tax collected, not remitted to the Government or for any other reason and thereby causing loss to BHEL, the same shall be recoverable from the Vendor towards non- compliance of statutory provisions from the money's due to them with applicable interest.

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- 1.8.6.7. Where the purchases are for one time based on absolute requirements, then the Vendor shall be eligible for reimbursement only upon submission of TCS certificate.
- 1.8.7. **BOCW Act & BOCW Welfare Cess Act**
- 1.8.7.1. The Contractor should Register their Establishment under BOCW Act 1996 read with rules 1998 by submitting Form I (Application for Registration of Establishment) and Form IV (Notice Of Commencement / Completion of Building other Construction Work) to the respective Labour Authorities i.e.,
- a. Assistant Labour Commissioner (Central) in respect of the project premises which is under the purview of Central Govt.–NTPC, NTPL etc.
 - b. Appropriate State authorities in respect of the project premises which is under the purview of State Govt.
- 1.8.7.2. The Contractor should comply with the provisions of BOCW Welfare Cess Act 1996 in respect of the work awarded to them by BHEL.
- 1.8.7.3. The contractor should ensure compliance regarding Registration of Building Workers as Beneficiaries, Hours of work, welfare measures and other conditions of service with particular reference to Safety and Health measures like Safety Officers, safety committee, issue of Personal protective equipments, canteen, rest room, drinking water, Toilets, ambulance, first aid centre etc.
- 1.8.7.4. The contractor irrespective of their nature of work and manpower (Civil, Mechanical, Electrical works etc) should register their establishment under BOCW Act 1996 and comply with BOCW Welfare Cess Act 1996.
- 1.8.7.5. Contractor shall make remittance of the BOCW cess as per the Act **only in consultation with BHEL** as per the rates in force (presently 1%). BHEL shall reimburse the same upon production of documentary evidence. Hence Bidder shall not include BOCW Cess (as applicable) in their quoted price. However, BHEL shall not reimburse the Fee paid towards the registration of establishment, fees paid towards registration of Beneficiaries and Contribution of Beneficiaries remitted.
- 1.8.7.6. Non-compliance to Provisions of the BOCW Act & BOCW Welfare Cess Act is not acceptable. In case of any non-compliance, BHEL reserves the right to withhold any sum as it deems fit. Only upon total compliance to the BOCW Act and also discharge of total payment of Cess under the BOCW Cess Act by the Contractor, BHEL shall consider refund of the amounts.

VOLUME-IA PART – I CHAPTER-IX
ACCOUNTING OF MATERIAL ISSUE

Void

VOLUME-IA PART –I CHAPTER –X
GENERAL

The scope of the work will comprise of but not limited to the following:

(All the works mentioned hereunder shall be carried out within the accepted rate unless otherwise specified.)

- 2.10.1. Contractors are requested to furnish the following documents at PSSR-HQ, Chennai immediately after release of Letter of Intent (LOI).
- i. Security Deposit and additional Security Deposit.
 - ii. Unqualified Acceptance for Detailed LOI / Work Order.
 - iii. Rs.100/- Stamp Paper for preparation of Contract Agreement.
- 2.10.2. Contractors are requested to furnish the proof of documents for the following at PSSR- Site
- i. Provident Fund Registration Number.
 - ii. Labour License Number.
 - iii. Workmen Insurance Policy Number.
- 2.10.3. In addition to the clause 2.8 of General Conditions of Contract (Volume-IC of Book-II) the contractor shall comply with the following.
- 2.10.3.1. **PROVIDENT FUND**
- 2.10.3.1.1. The contractor is required to extent the benefit of Provident Fund to the labour employed by you in connection with this contract as per the Employees Provident Fund and Miscellaneous Provisions Act 1952. For due implementation of the same, you are hereby required to get yourself registered with the Provident Fund authorities for the purpose of reconciliation of PF dues and furnish to us the code number allotted to you by the Provident Fund authorities within one month from the date of issue of this letter of intent. In case you are exempted from such remittance an attested copy of authority for such exemption is to be furnished. Please note that in the event of your failure to comply with the provisions of said Act, if recoveries therefore are enforced from payments due to us by the customer or paid to statutory authorities by us, such amount will be recovered from payments due to you.
- 2.10.3.1.2. The final bill amount would be released only on production of clearance certificate from PF / ESI and labour authorities as applicable.
- 2.10.3.2. **OTHER STATUTORY REQUIREMENTS**
- 2.10.3.2.1. The Contractor shall submit a copy of Labour License obtained from the Licensing Officer (Form VI) u/r25 read with u/s 12 of Contract Labour (R&A) Act 1970 & rules and Valid WC Insurance copy or ESI Code (if applicable) and PF code no. along with the first running bill.
- 2.10.3.2.2. The contractor shall submit monthly running bills along with the copies of monthly wages (of the preceding month) u/r78(1)(a)(1) of Contract Labour Rules, copies of monthly return of PF contribution with remittance Challans under Employees

