



Maharatna Company

ISO 9001, ISO 14001,
OHSAS 18001 & SA 8000
certified company
SubContract Deptt.

Bharat Heavy Electricals Limited

(A Govt. Of India Undertaking)

Power Sector – Northern Region,

Plot No. 25 , Sector - 16A ,

Distt. Gautam Budh Nagar, NOIDA – 201301(INDIA)

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CORRIGENDUM – 02 dated 09/02/2023

Sub: Tender for "PART-I:- THE WORK FOR RECEIPT OF MATERIALS, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION AND HANDING OVER OF PLANT AND OTHER MATERIALS OF TG, ELECTRICAL, C&I, ASSOCIATED AUXILIARIES, CEMENT, STRUCTURAL STEEL & REINFORCEMENT STEEL AND PROVIDING SERVICES FOR - MATERIALS MANAGEMENT, CONSTRUCTION POWER MANAGEMENT, WATER SPRINKLING AND MOBILE TOILETS AND PART-II: - PROVIDING SERVICES OF PIT-LESS WEIGH-BRIDGE OF 100 MT CAPACITY OF SIZE 20 M X 3.5 M ON BUILD, OWN AND OPERATE BASIS at 2X700 MWe PHWR GHAVP NPCIL, GORAKHPUR, HARYANA".

TENDER NO. BHEL/NR/SCT/GHAVP/MM/1286

1. With reference to following clarification of bidder's queries, revised TCC incorporating the corrections is attached herewith, superseding the earlier version issued with the tender:

| Sl No | Reference Clause of Tender Document | Existing Provision | Bidders Query | BHEL's clarification |
|-------|---|---|---|--|
| 01 | Clause No. 2.53 of TCC At Page 57 AND Clause No D.1 of Rate Schedule Break up | Water Sprinkling services to be done for a period of 45 months from the date of actual date of start of work Services to be provided for 40 months | Please confirm the period of water sprinkling services | Typo error. Actual: - Water Sprinkling Services to be provided for 40 months. |
| 02 | Clause No. 2.53 of TCC At Page 57 | Cost of water shall be revised based on latest official circulars and shall be reimbursed as per actuals on submission of proper documents. | If cost of ware for providing water sprinkling service is being reimbursed by BHEL then should it be a part of cost in % age of the total contract price? As as per the interpretation in clause 7.9 of TCC 6.03% (total % age) is payable towards sprinkling services for 40 months. Similarly as BHEL Support | Typo error. Actual:- % Allocation of Lumpsum price for Water Sprinkling Services is 6.03%. |

| | | | | |
|----|---|--|---|--|
| | | | Service Charges (BSS) is being reimbursed by BHEL and as such no % age of contract price is allocated. Please clarify. | |
| 03 | 2.54 of TCC AND E.1 of Rate Schedule Break Up | Mobile Toilets Services to be provided for 51 months Installation and Maintenance (01 no Unskilled manpower) for 43 months | Please confirm the exact period as the contract period is 45 months. | Typo error. Actual: - Mobile Toilet Services to be provided for 43 months. |
| 04 | 2.55 of TCC AND F.1 of Rate Schedule Break Up | Weighbridge Installation period 2 months, operation period 51 months Weighbridge operation period is 43 months. | Please confirm the exact period as the contract period is 45 months. | Typo error. Actual: - Weighbridge Services is for 45 Months that includes 2 Months installation period and 43 Months operation period. |
| 05 | 7.7 of TCC AND PART I A of Rate Schedule Break Up | 40.81% of Lumpsum Price Quoted by Bidder will be paid per ton basis for Handling all items As per Part I of Rate Schedule break up 44.40% is allocated towards handling charges | Please confirm the actual % age of allocation towards handling charges | No Deviation. 40.81% of Lumpsum Price Quoted by Bidder will be paid per ton basis for Handling all items 3.59% of Lumpsum Price Quoted by Bidder will be paid per ton basis for Re-Shifting, Re-Stacking & Dispatch all items. |
| 06 | 7.7 of TCC AND PART I A of Rate Schedule Break Up | 3.59% allocated towards re-shifting 3.44% allocated towards re-shifting | Please confirm the actual % age of allocation towards re-shifting | No Deviation. 3.59% of Lumpsum Price Quoted by Bidder will be paid per ton basis for Re-Shifting, Re-Stacking & Dispatch all items. |
| 07 | PART I C of Rate Schedule Break Up | Calculation of Manpower Charges M x N is not correct | Please mention the correct per day basic wages so as to identify the proper wage circular in due course of revision | Typo error. Minimum wages corrected in revised TCC. |

2. Further clarification to bidder's query:

| Sl No | Bidders Query | BHEL's clarification |
|--------------|--|---|
| 01 | Kindly clarify whether, 120 Ton Capacity PIT Type DIGITAL WEIGH BRIDGE WITH LATEST FEATURES OF SIZE, (3mtr x 18mtr) platform for tyre space and 0.02% accuracy Level acceptable. We shall quote as per your clarification and confirmation. | 120 Ton Capacity PIT Type DIGITAL WEIGH BRIDGE with latest features of size (3mtr x 18mtr) platform for tyre space and 0.02% accuracy Level may be allowed. |

3. All other terms and conditions against this Tender shall remain unchanged.

- 4.** This corrigendum is to be submitted duly signed and stamped along with the Techno-commercial bid (Part-I).

TECHINICAL CONDITIONS OF CONTRACT

Of

PART-I:-

THE WORK FOR RECEIPT OF MATERIALS, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION AND HANDING OVER OF PLANT AND OTHER MATERIALS OF TG, ELECTRICAL, C&I, ASSOCIATED AUXILIARIES, CEMENT, STRUCTURAL STEEL & REINFORCEMENT STEEL AND PROVIDING SERVICES FOR - MATERIALS MANAGEMENT, CONSTRUCTION POWER MANAGEMENT, WATER SPRINKLING AND MOBILE TOILETS

PART-II:-

PROVIDING SERVICES OF PIT-LESS WEIGH-BRIDGE OF 100 MT CAPACITY OF SIZE 20 M X 3.5 M ON BUILD, OWN AND OPERATE BASIS

FOR

U#1 & 2 AT 2X700 MWe PHWR GHAVP NPCIL, GORAKHPUR, HARYANA.



Bharat Heavy Electricals Limited
(A Govt. Of India Undertaking)
Power Sector – Northren Region,
Plot No. 25 , Sector - 16A,
Distt. Gautam Buddh Nagar,
NOIDA – 201 301 (INDIA)

TECHNICAL CONDITIONS OF CONTRACT (TCC)

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TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - I: PROJECT INFORMATION

NPCIL (Nuclear Power Corporation of India Limited) has awarded the work for Design & Engineering, manufacture, Procurement, Erection/Construction, commissioning & testing, trial operation and handing over of Turbine Island for 02 nos. of 700MWe PHWR (Pressurised heavy water reactor) based nuclear power plants to be set up at Gorakhpur, Haryana.

Project Information is as follows:

| S.N. | Title | Description |
|------|--------------------------|---|
| 1 | Owner | NUCLEAR POWER CORPORATION OF INDIA LTD. (NPCIL) |
| 2 | Project Title | 2X700MWe PHWR- GORAKHPUR HARYANA ANU VIDYUT PARIYOJNA UNIT# 1&2 – TG ISLAND PACKAGE |
| 3 | Project Site Location | Site is situated on the left bank of the Fatehabad Branch of Bhakra canal, in Fatehabad district of Haryana state. The nearest village to the site is Gorakhpur. |
| 4 | Site Access | Chandigarh, the State capital is about 250 km away from the site by road. National Highway No. 10 passes through Badopal village at a distance of 6 km from site. From Delhi the road to site via NH-10 passes through Rohtak, Hansi and Hisar. |
| 5 | Nearest Railway Station | The nearest railway station Uklana Mandi (Northern Railway) is about 23km away from the project site. |
| 6 | Nearest Airport | The nearest major airport is Delhi at about 208 km by road |
| 7 | Nearest Highway | NH10 |
| 8 | Ambient Air Temperatures | a) Maximum dry bulb temperature : +48.4 deg C, b) Minimum dry bulb temperature: -0.1 deg C, c) Design temperature for electrical equipment / devices: +50 deg |
| 9 | Relative Humidity | a) Maximum during monsoon : 100% b) Minimum (design) : 5% |
| 10 | Air Quality | Air quality is clean and free from chemical pollutants. |
| 11 | Rainfall | a) Annual Average : 512 mm b) Highest annual rainfall : 787 mm in 1997 c) Lowest annual rainfall : 171.1mm in 2000 d) Period : Year 1969-2007 |
| 12 | Wind Pressures | a) Height above mean ground level - @10M Design Wind Speed m/sec - 62.81 b) Height above mean ground level - @100M |

TECHNICAL CONDITIONS OF CONTRACT (TCC)
CHAPTER - I: PROJECT INFORMATION

| | | |
|----|----------------|--|
| | | Design Wind Speed m/sec – 76.14 The assessment of wind loads based on the above basic wind speed shall be done as specified in IS: 875. |
| 13 | Wind Direction | Predominantly W,SW,NW & SE with respect to true North |
| 14 | Seismology | Zone III as per IS 1893-2002 part I |

Note: - The bidder is advised to visit and examine the site and its surroundings and obtain for himself on his own responsibility all information that may be necessary for preparing the bid and entering into the CONTRACT. All costs for and associated with site visits shall be borne by the bidder.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - II: SCOPE OF WORK

2.0 SCOPE OF WORK

PART-I:-

- 2.1** BHEL has been awarded the work of Design, Engineering, Supply, Erection, Testing & Commissioning of 2X700 MWe PHWR GHAVP NPCIL STG PACKAGE at Gorakhpur, Fatehabad, Haryana by NUCLEAR POWER CORPORATION OF INDIA LIMITED (**NPCIL**).
- 2.2** THE SCOPE OF WORK OF THIS TENDER SPECIFICATION OF MATERIAL HANDLING AND MATERIALS MANAGEMENT SERVICES FOR 2X700 MWe PHWR GHAVP NPCIL STG PACKAGE at Gorakhpur, Fatehabad, Haryana SHALL BE BROADLY AS UNDER:
- a. **UNLOADING** OF ALL TYPES OF HEAVY CONSIGNMENTS AND/OR OD CONSIGNMENTS (e.g. STATOR, HP, IP, LP Turbine) DIRECTLY FROM TRAILORS/WAGONS BY SUITABLE CRANE OR BY JACK AND SLEEPER METHOD (ALL TO BE ARRANGED BY THE CONTRACTOR), INCLUDING LEVELLING OF THE UNLOADING AREA AND ATTENDANT WORK.
 - b. **RECEIPT** OF MATERIALS DISPATCHED BY ROAD TRANSPORT ON DOOR DELIVERY BASIS AT THE BHEL STORES AND UNLOADING THEREOF.
 - c. **COLLECTION** OF MATERIALS DISPATCHED BY ROAD TRANSPORT/ RAIL ON GODOWN DELIVERY BASIS FROM TRANSPORTERS'/RAILWAY GODOWNS, LOADING AT TRANSPORTERS'/ RAILWAY GODOWN, LOCAL TRANSPORT UP TO BHEL STORES/ STORAGE YARD AND UNLOADING THEREOF.
 - d. **PRELIMINARY VERIFICATION** OF MATERIALS AT THE TIME OF UNLOADING FROM ROAD TRANSPORT VEHICLE OR WHILE RECEIVING CONSIGNMENTS FROM RAILWAY/ TRANSPORTERS' GODOWN - AS THE CASE MAY BE, REPORTING IMMEDIATELY THE DISCREPANCIES LIKE DAMAGES AND SHORTAGES NOTICED.
 - e. **DETAILED VERIFICATION** OF MATERIALS WITH REFERENCE TO PACKING LIST AND LOADING ADVICE SLIP AFTER UNPACKING OF BOXES & CRATES; REPACKING, WHERE CALLED FOR, AFTER DETAILED VERIFICATION; PREPARATION OF RECEIPT INSPECTION REPORTS.
 - f. **STACKING AND STORING** AT BHEL OPEN STORAGE YARD/ COVERED STORES/ CLOSED & SEMI-CLOSED SHEDS, SUBMISSION OF STACKING/ STORING RECORDS.
 - g. **PRESERVATION OF THE MATERIALS** IN ACCORDANCE WITH BHEL'S PRESERVATION MANUAL AND/ OR AS PER BHEL'S INSTRUCTIONS.

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- h. **GENERAL CLEANING, GRASS CUTTING AND UPKEEP OF STORAGE YARD, COVERED AND SEMICLOSED STORES SHEDS** WITHIN THE QUOTED RATES FOR UNLOADING, VERIFICATION AND STACKING.
- i. **PROVIDING MATERIALS MANAGEMENT SERVICES** AS SPECIFIED IN RELEVANT CHAPTER
- j. **REHANDLING AND RESTACKING** OF MATERIALS AS AND WHEN CALLED FOR BY BHEL. THIS ALSO INCLUDES EXCESS/REDUNDANT/ SCRAP MATERIALS RETURNED TO STORES BY BHEL'S CONSTRUCTION & ERECTION CONTRACTORS.
- k. **HANDLING AND LOADING OF OUTGOING MATERIALS** THOSE ARE TO BE SENT TO OTHER DESTINATIONS.
- l. **PROVIDING SERVICES FOR MAINTENANCE AND UPKEEP OF CONSTRUCTION POWER**
- m. **WATER SPRINKLING AT SITE**
- n. **PROVIDING SERVICES FOR MOBILE TOILETS**

SCOPE OF WORK IS FURTHER DETAILED IN VARIOUS CLAUSES HEREAFTER.

2.3 MAJOR PACKAGES TO BE HANDLED ARE AS UNDER:

- a. Reinforcement Steel, Structural Steel, Cement.
- b. Turbine, turbo-generator, condenser, various pumps with drive motors and their auxiliaries including heaters, heat exchangers and de-aerator.
- c. STG, MSR, & Aux controls and instrumentation and accessories
- d. Electrical Panels, cables, cable trays and accessories.
- e. Station C&I package with associated equipments, cables & cable trays.
- f. Power cycle and TG cycle Piping, Tanks, Vessels etc.

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- g. Complete Insulation, Refractory, Lining, Ancillary and cladding materials.
 - h. Low pressure piping system.
 - i. LT switch gears, Electrical and pneumatic actuators and motors.
 - j. Circulating water pipes, filter, plate type heat exchanger, CW booster pumps with drives, DM cooling water system and drives, and aux cooling water pumps.
 - k. Other BHEL supplied (manufactured/bought out items) packages.
 - l. Materials and consumables required for erection & commissioning of plant.
 - m. Miscellaneous Chemicals.
 - n. Miscellaneous Cranes & hoist.
 - o. Construction equipments of BHEL including high capacity cranes sent in dismantled condition and other items received from other sites/locations.
- 2.4 Approx. weight to be handled as indicated in **Annexure-I** is of the order of **67,736 MT**. Most of these material required for erection shall be arrive at site as per requirement for which the contractor shall be required to carry out proper handling, verification, storage and issue as per the scope mentioned in this NIT.

Total Break-up of Approximate Quantities as follows:

- a) Main Plant Equipment = 32,210 MT
- b) Reinforcement Steel = 21,590 MT
- c) Structural Steel = 3,936 MT
- d) Cements in bag = 10,000 MT

However depending on site requirements, some of the items may need to be delivered directly at site, which may be done by BHEL through its respective erection agency. In such cases where material is received, unloaded and verified by erection agency, the contractor (Material Handling Contractor) will NOT be eligible for any payment for such works. Besides above, BHEL entirely at its discretion (including cases where the contractor is not able to mobilize adequately), may arrange unloading / handling of items like Generator, LP Rotors, Feed storage tank, MSR, etc and any other materials through its other contractors. The contractor (Material Handling Contractor) in such cases will NOT be eligible for any payment.

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Annexure-I attached with this NIT gives the general idea about the weights and dimensions of some major components / equipments to be handled by the contractor. The weights and dimensions shown are approximate and are liable to vary. No increase in quoted / accepted rates / prices shall be allowed due to change in weights and dimensions of the equipment / materials.

2.5 **SITE VISIT**

Contractor should visit site and acquire full knowledge & information about site conditions and in & around the plant premises, together with all statutory, obligatory, mandatory requirements of various authorities before submission of bid. Post Award no claim shall be admissible in this regard.

2.6 Successful bidder may have to engage a separate agency/gang for Unloading, Stacking, Issuing, Re-shifting, Re-stacking, Loading, etc for Cement Handling.

2.7 Weekly Cleaning, Housekeeping, etc inside Cement storage shed shall have to be ensured by vendor.

2.8 The contractor is to use his own equipment like suitable cranes / trucks / tractor trailers and other material handling equipment including all necessary small / major T&Ps required for the above work at 2X700 MWe GHAVP NPCIL STG PACKAGE Gorakhpur, Fatehabad, Haryana.

2.9 It will be responsibility of the contractor to keep in touch with NPCIL and BHEL at site to find out the arrival of consignments, and release of truck/trailers after unloading.

2.10 Unloading of heavy or OD consignments (i.e. Stator, HP,IP,LP turbine, MSR etc) directly from trailers by suitable crane or by jack and sleeper method (all to be arranged by the contractor), at the location decided by BHEL engineer shall be carried out by the contractor within the quoted rate. All T&Ps including hydraulic jacks and sleepers required for sleeper/jack method of unloading shall be arranged by the contractor.

2.11 Detailed verification of materials with reference to packing list / Loading advise slip / etc., after unpacking of boxes & crates; repacking where called for, after detailed verification; preparation of receipt inspection reports etc shall be carried out within the quoted rate within 30 days of the unloading. **If the verification is not carried out within 30 days for reasons attributable to the contractor, then BHEL is having right to carry out the verification at the risk and cost of the contractor.**

2.12 BHEL will provide free of cost all necessary preservatives, paints, thinners, rust preventives, grease, lubricants and end caps to contractor for preservation of

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- components. All tools & tackles and other consumables required for preservation of components including supervision shall however be provided by contractor at his own cost. Preservation of components includes applying preservatives, paints, rust preventives, greasing of threaded portions, fixing of end caps in position for pressure parts, repainting of work order / DU numbers, component codes etc. After preservation wherever necessary, components will be stacked properly as per original stacking for which no additional payment shall be made.
- 2.13 After the stacking/verification, the materials may need to be restacked / shifted within the storage area as per the instructions of the Engineer. The activity of restacking shall be applicable and payable only if the material after verification need to be shifted and restacked to different location with the help of trailer or crane as per the instruction of BHEL Engineer.
- 2.14 It shall be the responsibility of the contractor to keep in touch with Engineer at site and find out arrival of road consignments. The Contractor shall collect all the parcel way bills / lorry waybills from BHEL site office either personally or through an authorized representative. The contractor or his authorized representative shall, for the purpose, visit the said office every day and collect available GR, RR, LWB, and PWB etc. While collecting the GR, RR, LWB, PWB, contractor or his authorized representative will sign the register maintained for the purpose indicating date and time of collection. The contractor shall keep in touch with carriers and arrange to effect delivery of consignments immediately on their receipts. Delay may cause deterioration of goods apart from attracting demurrage charges. Contractor shall also maintain a register (Manual & Digital both) indicating date of RR, LWB, PWB, date of collection of the materials from road transport agencies / Lorries and date of stacking them at storage yard of BHEL.
- 2.15 It is possible that in certain cases, dispatch documents may not be received in time but BHEL may receive Photostat/ Xerox copies of the same. It is, therefore, the responsibility of the contractor to collect these Photostat/ Xerox copies while obtaining indemnity bond from BHEL authorities at site.
- 2.16 Payment of all demurrage / wharfages that are due to contractor's fault, would be the responsibility of contractor and to his account. If BHEL has to make payment of demurrage / wharfages along with freight, the amount so paid as demurrage / wharfages, for the reasons stated above, shall be paid by the contractor forthwith or would be recovered from bills of the contractor.
- 2.17 In any case contractor will pursue with concerned Carrier authorities at all level (local/ HQ etc.) for waiver / reduction to the minimum of such demurrage charges. Whenever such demurrages become payables due to reasons not attributable to contractor, contractor

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will immediately bring it to the notice of BHEL with specific request to bear such charges. The decision of the Engineer in such case will be final and binding on the contractor.

- 2.18 Any discrepancy / shortage / damage found in the consignment after taking delivery from the carriers after giving clear receipt would be the responsibility of the contractor and the amount liable to be lost by BHEL on such accounts is recoverable from the contractor.

The contractor shall verify the consignments in detail **within 12 days of Receipt and report the discrepancies in prescribed formats not later than 14th day**. Any loss on account of delayed reporting shall be recoverable from contractor's bill/ any payment due. Contractor shall arrange all facilities to open packages - where required in the presence of BHEL engineer, verify the contents, repack wherever and whenever called for and properly stack them as per storage manual or/ and as may be directed by BHEL.