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Provident Fund Act 1952 and copy of renewed WC Insurance policy or copies of monthly return of ESI contribution with Challans under ESI Act 1948 (if applicable) in respect of the workmen engaged by them.

- 2.10.3.2.3. The Contractor should ensure compliance of Sec 21 of Contract Labour (R&A) Act 1970 regarding responsibility for payment of Wages. In case of “Non-compliance of Sec 21 or non-payment of wages” to the workmen before the expiry of wage period by the contractor, BHEL will reserve its right to pay the workmen under the orders of Appropriate authority at the risk and cost of the Contractor.
- 2.10.3.2.4. The Contractor shall submit copies of Final Settlement statement of disbursement of retrenchment benefits on retrenchment of each workman under ID Act 1948, copies of Form 6-A (Annual Return of PF Contribution) along with copies of PF Contribution Card of each member under PF Act and copies of monthly return on ESI Contribution – Form 6 under ESI Act 1948 (if applicable) to BHEL along with the Final Bill.
- 2.10.3.2.5. In case of any dispute pending before the appropriate authority under ID Act 1948, WC Act 1923 or ESI Act 1948 and PF Act 1952, BHEL reserves the right to hold such amounts from the final bills of the Contractor which will be released on submission of proof of settlement of issues from the appropriate authority under the act.
- 2.10.3.2.6. In case of any dispute prolonged / pending before the authority for the reasons not attributable to the contractor, BHEL reserves the right to release the final bill of the contractor on submission of Indemnity bond by the contractor indemnifying BHEL against any claims that may arise at a later date without prejudice to the rights of BHEL.

2.10.3.3. **DEPLOYMENT OF SKILLED / SEMI-SKILLED TRADESMEN**

The following clause is applicable in case the contract value / contract price is Rs. Five crores and above.

The contractor shall, at all stages of work deploy skilled / semi-skilled tradesmen who are qualified and possess certificate in particular trade from CPWD Training Institute / Industrial Training Institute / National Institute of Construction Management and Research (NICMAR), National Academy of Construction, CIDC or any similar reputed and recognized Institute managed / certified by State / Central Government. The number of such qualified tradesmen shall not be less than 20% of total skilled / semi-skilled workers required in each trade at any stage of work. The contractor shall submit number of man days required in respect of each trade, its scheduling and the list of qualified tradesmen along with requisite certificate from recognized Institute to Engineer-in-Charge for approval. Notwithstanding such approval, if the tradesmen are found to have inadequate skill to execute the work of respective trade, the contractor shall substitute such tradesmen within two days of written notice from

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Engineer-in-Charge. Failure on the part of contractor to obtain approval of Engineer-in-Charge or failure to deploy qualified tradesmen will attract a compensation to be paid by contractor at the rate of Rs. 100 per such tradesman per day. Decision of Engineer-in-Charge as to whether particular tradesman possesses requisite skill and amount of compensation in case of default shall be final and binding.

2.10.3.4. **RECOVERY OF COMPENSATION PAID TO VICTIMS BY BHEL IN CASES OF DEATH/ PERMANENT INCAPACITATION OF PERSON DUE TO AN ACCIDENT DURING THE WORKS**

BHEL shall recover the amount of compensation paid to victim(s) by BHEL towards loss of life / permanent disability due to an accident which is attributable to the negligence of contractor, agency or firm or any of its employees as detailed below.

- a) Victim: Any person who suffers permanent disablement or dies in an accident as defined below.
- b) Accident: Any death or permanent disability resulting solely and directly from any unintended and unforeseen injurious occurrence caused during the manufacturing / operation and works incidental thereto at BHEL factories/ offices and precincts thereof, project execution, erection and commissioning, services, repairs and maintenance, trouble shooting, serving, overhaul, renovation and retrofitting, trial operation, performance guarantee testing undertaken by the company or during any works /during working at BHEL Units/ Offices/ townships and premises/ Project Sites.
- c) Compensation in respect of each of the victims:
In the event of death or permanent disability resulting from Loss of both limbs: Rs. 10,00,000/- (Rs. Ten Lakh)
In the event of other permanent disability: Rs. 7,00,000/- (Rs. Seven Lakh)

Permanent Disablement: A disablement that is classified as a permanent total disablement under the proviso to Section 2 (l) of the Employee's Compensation Act, 1923.