- 2.19 It would be the responsibility of the contractor to examine the packages, consignments, etc. on arrival and bring to the notice of carriers and BHEL Authorities regarding loss / damages, if any, observed in the consignments proposed to be taken delivery. Before taking delivery, particularly of consignments in 'smalls', the weight of the package shall be checked with the invoiced weight / contents of the packages and any discrepancy shall be reported immediately to BHEL/ carriers. In all the cases of loss / damages the contractor will take open delivery from the carriers & shall forward such Open Delivery Certificates (ODC) to the Engineer within 07 days of retiring such consignments. All expenses connected therewith shall be to the account of contractor. BHEL reserves right to claim losses, if any, accrued to BHEL in the event of contractor's non-compliance to above.
- 2.20 BHEL reserves the right to recover from the contractor any loss which arises out of undue delay / discrepancy / shortage / damage or any other cause during transit and stacking (between the Road / carriers godowns / weigh bridges and BHEL storage yards / store sheds / project site), when the custody of the equipment is with the contractor.
- 2.21 Pre-defined identification system of the locations of open storage yard, semi-closed shed, covered stores as well as storage racks has to be designed by the contractor with the approval of BHEL. Contractor shall put up prominent identification boards of segmental locations (for open and closed stores) or inscription (on the storage racks) with clear visibility from a distance. Contractor shall also arrange to display plot plan at regular intervals in the covered/ semi-closed/ open storage. The contractor shall arrange proper displays/signs for various requirements as per instructions of BHEL.

The display boards shall be made with structural steel & M.S. plates and shall be painted with synthetic enamel paint. Contractor shall have to periodically repeat such exercise as the original displays may get lost / damaged / deteriorate with time. All materials and consumables for this purpose shall be arranged by the contractor. Contractor shall have

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to make his own arrangements including supply of materials for displaying the proper identification tags, boards, marking, inscription, etc. as scope of work.

- 2.22 Contractor shall submit procedure with sketches of handling of all heavy components to BHEL well in advance and obtain prior approval before unloading and stacking.
- 2.23 Since this contract is intended to be a complete package from material receipt through issue/ transactions right upto material reconciliation therefore full responsibility w.r.t the proper upkeep of facilities e.g. computers, stationary items; ensuring befitting discipline among the store assistants/ staff under its control and accounting of materials on stock shall rest with the contractor at all times.

In the remote possibility of any untraceable material, customarily BHEL has to process the insurance claim. To kick off such claim, the contractor shall render all necessary assistance including augmentation of documents (FIR, etc) within the quoted price as may be required for realization of the insurance claim.

- 2.24 Unloading from trailer at storage area / work site, stacking and re-stacking of heavy sophisticated equipment like MSR, heavy motors, heavy bearings, generators, rotors, C&I panels, turbine components, pumps, panels etc. shall be done in BHEL's presence or as per the directions of BHEL representative.

Certain items may be dispatched with tie rods/ strips welded with frame carrying items and with trailer. These tie rods / strips are required to cut by using Gas flame or by other method as directed by Engineer for unloading of materials. Cutting, Returning & Stacking of these cut pieces lies in the scope of Contractor within the quoted rates.

- 2.25 Since, the trucks / trailers are expected to arrive during any time of the day / night, the contractor shall have his workmen round the clock at site as well as other places as required to unload the materials.

Consignments coming on Sundays and Holidays are also required to be handled by the contractor promptly. It will be the responsibility of the contractor to contact the site Engineer / his authorized representative of BHEL at their residence, if required, and obtain instructions to make suitable arrangements. The detention charges, if any, in the event of delay in unloading from the carrier, will be on contractor's account.

- 2.26 It shall be the responsibility of the contractor, to provide all necessary facilities and tools to open the packages, in the presence of the Engineer, verifying their contents, re-packing wherever and whenever necessary, properly stacking them as may be directed by the Engineer. These works should be so done so as to facilitate proper handling, periodical verification of materials, receipt position, stock taking etc.

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The contractor shall have experienced persons at site who can maintain the records of dispatch / receipt/ stacking / verification / shortage / damage / missing items etc.

- 2.27 **All materials shall be stored at least 6” above ground level by use of concrete sleepers. No material shall be left to remain on ground at any time.** Materials shall not be stacked in low-lying areas, where they are likely to get flooded during rains. Concrete sleepers/ blocks and tarpaulins for this purpose wherever deemed necessary will be arranged by BHEL free of cost as decided by BHEL ENGINEER. However these items shall be stacked / stored properly at a location(s) specified by BHEL when not in use. The contractor is expected to use these most judiciously. In case it is observed that the contractor is not utilizing these optimally, he could be asked to re-stack the same at his cost.
- 2.28 It is possible that certain heavy items/ consignments may require fabrication of a suitable shed over it. These sheds will be covered with suitable sheets or tarpaulin. The contractor will be required to fabricate such sheds. All raw materials required for this will be provided by BHEL on FOC basis. However all expenses towards manpower, T&P, consumables etc will be borne by the contractor. After the completion of the work the contractor will dismantle the same and return these materials back to the stores. The contractor will be paid @ Rs. 13,000/- per MT for such works.
- NO ADDITIONAL PAYMENT SHALL BE MADE IN CASE THE STRUCTURE IS FABRICATED OF SCAFFOLDING PIPES, CLAMPS & GI SHEETS. IN SUCH CASES THE MATERIAL SHALL BE ISSUED BY BHEL FREE OF CHARGE TO THE CONTRACTOR. HE SHALL ENSURE THAT THE SAME ARE RETURNED TO THE STORE AFTER THE EQUIPMENT HAS BEEN ISSUED.**
- 2.29 The material / equipment requiring indoor storage will be handled and stacked inside the storage shed (provided by BHEL) by the contractor using own material handling equipments.
- 2.30 **For checking / verification of the components / packages with packing slips GR/ LWB etc., sufficient experienced persons and other facilities shall be provided by the contractor as and when required by the Engineer.**
- 2.31 Stacking of the material shall be done as per the instructions and to the satisfaction of the Engineer. The materials shall be stacked in such a way that the same should facilitate easy handling. In the event of any improper stacking BHEL may ask the contractor to re-stack the material properly failing which BHEL may get the job done by any other agency at the risk and cost of the Contractor.
- 2.32 The contractor shall execute the work in the most substantial and workman like manner. The stores shall be handled with due care and diligence. Contractor has to intimate BHEL regarding any damage/maintenance of stores in due time for proper repair in order to

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avoid losses of materials. Any loss to BHEL due to contractor's lapse / negligence shall have to be made good by the contractor.

- 2.33 In case contractor is not able to unload, transport, stack the material at a pre-determined area, as per direction of the Engineer for any reason whatsoever (including non-availability of crane, tractor trailer and other T&P etc.), BHEL shall be at liberty to get the work done by engaging other agency / equipment / T&P etc. at the risk and cost of the contractor.
- 2.34 If the contractor or his workmen shall break, deface injure or destroy any part of a building, road, Serbs, fenced enclosures, water pipes, cables, drains, electric or telephone posts or wires, trees, stored components or any other property or to any part of erected equipment etc., the contractor shall make the same good at his own cost or in default the BHEL Engineer may cause the same to be made good by other workmen/agency or by other means and deduct the expense (of which the BHEL Engineer's decision is final) from any sum that may be then or at any time thereafter become due to the contractor or from his security deposit or any other money due at any site of BHEL.
- 2.35 **It shall be the responsibility of the contractor to keep the storage areas (closed / semi-closed / open) in neat and tidy conditions. Any vegetation like grass, bushes, Sarkandas etc. shall be cut periodically in open storage area & removed as per requirement & instructions of BHEL Engineer within the contractual value.** All surplus / unusable packing materials shall be removed and deposited at location(s) specified by BHEL within the project premises (including weighing of the same within the project premises if required).
- 2.36 Normally the consignments from BHEL's manufacturing units / their sub-suppliers are sent on freight paid basis. In case any consignment is received at any place on freight to pay basis, it will be the responsibility of the contractor to pay the freight and take delivery of such consignments. The amount of freight paid by the contractor at any point of time in such cases will be limited to Rs. 20,000/- . However, the freight paid by the Contractor will be reimbursed by BHEL with RABs on production of relevant receipts. In case of freight amounts exceeds Rs. 20,000/- contractor may request BHEL well in time to issue cheque / draft for such amounts in favor of carriers towards freight charges.
- Delay in issuance of cheque/ drafts as above shall not in any case be taken as a cause of delay in taking delivery of consignment resulting in demurrage leviable by carriers. Receipt of such payment and proof of taking delivery of consignment shall be submitted to BHEL by the contractor.
- 2.37 Normally the consignments are expected to be received inside the Project area. But in case any consignment is booked to any other place in and around GORAKHPUR / FATEHABAD, it will be the responsibility of the contractor, if necessary and desired by

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BHEL, to take delivery as desired by BHEL Engineer. The reimbursement of freight paid, as envisaged in clause 2.36 will be made to the contractor.

- 2.38 In case some materials are required to be dispatched from Gorakhpur site to manufacturing units, other sites or any other place, the contractor may be asked by BHEL Engineer to get the same packed, transported to nearest Railway Station / Carrier's godowns and get the same booked. Prior to that Contractor shall identify, tag, pack and prepare gate passes for the materials to be dispatched. Materials shall be loaded onto the outgoing vehicles with due care and handed over to the transporter with clear goods receipt which shall be submitted with BHEL promptly. BHEL shall make arrangement for the transport vehicles at its own cost.

Payment will be regulated on pro-rata basis on the accepted unit rate as per **SECTION A.4 & A.5 OF RATE SCHEDULE, as applicable.**

- 2.39 Such materials which need to be brought to transporter's/ railway godown for booking, arrangements shall be adopted as mentioned below:
Contractor shall arrange suitable vehicle for transportation of materials/smalls from stores/storage yard/site to transporters godowns, identify, tag, pack and prepare gate passes for the materials to be dispatched. Materials shall be loaded onto the outgoing vehicle with due care and handed over to the transporter with clear goods receipt which shall be submitted with BHEL promptly within the quoted rates as per **SL NO A.4 & A.5 OF RATE SCHEDULE, as applicable.**
- 2.40 In case some of consignments are to be dispatched on full truck / trailer load basis, where the carriers will place their fleet inside the plant for loading, the contractor may be asked to collect them from different locations of store sheds/ yard and load by using his crane and labour.
- 2.41 **M ANDATORY SPARES**
- 2.42 Mandatory Spares from various manufacturing units of BHEL may come early during the course of the project and handing over to customer shall be taken up accordingly till completion. Vendor has to do proper identification, separate storage, stacking, verification and separate record keeping of these materials. Vendor has to provide assistance to BHEL during handing over of the materials to customer.