2.10.4. **GENERAL**

2.10.4.1. **E way Bills to be arranged by contractor whenever required.**

2.10.4.2. All works shall be carried out in proper workmen like manner. Items of works covered by the following specification shall be carried out as per the best practices and according to the direction of the Engineer In-charge / BHEL, Site Engineer and to his satisfaction. Unless otherwise specified in this section or in the description of item, the cost of stage of works mentioned here under shall be deemed to have been included in the rates of items provided in the schedule.

2.10.4.3. Scope of work covered under this specification requires quality workmanship, engineering and construction management. The contractor shall ensure timely

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completion of work. The contractor shall have adequate tools, measuring instruments, etc. in his possession. He shall also have adequate trained, qualified and experienced engineers, supervisory staff and skilled personnel. The manpower deployment identified by contractor shall match with above scope of works.

- 2.10.4.4. It is not the intent to specify herein all details of material. Any item related to this work not covered by this but necessary to complete the system will be deemed to have been included in the scope of the work.
- 2.10.4.5. Site testing wherever required shall be carried out for all items / materials installed by the contractor to ensure proper installation and functioning in accordance with drawings, specifications and manufacturer's recommendations.
- 2.10.4.6. The work shall be executed under the usual conditions without affecting the plant construction and in conjunction with other operations and contracting agencies at site. The contractor and his personnel shall co-operate with the personnel of other agencies, co-ordinate his work with others and proceed in a manner that shall not delay or hinder the progress of work as a whole.
- 2.10.4.7. The Contractor may have to execute work in such a place and condition where other agencies also will be under such circumstances. The contractor shall co-operate with other contractors and agencies so that various activities can be carried out simultaneously in order to achieve an early completion.
- 2.10.4.8. All the work shall be carried out as per instructions of BHEL engineer. BHEL engineer's decision regarding the correctness of the work and method of working shall be final and binding on the contractor.
- 2.10.4.9. The contractor will be responsible for the safe custody and proper accounting of all materials in connection with the work.
- 2.10.4.10. The contractor must obtain the signature and permission of the security personnel of the customer for bringing any of their materials inside the site premises. Without the Entry Gate Pass these materials will not be allowed to be taken outside.
- 2.10.4.11. Contractor shall retain all T&Ps, Material handling equipments etc at site as per advice of BHEL engineer and same shall be taken out from site only after getting the clearances from Engineer In charge.
- 2.10.4.12. The contractor at his cost shall arrange necessary security measures for adequate protection of his machinery, equipment, tools, materials etc. BHEL shall not be responsible for any loss or damage to the contractor's construction equipment and materials. The contractor may consult the Engineer-in-Charge on the

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arrangements made for general site security for protection of his machinery equipment tools etc.

- 2.10.4.13. Any wrong erection shall be removed and re-erected promptly to comply with the design requirements to the satisfaction of Site Engineer.
- 2.10.4.14. Contractor has to work in close co-ordination with other erection agency at site. BHEL engineer will co-ordinate area clearance. In a project of such magnitude, it is possible that the area clearance may be less / more at a particular given time. Activities and erection program have to be planned in such a way that the milestones are achieved as per schedule/ plans. Contractor shall arrange & augment the resources accordingly.
- 2.10.4.15. Contractor shall remove all scrap materials periodically generated from his working area in and around power station and collect the same at one place earmarked for the same. Failure to collect the scrap is likely to lead to accidents and as such BHEL reserves the right to collect and remove the scrap at contractor's risk and cost if there is any failure on the part of contractor in this respect. All the package materials, including special transporting frames, etc. shall be returned to the BHEL stores by the contractor.
- 2.10.4.16. The contractor is strictly prohibited from using BHEL's regular components like angles, channels, beams, plates, pipe / tubes, and handrails etc for any temporary supporting or scaffolding works. Contractor shall arrange himself all such materials. In case of such misuse of BHEL materials, a sum as determined by BHEL engineer will be recovered from the contractor's bill. The decision of BHEL engineer is final and binding on the contractor.
- 2.10.4.17. No member of the already erected structure / platform, pipes, grills, platform, other component and auxiliaries should be cut without specific approval of BHEL engineer.
- 2.10.4.18. Contractors shall ensure that all their Staff / Employees are exposed to periodical training programme conducted by qualified agencies/ personnel on ISO 9001 – 2015 Standards.
- 2.10.4.19. Crane operators deployed by the contractor shall be tested by BHEL before he is allowed to operate the cranes.
- 2.10.4.20. On completion of work, all the temporary buildings, structures, pipe lines, cable etc. shall be dismantled and leveled and debris shall be removed as per instruction of BHEL by the contractor at his cost. In the event of his failure to do so, the expenditure towards clearance of the same will be recovered from the contractor. The decision of BHEL Engineer in this regard is final.
- 2.10.4.21. It is the responsibility of the contractor to do the alignment, checking, etc. if necessary, repeatedly to satisfy BHEL Engineer with all the necessary tools and