Any discrepancy / shortage / damage found in the consignment after taking delivery from the carriers after giving clear receipt would be the responsibility of the contractor and the amount liable to be lost by BHEL on such accounts is recoverable from the contractor.

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The contractor shall verify the consignments in detail **within 12 days of Receipt and report the discrepancies in prescribed formats not later than 14th day**. Any loss on account of delayed reporting shall be recoverable from contractor's bill/ any payment due. During the period of contract it may have to be shifted up to designated store of customer, for handing over. The cost for re-shifting, which is to be done only with proper instruction of BHEL Engineer, shall be paid as per **SL NO A.4 OF RATE SCHEDULE**.

- 2.43 The contractor will arrange for gate passes and any other permits required for carrying out his work from the respective agencies at his own cost. He will also comply with regulations of the customer within the project area, any of the State Government and other Government agencies.
- 2.44 The owner / employer or his authorized agents may inspect stores, storage yard, etc during the period 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.
- 2.45 Owing to several project requirements, many components may have to be shifted from originally stacked locations to elsewhere within the project premises. This may involve loading of such material onto a vehicle moving to a new location and unloading/stacking including proper inscription of identification marks if needed. List of items duly certified by BHEL official, shifted, updated stock records about change in location etc. shall be prepared/submitted along with the monthly bills.

Separate item rate is there for **RE-SHIFTING AND RE-STACKING** of stacked materials and the payment will be regulated on pro-rata basis on the accepted unit rate as per **SL No A.4 & A.5 OF RATE SCHEDULE, as applicable**.

2.46 **M A T E R I A L M A N A G E M E N T S E R V I C E S**

The contractor under this contract shall provide manpower resources at the project site. The resources deployed by the contractor shall be at the exclusive disposal of BHEL on a full time basis. These shall not be used for any activities associated with the normal responsibilities envisaged under this contract of material handling and material management.

Scope shall include services of Office Boy/ Messenger/ Peon at BHEL office and stores, for handling correspondences (Dak, Documents, Drawings, etc), and other services e.g. Cook, Gardening, Cleaning etc. These shall also include services of personal assistance in the official work of BHEL's construction manager, secretarial services for correspondences and documentation of various departments of BHEL site (erection, commissioning, finance & accounts, stores/material management etc.). Man-months spread across

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various nature of services shall be deployed promptly as per the instruction of BHEL. The unit of measurement of such services rendered satisfactorily by one person during one month shall be termed as one '**Man-Month**'.

Payment for above shall be made as per the man-month rate fixed in **PART-I-C OF RATE SCHEDULE**, on pro-rata basis as at actuals.

Tentative Requirement:-

| Sl. No. | Category | Deployment Man-Months |
|---------|--------------|-----------------------|
| 1 | Skilled | 180 |
| 2 | Semi-Skilled | 180 |
| 3 | Unskilled | 180 |

NOTE: BHEL AT ITS SOLE DISCRETION RESERVES THE RIGHT TO RE-SHUFFLE THE WORK ALLOCATION OF THE PERSONNEL DEPLOYED.

Minimum wages per month fixed in PART-I-C OF RATE SCHEDULE = (Basic Wages + Special Allowance)

Per Man Day Rate = Total Man-Month Rate (per person) divided by 26 Days.

MONTHLY UNIT RATES ARE BASED ON MINIMUM WAGES AS PER LATEST NPCIL GHAVP GORAKHPUR CIRCULAR AT THE TIME OF NIT AND THE SAME SHALL BE REVISED AS WHEN IT IS CHANGED. THE MINIMUM WAGES PER MONTH SHALL BE PAID AS PER LATEST THE RATE GIVEN IN CIRCULAR ISSUED BY NPCIL GHAVP GORAKHPUR.

SINCE THE RATES AGAINST MANPOWER SERVICES ARE VARIABLE ACCORDING TO PERIODIC REVISION, THE OVERRUN COMPENSATION AS PER GENERAL CONDITION OF CONTRACT SHALL NOT BE APPLICABLE FOR PART-I-C OF RATE SCHEDULE.

THE ACTUAL REQUIREMENT OF MANPOWER SHALL BE DISCUSSED AND FINALIZED WITH ENGINEER IN-CHARGE REGULARLY DURING THE COURSE OF THE CONTRACT AND TO BE DEPLOYED ONLY AFTER DUE CLEARANCE FROM BHEL ENGINEER.

IN CASE THE CONTRACTOR DOES NOT DEPLOY OR DELAYS DEPLOYMENT OF ABOVE SAID MANPOWER WITH REFERENCE TO SPECIFIC INSTRUCTIONS FROM BHEL, BHEL WILL RECOVER NON-REFUNDABLE PENALTY PER DAY OF DELAY IN THE FOLLOWING MANNER:

- i) RECOVERABLE AMOUNT SHALL BE DIFFERENTIAL OF THE ACTUAL AMOUNT INCURRED INCLUDING 5% OVERHEADS AND AMOUNT THAT WOULD HAVE BEEN PAID IF MANPOWER IS SUPPLIED BY AGENCY AS PER CONTRACT i.e.**

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RECOVERY = ACTUAL x (1+5%) - M x (1+28.58%)

WHERE M = PREVAILING MINIMUM WAGES AS PER NPCIL AT GHAVP GORAKHPUR.

AGENCY TO ENSURE PAYMENT OF MINIMUM WAGES AND THE SAME TO BE REVISED AS WHEN IT IS CHANGED. THE MINIMUM WAGES PER MONTH SHALL BE PAID AS PER THE LATEST RATE GIVEN IN CIRCULAR ISSUED BY NPCIL GHAVP GORAKHPUR. INSURANCE, ALL STATUTORY LIABILITY, FOOD AND ACCOMMODATION SHALL BE IN THE SCOPE OF CONTRACTOR ONLY.

COMPUTER OPERATORS SHALL BE TREATED UNDER SKILLED CATEGORY.

2.47 For any exigencies during execution of the contract, the contractor shall have to depute his personnel for collection/delivery of any material meant for site from/to out station if desired and instructed by the Engineer. The contractor will however be reimbursed expenses incurred for such work for person deputed, as below:-

- Second class train fare with reservation / supplementary charges/bus fare subject to furnishing details with proof regarding ticket numbers, journey details, amount of fare etc.
- Local conveyance charges (Actual bus / cycle rickshaw/ auto rickshaw fare for local journeys at out station) as permitted by the Engineer.
- Daily allowances @ Rs.200/- per day and @ Rs.500/- per day for lodging.
- Postal / telegraphic / telephones charges, if any, subject to production of proof of having incurred such expenditure.
- Freight and other charges, if any, paid on production of actual receipts.
- Payment for the above will be made by BHEL within a month from the date of submission of bill along with details / desired documents by the Contractor subject to completion of work assigned to contractor personnel and to the entire satisfaction of the Engineer.

2.48 RESPONSIBILITIES OF CONTRACTOR

2.48.1 RECEIPT & ISSUE

Scope includes execution of various activities as follows:

- i) Receipt, unloading, carrying out receipt inspection, detailed verification, stacking and regular stock verification of project materials at site.
- ii) Preparing various reports at appropriate stages and reporting damage/loss during receipt as well as storage and any other associated responsibility as assigned by BHEL from time to time. Responsibility shall include the following activities:

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- a) Examination of incoming consignments to detect any loss or shortage or outward damage and recording it on the LR/LWB before making acknowledgement of its receipt from the transporter and simultaneously obtaining endorsement of the vehicle driver on the same.
- b) Reporting such discrepancy to BHEL immediately on receipt of consignment.
- c) Assisting BHEL in lodging insurance claims in respect of loss/damage as stated above.
- iii) Issue of materials to BHEL's erection contractors, preservation of stacked materials, re-stacking/re-handling as necessary, progressive and final reconciliation with BHEL's erection agencies and preparation of necessary document/ record in respect of these activities.
- iv) Return of excess/defective materials by various erection contractors of BHEL.
- v) Loading and dispatch of outgoing materials.

EXPECTED MINIMUM QUALITY OF SERVICE

Contractor shall render the services by ensuring deployment of requisite personnel with adequate educational qualification having thorough experience in related field to enable understanding the intricacies of and special requirements involved in handling of project materials, inconsistencies and uncertainties associated with in/out flow of materials, project activities at odd hours & holidays and irregular working hours. Contractor shall ensure prompt and timely availability of such services.

2.48.2 PRESERVATION OF COMPONENTS

Contractor shall arrange for preservation of components as per BHEL's storage and preservation manual and/or as per instructions of BHEL engineers.

One or more of following methods shall be adopted for preservation:-

- i) Coating with preservative paints/lubricant/inhibitors
- ii) Capping/wrapping/covering
- iii) Filling/immersion in oil/chemicals etc
- iv) Periodic checks/maintaining required nitrogen pressure in tanks of transformers; BHEL will provide the nitrogen gas for the same. However contractor shall handle the cylinders at stores, transport to point of use, fit-up refills and return empty cylinders to BHEL stores.
- v) **HT motors**

For preservation of HT motors, space heaters have to be kept energized to avoid ingress of moisture. Insulation resistance has to be measured and recorded at specified intervals till these are issued for erection. BHEL will provide necessary

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cables, switches etc. For this, however contractor shall install, operate and maintain the same.

BHEL will provide free of cost all preservatives like preservative oil, lubricants, chemicals, inhibitors, caps etc except primers & paints. Contractor shall provide red oxide zinc chromate (ROZC) primer conforming to IS: 2074 of reputed manufactures (e.g. Asian paints, Berger, Jenson & Nicholson, Bombay Paints, Shalimar or any other BHEL approved manufacturer) required for preservation shall be provided by the contractor and used for this purpose.

In the process the identification marks, component/material codes, match marks may have to be repainted. This work after preservation components are to be stacked properly, periodical reports on the preservation carried out should be submitted to BHEL in the prescribed formats.

2.48.3 RECORD KEEPING

Contractor shall prepare, maintain and update various MM records, associated with materials management operation of BHEL at project site. Two systems of record keeping/capturing information & data at various stages are in vogue viz.

I. Manual ledgers & records.

II. Computerized database application: BHEL has developed a software application named E-stores that Captures all the data in the entire chain of transactions starting with Master list of project materials, records of dispatch, receipt, Inspection, issue, return, consumption etc.

Some of these records are master shipping/packing list, LR/RR register, Daybook register, stock register, records of issues to & return of materials in respect of various erection subcontractors, insurance claim records, periodical status reports in various formats covering desired aspects and output information as per BHEL/ Client's requirement.

Contractor will provide necessary hardware, software & stationary etc. and shall take utmost care to ensure that these properties and records are protected from any Damage or loss. BHEL will recover the cost of such property / expenses of restoration from the contractor with 30% overhead charges in case of any loss/damage attributable to negligence/failure on contractor's part. Also contractor has to engage a qualified computer operator/skilled person for implementation of e-stores and ensuring material re-conciliation.

The contractor under this contract shall complete induction of following categories of resources within the quoted item rates, to ensure establishment of proper materials management at the project site. Accordingly, supervisors/manpower (apart from

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workmen on cranes and material handling purpose) as indicated against each activity in the table below, normally to work at (but not limited to) BHEL site office.

Contractor shall engage skilled & qualified personnel for Construction Power management and Material management in the area of material receipt & its unloading, verification of materials, preservation of materials, record keeping of materials, for dealing with insurance claims and maintenance and upkeep of 11KV/415V Distribution and 415 V construction power grid. For some of the above important area of works tentative minimum deployment of workers shall be as follows:

| SL NO | ACTIVITY/ DESCRIPTION | MINIMUM NO. OF PERSONS | REMARKS |
|-------|---|------------------------|--|
| 1. | DETAILED VERIFICATION | 1 | TO BE DEPLOYED FROM START OF CONTRACT PERIOD |
| 2. | MATERIAL RECEIPT/ UNLOADING, COLLECTION/ BOOKINGS, MATERIAL ISSUE (STRUCTURAL, REINFORCEMENT & CEMENT, TG, T&P, PIPING, BOP, ELEC, C&I) | 1 | TO BE DEPLOYED FROM START OF CONTRACT PERIOD |
| 3. | PRESERVATION | 1 | APR |
| 4. | RECORD KEEPING (STRUCTURAL, REINFORCEMENT & CEMENT, TG, PIPING, BOP, ELEC, C&I, T&P STOCK, MRC, ASSISTANCE IN INSURANCE CLAIMS, PURCHASE ETC) | 1 | FROM THE START OF TG & AUX ERECTION |
| 5. | QUALIFIED COMPUTER OPERATOR/ SKILLED PERSON IS TO BE PROVIDED FOR IMPLEMENTATION OF E-STORES AND ENSURING MATERIAL RE-CONCILIATION. | 1 | TO BE DEPLOYED FROM START OF CONTRACT PERIOD |
| 6. | QUALIFIED ELECTRICIAN WITH MMES AND T&Ps (MULTIMETER, TONG TESTER, MEGGER-1000V, LADDER, ETC.) CAPABLE OF MAINTAINING 11KV/ 415V DISTRIBUTION AND 415 V CONSTRUCTION POWER GRID | 1 | APR |

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NOTE:

1. THE NUMBER OF PERSONS INDICATED ABOVE IS TENTATIVE AND ACTUAL DEPLOYMENT MAY VARY BASED ON WORK LOAD AND SITE REQUIREMENT. THE MANPOWER REQUIREMENT SHALL BE FINALISED IN THE BEGINNING OF THE CONTRACT PERIOD AS WELL AS SHALL BE REVIEWED DURING THE COURSE & EXTENDED PERIOD OF THE PROJECT WITH BHEL ENGINEER INCHARGE, BASED ON WHICH FURTHER DEPLOYMENT CAN BE CHANGED. THIS DOES NOT ABSOLVE THE CONTRACTOR FROM HIS RESPONSIBILITY TOWARDS THE SATISFACTORY EXECUTION OF THE JOB.
 2. IN CASE THE CONTRACTOR DOES NOT DEPLOY OR DELAYS DEPLOYMENT OF ABOVE SAID MANPOWER WITH REFERENCE TO SPECIFIC INSTRUCTIONS FROM BHEL, BHEL WILL RECOVER NON-REFUNDABLE PENALTY AS:
 - i) RECOVERY AT THE RATE OF THE PREVAILING MINIMUM WAGES PLUS 23.58% (FOR STATUTORY PAYMENTS) NPCIL GHAVP GORAKHPUR FOR THE RESPECTIVE CATEGORIES STATED ABOVE PLUS 10% WILL BE MADE FROM THE RUNNING/ FINAL BILL OF THE CONTRACTOR.
 - ii) FOR COMPUTER OPERATOR MINIMUM WAGE SHALL BE TAKEN AS MINIMUM WAGE FOR SKILLED WORKER.
 3. CONSUMABLES LIKE JOINTING KIT, LUGS, GLANDS, CABLES, WIRES, FUSES, ETC. REQUIRED FOR UPKEEP AND MAINTENANCE OF 11KV/ 415V DISTRIBUTION AND 415V CONSTRUCTION POWER GRID SHALL BE PROVIDED BY BHEL FREE OF COST UNDER SUPERVISION OF BHEL ENGINEER.
 4. PART-I-A OF RATE SCHEDULE IS INCLUSIVE OF PAYMENT AGAINST ABOVE LISTED MANPOWER. NO SEPARATE PAYMENT WILL BE MADE FOR THE ABOVE LISTED MANPOWER.
 5. INSURANCE, ALL STATUTORY LIABILITY, FOOD AND ACCOMMODATION SHALL BE IN THE SCOPE OF CONTRACTOR ONLY.
- 2.49 Payment for all materials including over dimensional and heavier components shall be regulated on the accepted unit rate - **PART-I-A 1 of rate schedule**.
- 2.50 **Contractor shall make following necessary arrangements:**
- 2.50.1 Contractor has to maintain contact with local hospital having ambulance facility & other medical facilities required during emergency.
 - 2.50.2 Contractor has to ensure pre-employment medical check for all staff & workers.

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2.51 The contractor shall comply with following towards Social Accountability:

- a. The contractor shall not employ any employee less than 15 years of age in pursuant to ILO convention. If any child labour were found to have been engaged, the Contractor shall be levied with expenses of bearing his education expenditure which will include stipend to substantiate appropriate education or employ any other member of family enabling to bear the child education expenditure.
- b. The contractor shall not engage Forced/ Bonded Labour and shall abide by abolition of Bonded Labour System (Abolition) Act, 1976.
- c. The contractor shall maintain Health & safety requirement as stipulated in the Contract and Contract Labour (Regulation & Abolition) Act, 1970.
- d. The Contractor shall abide by UN convention w.r.t. Human Rights and shall be liable for Discrimination / Corporal Punishment for failure in meeting with relevant requirements.
- e. The Contractor shall abide the requirement of Contract Labour (Regulation & Abolition) Act, 1970 for working hours.
- f. The Contractor shall abide by the Statutory requirement of Minimum Wages Act 1948, payment of Wages Act 1936.
- g. The Contractor shall arrange potable drinking water to its employees & workers.

2.52 Contractor shall ensure daily housekeeping and keep proper cleanliness of work place and do the disposal of wastes to certified area.

2.53 WATER SPRINKLING

Water sprinkling is to be done by Contractor in the construction area and its peripheral roads to avoid spread of dust in air. It is to be done for a period of 40 months from the date of actual date of start of work by the Contractor OR as per instruction of BHEL Engineer in-charge.

For this work contractor has to deploy minimum 6000 ltr water tanker with water sprinkling arrangement. 05 trips of sprinkling are to be done every day or as per instructions of BHEL Engineer. Payment shall be made on prorata basis of actual number of trip(s) as certified by BHEL engineer.

Cost of water shall be as per rates notified by HI & WRD from time to time. Present rate is Rs. 300 per 2500 cft i.e. Rs. 0.12/cft. Cost of water shall be revised based on latest official circulars and shall be reimbursed as per actuals on submission of proper documents. The cost of driver, helper and fuel is in the scope of Contractor only.

2.54 MOBILE TOILETS

Contractor has to install and maintain (including cleaning of toilets and disposal of waste/ sewage) 04 nos. of mobile toilets, including overhead tank, at site within 02 months after mobilization. The same has to be maintained with the help of dedicated 01 (one) no.

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unskilled manpower during the complete deployment period of 43 months & extended period, if any, and as per BHEL instructions. **The mobile toilets shall be made operational within 02 (Two) months from the actual date of start of work by the Contractor.** The period of payment shall be regulated based on certification by BHEL engineer.

PART-II (Clause 2.55 to 2.90) WEIGH BRIDGE:-

2.55 WEIGH BRIDGE: Scope of Services/ Work & Contractor's Responsibilities:

Providing services of Pit-less Weighbridge of 100 MT Capacity of size 20 m x 3.5 m on Build, Own and Operate basis at the construction site of 2X700 MWe PHWR GHAVP NPCIL STG PACKAGE at Gorakhpur, Fatehabad, Haryana.

The total contract period shall be 45 months and be divided in two parts as under:

- (A) **INSTALLATION PERIOD:** The installation period of 2 months is provided for contractor to supply, install & commission his equipment, set up the necessary establishment and make operational all his facilities for rendering the service.
- (B) **OPERATION PERIOD:** The operation period shall be 43 months from the date of completion of declaring the facilities of contractor as "Operational" as per relevant clause.

2.56 The Scope of Services shall include Design, Procurement/ Manufacturing, Deployment at Project Site, Civil Construction, Installation, Testing, Commissioning, Operation (including manning in required shifts as per BHEL requirement), Maintenance (including supply of spare parts for day to day operation and also for the scheduled and/ or breakdown maintenance of all the equipment, Instruments and complete installation in totality), Dismantling after closure of Services, removal and disposal of equipment, scrap, earth, debris etc. from project site and restoration of the location in clean, level & soil compacted state. Approach road to the Weigh Bridge from Main Road shall be excluded from the scope and same shall be executed by BHEL.

2.57 The above scope of work includes complete civil work like excavation, suitably capable foundation & backfilling, leading and trailing ramps of RCC of gentle gradient etc. complete for installation of Weigh Bridge and Operation-cum-Control Room including, Mechanical, Electrical and Electronics items and any other items necessary for regular operation of the Weigh Bridge including cost of materials, labour, permits, licenses etc as applicable.