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tackles, manpower etc. without any extra cost. Also the contractor should ensure that the alignment is not disturbed afterwards.

2.10.4.22.If any item or equipment not covered but requires being erected, same shall be carried out by the contractor. Equivalent or proportional unit rate shall be considered wherever possible from the BOQ. The rates quoted by the contractor shall be uniform as far as possible for similar items appearing in rate schedule / price bid.

2.10.4.23.The contractor shall ensure that his premises are always kept clean and tidy to the extent possible. Any untidiness noted on the part of the contractor shall be brought to the attention of the contractor's site representative who shall take immediate action to clean the surroundings to the satisfaction of the Engineer-in-Charge.

2.10.4.24.SITE INSPECTION

- i. BHEL or his authorized agents may inspect various stages of work during the currency of the contract awarded to him. The contractor shall make necessary arrangements for such inspection and carry out the rectification pointed out by the owner / employer without any extra cost to the owner / employer. No cost whatsoever such duplication of inspection of work be entertained.
- ii. BHEL will have full power and authority to inspect the works at any time, either on the site or at the contractor's premises. The contractor shall arrange every facility and assistance to carry out such inspection. On no account will the contractor be allowed to proceed with work of any type unless such work has been inspected and entries are made in the site inspection register by BHEL.
- iii. Wherever the performance of work by the contractor is not satisfactory in respect of workmanship, deployment of sufficient labour or equipment, delay in execution of work or any other matter, BHEL shall have the right to engage labour at normal ruling rates and get the work executed through other agency and debit the cost to the contractor and the contractor shall have no right to claim compensation thereof. In such a case, BHEL shall have the right to utilize the materials and tools brought by the contractors for the same work.

2.10.4.25.DOCUMENTATION

- i. Record of Quantity of FREE (if any) /Chargeable items issued by BHEL must be maintained during contract execution. Also reconciliation statement to be prepared at regular intervals.
- ii. The under mentioned Records/ Log-books/ Registers applicable to be maintained,
 - a. Hindrance Register

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- b. Site Order Book.
- c. Test Check of measurements.
- d. Cement Supply and Consumption Daily Register
- e. Records of Test reports of Field tests.
- f. Records of manufacture's test certificates.
- g. Records of disposal of scraps generated during and after the work completion.
- h. List of MMEs deployed by the bidder.
- iii. As built drawings:
After successful completion of installation work, drawings / documents shall be updated in line with the actual work carried out and as built drawings / documents shall be submitted by the contractor.
- iv. Other documents as specified in PROGRESS OF WORK (VOLUME-IA PART- II CHAPTER-XI)

VOLUME-IA PART – I CHAPTER-XI
PROGRESS OF WORK

The scope of the work will comprise of following but not limited to the following:

PROGRESS AND MONITORING OF WORK

- 2.11.1. Refer forms F -14 to F-18 of volume I D. Plan and review will be done as per the formats.
- 2.11.2. Contractor is required to draw mutually agreed monthly construction programs in consultation with BHEL well in advance monthly as per the Form-14. Contractor shall ensure achievement of agreed program and shall also timely arrange additional resources considered necessary at no extra cost to BHEL. Progress review meetings will be held at site during which actual progress during the week vis-a-vis scheduled program shall be discussed for actions to be taken for achieving targets. Contractor shall also present the program for subsequent week. The contractor shall constantly update / revise his work program to meet the overall requirement. All quality problems shall also be discussed during above review meetings. Necessary preventive and corrective action shall be discussed and decided upon in such review meetings and shall be implemented by the contractor in time bound manner so as to eliminate the cause of nonconformities.
- 2.11.3. The contractor shall submit daily, weekly and monthly progress reports, manpower reports, materials reports, consumables report, T&Ps availability report and other reports as per Performa considered necessary by the Site Engineer as per the BHEL formats.
- 2.11.4. The contractor shall submit weekly / fortnightly / monthly statement report regarding consumption of all consumables for cost analysis purposes.
- 2.11.5. The monthly report ending on 24th of every month shall be submitted as a booklet and shall contain the following details :-
 - a) Colour Progress photographs to accompany the report should be submitted.
 - b) Construction progress in terms of quantity, CUM,etc., completed as relevant to the respective work areas against planned.
 - c) Site Organization chart of engineers & supervisors as on 24th of the month with further mobilization plan
 - d) Category- wise man hours engaged during the previous month under the categories like fitters, electricians, welders, riggers, khalasis, grinder-men, gas-cutters, crane operators, store keepers, lab technicians, helpers, security etc. Data will be spilt up under the work area .

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- e) Consumables report giving consumption of all types of gases and electrodes during the previous month.
 - f) Availability report of cranes/T&Ps
 - g) Safety implementation report in the format
 - h) Pending material and any other inputs required from BHEL for activities planned during the subsequent month.
- 2.11.6. The manpower reports shall clearly indicate the manpower deployed, category wise specifying also the activities in which they are engaged.
- 2.11.7. During the course of construction, if the progress is found unsatisfactory, or if the target dates fixed from time to time for every milestone are to be advanced, or in the opinion of BHEL, if it is found that the skilled workmen like fitters, operators, technicians etc employed are not sufficient BHEL will induct required additional workmen to improve the progress and recover all charges incurred on this account including all expenses together with BHEL overheads from contractor's bills.
- 2.11.8. It is the responsibility of the contractor to provide all relevant information on a regular basis regarding construction progress, labour availability, equipment deployment, testing, etc.
- 2.11.9. The progress reports shall indicate the progress achieved against plan, indicating reasons for delays, if any. The report shall also give remedial actions which the contractor intends to make good the slippage or lost time so that further works can proceed as per the original plan the slippages do not accumulate and affect the overall programme.
- 2.11.10. The contractor to reflect actual progress achieved during the month and will be submitted to BHEL, so that slippages can be observed and necessary action taken in order to ensure that the situation does not get out of control will update the construction schedule forming part of this contract each month.

VOLUME-IA PART – I CHAPTER-XII
MATERIAL HANDLING

- 2.12.1. Open land shall be provided by BHEL on free of cost basis. Contractor shall maintain one centralized fenced store cum bar bending yard. Hard surfacing of this yard and all round drain shall be carried out by the contractor at his own cost within the quoted rate. Batching plant area, shall be provided and contractor shall make use of the area for installation and operation of the Batching Plant at his own cost. The bidder shall make complete arrangement of necessary security personnel, to safeguard all such materials in his custody.
- 2.12.2. The system for receipt, storage & issue of materials shall be available with vendors for easy traceability.
- 2.12.3. Periodic audit of system of purchasing, storing and issue, etc. will have to be carried out by the vendors. BHEL will also audit the same.
- 2.12.4. The contractor shall construct waterproof cement store for storing and stacking of cement, CGI/ asbestos roofing (slope) with brick masonry wall, PCC flooring. Materials required for the same shall be provided by contractor at his own cost. Cement has to be kept over wooden raised platform. Stacking of cement is to be done as per IS codes with proper illumination and locking arrangements.
- 2.12.5. The contractor shall in no case be entitled for any compensation or damages on account of any delay in supply or non-supply thereof for all or any such material.
- 2.12.6. Materials shall not under any circumstances taken out of the project site unless otherwise permitted by BHEL.

VOLUME-IA PART – II

In the next 810 pages as below:

CONTENTS

SI No	Description	Chapter	No. of Pages
Vol IA	Part-II: Technical specifications		
1	Corrections/ Revisions pertaining to Chapter-2, Part-II, Vol IA, Technical Specification for Ash Dyke	Chapter-1	6
2	Technical Specification for Ash Dyke (Starter Dyke) And Associated Works	Chapter-2	804