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- 2.58 All equipment necessary for the required service shall be tested as per relevant IS and/or other applicable specifications at works prior to the shipment to site for Installation. **On completion of Supply, Installation and Commissioning of the complete facility the same shall, in witness of BHEL, be subject to Load Test / Acceptance Test as per applicable Indian Standards or relevant engineering practice. On successful completion and acceptance of such test duly certified by BHEL, the equipment/installation shall be declared 'Operational' for contractual purposes.**
- 2.59 The service shall be rendered to suit BHEL site requirement, which may require single shift/ two shift/ round the clock, operation of the facilities. The services may be required on weekends and holidays as well, as per BHEL site activities.
- 2.60 Providing the environment control and regulation equipments such as Room Air Conditioner, Dust guard, Air Curtain etc as may be required to take care of electronics systems and installations to ensure continuous satisfactory availability and operation of service facilities is within the scope of work.
- 2.61 All Tools & Plants including crane, if any, materials, consumables etc required for installation of Weigh Bridge and all other facilities etc are in the scope of the service provider. All consumables required for Operation and maintenance of the facilities shall be arranged by the contractor. BHEL shall not provide any facility in this regard.
- 2.62 All staff, skilled, semi/un-skilled labour for Installation and Commissioning, Operation and Maintenance and any other requirement for rendering the service shall be in the contractor's scope.
- 2.63 Contractor shall arrange and ensure periodical calibration of the facilities/ equipment with / from the Government authorized agency / Haryana. Department with traceability to National Physical Laboratory of India. Also, all the relevant test as per IS and/or any other requirement shall be arranged by the contractor. The proof of all such calibrations and tests shall be furnished to BHEL. All fees, charges as applicable in this regard are in contractor's scope.
- 2.64 Contractor shall arrange Inspection by the Statutory Authorities as applicable to all his facilities and operation. Contractor shall pay all fees, charges etc as applicable.
- 2.65 The Contractor shall arrange construction water required for civil works of the Weighbridge.

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- 2.66 BHEL shall provide at one point the electricity supply 415 V, 50Hz, for Installation and for Operation & Maintenance of the contractor's site facilities. However, all necessary arrangements for drawl and distribution (with complete arrangement for cables, distribution boards and protection devices such as breakers, ELCB, etc) for his use shall be arranged by the contractor. This set up has be approved and cleared for use by the relevant authority (electrical inspectorate/ NPCIL/ Etc). BHEL shall not be responsible for damage(s), if any, to contractor's facilities/ equipments etc on account of any fluctuation in supply side parameters.
- 2.67 Contractor shall arrange appropriate insurance cover for his installations and facilities as well as for staff and labour for entire period of contract and extension thereof, if any. Proof of it shall be furnished to BHEL.
- 2.68 Contractor shall make security arrangement for his installations and facilities.
- 2.69 Contractor shall provide area illumination around his facilities suitable to need and in consultation with BHEL.
- 2.70 Regular repair, maintenance and upkeep of all installations & facilities arising out of wear and tear during use particularly of ramps and platforms shall be ensured for satisfactory availability and operation of installations & facilities as incidental.
- 2.71 On completion of service contract period the complete set up installed and other facilities created shall be removed by the contractor and from the project premises and level the ground etc without any additional cost to BHEL within time frame specified by BHEL. BHEL will not provide any T&P, consumables etc for removal of contractor's facilities and equipments etc.
- 2.72 Contractor shall follow all regulations and BHEL/ NPCIL directives with regard to Safety as applicable to the service being rendered.
- 2.73 Contractor shall obtain necessary Gate Pass, permission for shift operation/overstay as may be required by BHEL/ NPCIL for the time being.
- 2.74 Contractor at all times during the currency of this contractor shall possess necessary license, permits as applicable to the provision of this service and pay all fee and charges as may be applicable. BHEL shall in no way be held responsible for any of the lapse of the contractor.
- 2.75 **BRIEF TECHNICAL SPECIFICATION OF THE WEIGH BRIDGE IS AS FOLLOW :**

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| | |
|--|--|
| Number Required | 1 |
| Carrying capacity/strength | 120 MT |
| Weight capacity | 100 MT |
| Type | Pit Less Type Road Weigh Bridge |
| Number of Platform | 1 |
| Size of platform | 20m X 3.5m |
| Least count | 10 Kg |
| Purpose | Weighment of Laden and Empty Trucks, Trailers, Tankers etc |
| Accuracy | (+/-) 0.05% of Full Scale |
| Type of the system | Microprocessor controller based with load cells |
| Display | Digital display in Kilograms for full |
| Print out | Automatic print out should be generated for each weighment through the System. |
| Capacity and should have adequate font size (at least 13mm) legible with contrasting background. | |

- 2.76 Bidder along with his offer shall submit the complete technical information with regard to the weighbridge offered as part of service.

Refer Annexure-II Technical Specification of Weigh Bridge.

FACILITIES TO BE PROVIDED BY BHEL

- 2.77 BHEL will provide only the space/land free of cost for setting up the Weigh Bridge.
- 2.78 Approach road to Weigh Bridge shall be provided by BHEL for the movement of loaded/unloaded trailers/trucks etc.
- 2.79 As provided elsewhere BHEL will provide Electric supply at one point to the contractor. Electricity is chargeable. Also, any cess and duties levied/leviable on electricity consumed & fixed load shall be to the contractor's account.

AVAILABILITY OF SERVICES, PREVENTIVE MAINTENANCE, BREAKDOWN MAINTENANCE & PENALTY DUE TO BREAKDOWN ETC.

- 2.80 Contractor shall provide his equipment and other resources in such a manner so as to ensure uninterrupted service as and when required by BHEL. Accordingly all his installations and facilities shall be operative. No undue delays shall occur in weighing of carriers on account of any failure of contractor's services.
- 2.81 For preventive maintenance, contractor shall plan the activities in advance in consultation with BHEL and execute such plans within the time approved by BHEL, expeditiously so as to ensure barest minimum down time. No penalty will be charged for such down time for preventative maintenance.

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- 2.82 For unforeseen Breakdowns in a service month a cumulative Service Non-availability of 05 days but not exceeding 02 days at a stretch on any single occasion will be permitted, as incidental and no penalty shall be levied for such breakdowns. However, contractor shall expedite remedial action so as to restore the services back to normal with least of disruption. Such allowable breakdown duration can be availed only in the concerned service month and cannot be adjusted against any other service month. Also such allowance shall be applicable only in case of a machinery breakdown/malfunction and not for any break in services attributable to absenteeism of personnel.

PENALTY

- 2.83 In case the contractor fails in delivering the contracted service over and above the allowed period as specified above, BHEL shall levy penalty for each additional hour or part thereof beyond such allowances in the following manner:
- a) The regular payment (as per Terms of Payment) for those many hours of service not available beyond allowance shall not be paid.
 - b) Daily rate shall be calculated as under:

Amount Payable for the relevant Service Month

DAILY RATE = -----

30 days

Amount payable for the relevant Service Month is calculated as per TCC clause no. 7.12.

In addition to the disallowance of regular payment as above, a non-refundable penal charge at the rate of 25% of such daily rate for the days of service not available beyond allowed periods shall also be levied in the RA bill of respective month.

- 2.84 **VARIATION IN QUANTITY/ DURATION:-**

It is anticipated that in total about 35,526 MT of incoming and outgoing materials, mostly steel & cement, will pass through the weighbridge spread over the Operation Period and Extensions thereof. However, these quantities and Operation Period may vary to any extent on upper/lower side depending upon the site conditions and BHEL requirements. No claim whatsoever from the contractor shall be entertained on account of any such variation in quantities or Operation Period.

Duration for deployment of is tentative and may change as per requirement. Mobilization and demobilization of WEIGHBRIDGE shall strictly be done as per the instructions from BHEL. BHEL also reserves the right to direct the contractor to discontinue/ de-mobilize within the contract period/extended contract period with 60 days advance written notice without assigning any reason. No payment will be made for the period after the date of demobilization/ discontinuance notified by BHEL.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - II: SCOPE OF WORK

- 2.85 The service shall be rendered and facilities shall be available for exclusive use of BHEL. The facilities shall not be used for any commercial use other than that as specified in this Tender Specification.
- 2.86 Service provider shall take back the entire installation (building, foundation, equipment, accessories etc.) after the completion of Contract Period (including extensions thereof).
- 2.87 The contract shall deem to be completed when so certified by BHEL. All the above works shall be measured and paid under relevant item of BOQ. All the above jobs shall be as per BHEL Engineer's instructions, drawings, detailed specification and respective bill of quantities furnished in the Rate Schedule.

Responsibility of the Contractor (Weigh Bridge)

- 2.88 The contractor shall engage all the unskilled, skilled and especially skilled labor including fabricators, welders and fitters etc. and supervisory staff. Only trained and competent personnel with previous experience in the job shall be employed. However, BHEL reserves the right to decide on the suitability of the workers and other personnel who will be employed by the contractor. BHEL reserves the right to insist on removal of any employee of the contractor at any time, if they found him unsuitable. The contractor shall be bound to follow the instruction of BHEL.
- 2.89 All the materials like steel, structural members, painting materials, G.I. Sheets, MS square bar and necessary electric goods etc. shall be supplied by the contractor as per the specification mentioned in the tender/Indian standard specification. The contractor is required to quote their rates inclusive of cost of all materials, labor, etc. BHEL reserves the right to inspect and reject any material not found satisfactory.

2.90 GENERAL - WEIGH BRIDGE

During execution of the job, it is very essential that proper and adequate inspection should be made constantly by the contractor to maintain quality of workmanship and to ensure that deviations from BHEL drawings not exceed the permissible limits, which shall be approved by BHEL. Necessary laboratory test shall be conducted on random sampling basis for the materials like Bricks, steel, cement etc if so desired by BHEL Engineer. Apart from that Contractor shall also ensure Field Quality Test (FQA) like Compressive Strength Test of concrete (cube test), Sieve Analysis of aggregates, and Compaction Test for backfilling as per Standard Practice and Relevant IS codes either at site or nearby Field Quality Lab approved by BHEL. All the testing charges shall be borne by the contractor. Decision of BHEL engineer shall be binding on the contractor. Contractor shall procure reinforced / structural steel & cement from reputed manufacturer/ Authorized dealer & approval for the same shall be obtained from BHEL well in advance before ordering of the materials.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - II: SCOPE OF WORK

The contractor shall visit the site and ascertain the local conditions, entry and traffic restrictions, all obstructions in the area and also ascertain all site conditions and particularly the sub-soil conditions etc. The contractor shall carry out the survey to study the properties of soil/sub soil like strength to withstand the weight of structure during all weather conditions without sinking of foundation. If any of such defects like cracks, sinking of foundation etc. occur after completion of work till the performance guarantee period, it shall be rectified by contractor free of cost including the supply of materials required. No claim shall be entertained on this account under any circumstances from the contractor.

2.91 Tree Plantation and Protection

The Contractor shall plant trees of different species suitable for the soil condition at site in an area identified by BHEL and shall maintain the same including periodic watering till completion of work within quoted price. **This shall be within the quoted price of the contract and tree plantation work shall be completed within 04 (Four) months from the date of actual date of start of work by the Contractor. A total of 500 number of trees are to be planted.**

Trees designated by BHEL shall be protected from damage during the course of the facilities and earth level within 01 meter of each such tree shall not be changed. Where necessary, such trees shall be protected by providing temporary fencing. Where tree cutting is involved, procedures as directed by the BHEL/ NPCIL shall be complied with.

2.92 Area Cleaning

The designate storage work premises should always be clean and tidy to avoid damages of material due to clogging of waters, rusting, vegetation, fire etc. The contractor shall provide and maintain at his own cost pumps and other equipment to keep the work free from water and continue to do so for complete contractual period, including extended period.

The contractor shall clear all trees, plants, grass, rubbish, vegetation, brickbats etc. from BHEL site office, Contractor Site office, Weigh bridge, Closed Stores & Open Yards and dispense them suitably in allotted areas without any extra cost to BHEL. The activity has to be performed on periodic basis and as per instructions of BHEL with the help of modern equipments. In case of failure to comply with the same, BHEL may get the work carried out on risk and cost of Contractor.

After completion of contract duration, contractor has to dismantle its establishment, clean the area and handover the same to BHEL.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - II: SCOPE OF WORK

2.93 VARIATION IN QUANTITY (Clause no. 2.14 of GCC)

The quantities against each item of the Rate Schedule are approximate and may vary up to any extent or may be deleted altogether. **Compensations on account of such variation shall be dealt as per clause no. 2.14 of GCC where 'Awarded Contract Value' shall be referred to Items rates of Part-I-A, B & C of RATE SCHEDULE ONLY.** The Payment shall be made as per agreed item rates for the quantities actually executed and measurements by BHEL. The contractor has to take note of this and quote his rates accordingly.

In scenario of increase in individual quantity more than 100%, clause 2.14.2 of GCC shall be valid for Part-I-A & B only, since rate of Part-I-C are standard and will be revised as per prevailing daily wages circular issued by NPCIL for time to time.

2.94 The contractor shall take adequate precautions to ensure complete safety and prevention of accidents at site. The safety precautions shall conform to IS codes wherever applicable.

2.95 The contractor shall, at all stages of work deploy skilled/ semi-skilled tradesman/ worker 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 tradesman along with requisite certificate from recognized Institute to Engineer-in-Charge for approval. Notwithstanding such approval, if the tradesman are found to have inadequate skill to execute the work of respective trade, the contractor shall substitute such tradesman within two days of written notice from Engineer-in-charge. Failure on the part of contractor to obtain approval of Engineer-in-Charge or failure to deploy qualified tradesman 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.

TECHNICAL CONDITIONS OF CONTRACT (TCC)
CHAPTER - III: FACILITIES IN THE SCOPE OF CONTRACTOR/BHEL

3.0 FACILITIES IN THE SCOPE OF BHEL/ CONTRACTOR

| S.No. | Description | Scope | | Remarks |
|---------|--|-------|------------|--|
| | | BHEL | Contractor | |
| 1.1.0 | ESTABLISHMENT | | | |
| 1.1.1 | FOR CONSTRUCTION PURPOSE | | | |
| A. | Open space for office | YES | | Free of charge. As and where made available by customer M / s NPCIL / BHEL |
| B. | Open space for storage | YES | | Free of charge. As and where made available by customer M / s NPCIL / BHEL |
| 1.1.2 | FOR LABOUR COLONY | | | |
| A | Open space | | YES | To be arranged by Contractor <u>outside plant premises.</u> |
| 1.2.0 | ELECTRICITY | | | |
| 1.2.1. | Electricity for construction/ usage purposes | | YES | Chargeable – Consumption (Per kVA hour basis) + Fixed Charges (Connected Load/ Month basis) As per NPCIL/ DHBVN standard rates. <u>Contractor shall install calibrated tri-vector type energy meter for metering electricity consumption.</u> |
| 1.2.1.1 | Single point source | YES | | |

TECHNICAL CONDITIONS OF CONTRACT (TCC)
CHAPTER - III: FACILITIES IN THE SCOPE OF CONTRACTOR/BHEL

| S.No. | Description | Scope | | Remarks |
|---------|---|-------|------------|---|
| | | BHEL | Contractor | |
| 1.2.1.2 | Further distribution for the work to be done which include supply of materials & execution | | YES | |
| 1.2.2 | Electricity for the office, weigh bridge, stores, canteen etc of the bidder which include: | | | |
| 1.2.2.1 | Distribution from single point including supply of materials & service | | YES | |
| 1.2.2.2 | Supply, Installation & connection of material of tri-vector type energy meter including operation & maintenance | | YES | |
| 1.2.2.3 | Charges, Duties & deposits including statutory clearances for above | | YES | |
| 1.2.2.4 | Demobilization of the facilities after completion of works | | YES | |
| 1.2.2.5 | Electricity for living accommodation of the bidder's Staff, engineers, supervisors etc. on the above lines | NA | NA | No Accommodation inside premises. |
| 1.3.0 | WATER SUPPLY | | | |
| 1.3.1 | FOR CONSTRUCTION / DRINKING | | | |
| 1.3.1.1 | Making the water available at single point | YES | | Chargeable. As and where made available by <u>BHEL/ NPCIL</u> |
| 1.3.1.2 | Further distribution as per the requirement of work including supply of materials & execution | | YES | Calibrated water meter is to be installed by Contractor at its own cost. Present rate of water is Rs 300 per 2500 cft of water. |
| 1.3.2 | FOR LABOUR COLONY | | | |
| 1.3.2.1 | Making the water available at single point | | NA | No Accommodation inside premises. |
| 1.3.2.2 | Further distribution as per the requirement of work including supply of materials & execution | | NA | |
| 1.4.0 | LIGHTING | | | |

TECHNICAL CONDITIONS OF CONTRACT (TCC)
CHAPTER - III: FACILITIES IN THE SCOPE OF CONTRACTOR/BHEL

| S.No. | Description | Scope | | Remarks |
|-------|---|-------|------------|--|
| | | BHEL | Contractor | |
| 1.4.1 | For Material Handling work (supply of all materials) 1. At office storage area 2. At Yard or any other places where material is unloaded/ stored | YES | | |
| 1.4.2 | For material handling work (execution of lighting work/ arrangements) 1. At office storage area 2. At Yard or any other places where material is unloaded/ stored | YES | | |
| | Providing the necessary consumables like bulbs, tubelights, Switches, etc. for maintaining the lighting system | YES | | |
| 1.5.0 | Communications facilities for site operations of the bidder | | | |
| 1.5.1 | Telephone, fax, internet, intranet, email etc. | | YES | |
| 1.5.2 | Single Point Source | YES | YES | For intranet BHEL shall provide single point connection source. Rest communication facilities has to be arranged by bidder itself. |
| 1.5.3 | Further distribution as per the requirement | | YES | |

- 3.1 BHEL will not be responsible for any loss or damage to the contractor's equipment as a result of variation in voltage or frequency or interruptions in power supply.
- 3.2 The Contractor shall be responsible for providing all necessary facilities like residential accommodation, transport, electricity, water, medical facilities etc. at his own cost, as required under various labour laws and statutory rules and regulations framed there under, to the personnel employed by him.

Provision of distribution lines of both electrical power and water from the central points to the required place with proper distribution boards observing the safety rules laid down by the electrical authorities of the state shall be done by the contractor, supplying all the materials like cables, distribution board, switch boards, TPN, CBS, ELCBS/ MCCBS/ Copper

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - III: FACILITIES IN THE SCOPE OF CONTRACTOR/BHEL

/ Brass clamps, copper conductor, change over switches pipes etc. at his own cost. If any failure is caused in supply of the power and water, it is the responsibility of the contractor to make alternate arrangements at his cost. The contractor shall adjust his working shifts / hours accordingly and deploy additional manpower if necessary so as to achieve the targets. **The tri-vector type energy meter, integrator type power factor meter and integrator type maximum demand meter to be installed by the contractor at his cost & shall be tested and certified/ calibrated by State Electricity Board or any other agency approved by NPCIL. The meter shall be calibrated by contractor in every 1 (one) year at standard laboratory of State Government or NPCIL approved laboratories or NABL accredited Lab. All the expanses including the fees levied by standard laboratory of testing the meter shall be borne by contractor.**

It would be responsibility of contractor to ensure safety of the meter and to ensure that meter is not tampered with. In case it is found that meter has been tampered with, or found non-working a penalty of Rs. 1000/- shall be imposed on every occasion and the charges will be recovered on the basis of average consumption for the preceding 6 (six) months. In the cases where the period of six months is not available, the maximum consumption of preceding months shall be considered for consumption / recovery charges. The contractor will be required to take immediate action for replacement / repair of defective energy meter within eight (08) days from date of noticing the defect.

- 3.3 The contractor while drawing construction power supply from Distribution Board should strictly adhere to following points.
- a) All electrical installations should be as per Indian Electricity rules.
 - b) All distribution Boards installed by the contractor should be constructed with fireproof materials viz. Steel frames, Bakelite sheets etc.
 - c) Connection for single phase should be taken from phase and neutral. Nowhere the connection should be taken with earth as neutral.
 - d) All electrical connections should be made through connectors, nuts and bolts, switches, plug and sockets. Loose connections or hooking up of wires shall not be permitted.
 - e) Contractor have to make their own earthing arrangement for their equipment / DB earthing.
 - f) All electrical equipment / tools and plants should be properly earthed. DBs to be earthed diagonally opposite at two points.
 - g) Contractor should use "MCCB" and "ELCB" either on incoming or outgoing connections to the DBs.
 - h) Contractor should ensure that all the CBs / TPNs/ Fuses/ MCCB / ELCB cables etc. should be of adequate rating/ capacity.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - III: FACILITIES IN THE SCOPE OF CONTRACTOR/BHEL

- i) For permission of supply connections contractor has to submit a test report of their installations with a single line diagram of connected/ proposed loads.

3.4 Power-Factor Surcharges:

The monthly average power factor of the plant and apparatus installed by the contractor shall not be less than 90% lagging. The monthly average power factor shall mean the ratio expressed, as percentage of total kWh to total KVAH supplied during the month. The ratio shall be rounded up to two figures. In case 3rd figure is 5 or more than 5, then the figure at the second decimal place shall be increased by one. In case monthly average power factor falls below 90% lagging, the contractor shall have to pay a surcharge of 1% of SOP charges for every 1% decrease in the power factor upto 80% and 2% of SOP charge for every 1% decrease in power factor below 80%.

The contractor shall maintain a power factor at not less than 0.9 by installation if necessary at his own cost suitable corrective devices. The contractor's failure in this regards within a period as stipulated by the Engineer-in-Charge may entail installation of the necessary corrective device by the Engineer-in-Charge at the contractor's risk and cost.

- 3.5 ELCB will be tested once in a week or as directed by BHEL by actually simulating the earth leakage for all installations and the same shall be recorded in the logbook to be maintained by the contractor.
- 3.6 In case of power cuts / load shedding no compensation for idle labour or extension of time for completion of work will be given to contractor.
- 3.7 On completion of work or as and when required by BHEL, all the temporary buildings, structures, pipe lines, cables etc. shall be dismantled and levelled 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, BHEL will get it done and expenses incurred shall be recovered from the contractor along with prevailing overheads. The decision of BHEL Engineer in this regard shall be final.
- 3.8 All statutory compliances related to HSE, Works regulations, etc shall have to be ensured by Contractor in line with instructions issued by BHEL/NPCIL from time to time without any extra cost.
- 3.9 **For record keeping & MM works Contractor should install PCs in their office ALONG WITH MODEM to connect with BHEL server (LAN) AT SITE.**
- 3.10 **Contractor has to install and maintain (including cleaning of toilets and disposal of waste/ sewage) 04 nos. of mobile toilets, including overhead tank, at site within 02 months after mobilization. The same has to be maintained during contract period including extended period, if any, and as per BHEL instructions.**

TECHNICAL CONDITIONS OF CONTRACT (TCC)
CHAPTER - IV: T&PS TO BE DEPLOYED BY CONTRACTOR

4.0 T & Ps AND IM TEs DEPLOYED BY CONTRACTOR

| S.NO. | EQUIPM ENT | QTY. IN NOS. | DEPLOYM ENT PERIOD | | |
|-------|--|--------------|--------------------------------|-----------|--------------|
| | | | From | To | Total Period |
| 1. | 18/20 MT Tyre mounted Crane | 01 | From start of contract period* | 45 months | 45 months |
| 2. | 12/14 MT Tyre mounted Crane | 01 | From Start of contract period* | 35 months | 35 months |
| 3. | Truck 10MT | APR* * | | | |
| 4. | 20 MT Trailer with Pulling Unit | 01 | Start of contract period* | 20 months | 20 months |
| 5. | 10/20/50/100 MT Hydraulic Jacks | APR* * | | | |
| 6. | Precast concrete Sleepers | 1000 Nos | Start of contract period* | | |
| 7. | SLINGS, 'D'-SHACKLES, MAX PULLER. (01 MT TO 10 MT) | 25 PAIRS | | | |
| 8. | SLINGS, 'D'-SHACKLES, MAX PULLER, PULLEY BLOCKS, HYDRAULIC JACKS, ETC ABOVE 10 MT. (WITH TEST REPORTS) | APR* * | | | |
| 9. | SPANNER SETS RING/ D UPTO 56 MM | 02 SETS | Start of contract period* | | |
| 10. | Ladders | APR* * | | | |
| 11. | MMEs AND T&Ps INCLUDING MEGGER FOR MAINTAINING 11KV/415V DISTRIBUTION AND 415 V | APR* * | | | |

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - IV: T&PS TO BE DEPLOYED BY CONTRACTOR

| S.NO. | EQUIPMENT | QTY. IN NOS. | DEPLOYMENT PERIOD | | |
|-------|-------------------------|--------------|-------------------|----|--------------|
| | | | From | To | Total Period |
| | CONSTRUCTION POWER GRID | | | | |

* The date of start of contract period for particular T&P shall be the mutually agreed date between the contractor and BHEL engineer to start the work. In case of discrepancy the decision of BHEL engineer will be final.

** APR- As per requirement (Contractor shall have to deploy the T&P whenever required at site as decided by BHEL ENGINEER)

4.1 The above list specifies only major T&Ps (may not be complete) to be deployed by the contractor and is based on minimum requirement. All additional / other tools and plants including suitable capacity D shackles, slings, rails, sleepers, hydraulic / mechanical jacks etc which are required for satisfactory & timely completion of work shall also be deployed by the contractor without any extra cost to BHEL.

4.2 The above list is only indicative and these T&Ps may not be required for entire contract period but contractor shall ensure the availability of the T&Ps as per work requirement and T&P Deployment schedule.

T&P Deployment schedule shall be finalized at site in consultation with BHEL Engineer based on the work fronts/ work requirement. Deployment schedule may be reviewed time and again by BHEL Engineer based on the requirement at site. BHEL decision shall be final and binding regarding the T&P deployment schedule. Contractor shall mobilize / maintain the T&P's as per the deployment schedule notified time to time by BHEL Engineer.

4.3 If any one of T&P mentioned above is not needed for proper execution of scope of work, provided contractor has not utilized BHEL free issued T&P for completing such work, no recovery from contractor shall be applicable.

4.4 Any additional item required in addition to above mentioned T&P for proper execution of scope of work, contractor has to arrange such T&P within quoted rate on the instruction of BHEL in writing in a reasonable period within two weeks from the written instruction from BHEL.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - IV: T&PS TO BE DEPLOYED BY CONTRACTOR

4.5 Crane log sheet for each of the crane on daily basis are to be certified by the BHEL engineer. Contractor shall submit the monthly Running Account Bills along with duly certified log sheets

4.6 In case the contractor does not deploy or delays deployment or deploys for a shorter period of major T&P with reference to schedule specified or T&P deployed is **out of service/ unavailable for continuous more than 5 days in a month, BHEL will recover non-refundable penalty per day in the following manner:**

a) 12/ 14/ 18/ 20MT Crane - @ Rs 2500/- per day

b) 20 MT Trailer - @ Rs 2500/- per day

For the daily recovery rate for other T&P/IMTEs BHEL Engineer decision shall be final and binding on the contractor.

4.7 Contractor shall ensure that all the MMEs, T&Ps, cranes and trailers mentioned in the deployment plan shall be in good working condition throughout the period mentioned in the deployment plan. In case of non-compliance, if any, as **listed in clause 4.8 below**, the charges as per rates towards deployment of the particular T&P shall be not be paid for number of days beyond 10 days calculated on pro-rata basis, **as per the Cl. No. 7.5 Sl. No.2**, in the running bills of the respective months for any or all of the non-compliance, if any, as mentioned below.

(Explanation: If there is non-compliance as listed below in any one particular crane/T&P in any one month then the charges shall be unpaid in the running bill for number of days of non-compliance in that month on pro-rata basis for that crane/T&P alongwith deduction as per day penalized rates).

4.8 **List of non-compliance:**

- i. In case deployment of T&P w.r.t requirement/schedule, is delayed or deployed for a shorter period or abnormal down time of T&P.
- ii. In case T&P w.r.t requirement was not deployed by the contractor as per instruction of BHEL and BHEL had to deploy either its own T&P.
- iii. BHEL had to deploy the T&P from outside agency.
- iv. Non availability / not working condition of the particular crane cumulatively for more than 10 (ten) working days in the calendar month during the period mentioned in the deployment plan.

4.9 In case BHEL had to deploy its own T&P, hire charges of T&P applicable for outside agencies as per extant guidelines for "Hire Charges on issue of Capital Tools & Plants" shall be recovered.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - IV: T&PS TO BE DEPLOYED BY CONTRACTOR

In case BHEL had to deploy the T&P from outside agency, actual hiring cost plus applicable overheads shall be recovered.

- 4.10 All the tools and tackles/ measuring instruments shall be duly tested/ calibrated and valid certificate to that effect should be submitted to BHEL site in-charge before the start of work.
- 4.11 T&P's mentioned above shall be specifically deploy as per the respective packages. However, as per work requirement and availability of T&Ps the inter use in Material Handling and Mechanical works may be permitted as per the instruction of the BHEL Engineer.
- 4.12 If the work related to T & Ps mentioned above is completed then, BHEL can release that T & P during contract period / extended period, if any. However, written permission shall be taken by contractor from BHEL construction Manager before releasing the T&P.
- 4.13 In addition to the deduction mentioned in **clause 4.6, 4.7 & 4.8 above**, if work gets delayed due to non-availability of any T & P, BHEL reserves the right to get the work done at the risk and cost of contractor.
- 4.14 Any or part or all of the T & Ps of the contractor identified for the tendered package shall not be engaged for any works other than that of the works intended in this tender.
- 4.15 In case BHEL decides to engage the cranes for any of its job then the contractor is bound to operate the cranes with his own operator as per the direction of BHEL engineer. However, the mutually agreed charges towards high speed Diesel only shall be paid to the contractor. No other charges shall be payable to contractor on account of this.
- 4.16 During the extended period of contract, if any, contractor shall arrange all MMEs, T & Ps excluding the cranes and trailers. Arranging cranes and trailers shall be governed suitably by clause 4.17 & 4.18 below.
- 4.17 Deployment of cranes and trailers mentioned in the deployment plan, if required for more period of deployment, over and above the indicated period, shall be deployed by the contractor against specific request from BHEL. The charges towards deployment of the particular T & P during contract period for each month shall be paid which are calculated **as per the Cl. No. 7.5 Sl. No.2.**
- 4.18 During the extended period of contract, services of T&Ps shall be provided by the contractor as per the instruction of BHEL engineer. The monthly charges towards

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - IV: T&PS TO BE DEPLOYED BY CONTRACTOR

deployment of the particular crane & trailer shall be paid at the rate of 90 % of monthly awarded rates for a period of 12 months after completion of contract period. Thereafter (contract period+12 months) rate will be decided after mutual agreement. No extra payment shall be made for T&Ps other than cranes & trailer.

- 4.19 The first RA bill shall be released only after receipt 100% of **Precast concrete Sleepers** at site. The sleepers are to be taken back by the contractor on as is where basis is. No claim on account of damage / loss shall be payable by BHEL.
- 4.20 **Duration for deployment of major T&Ps for which separate monthly hiring rates are being paid as per PART-I-B & PART-II-F OF RATE SCHEDULE is tentative and may change as per requirement. Mobilization and demobilization of these T&Ps shall strictly be done as per the instructions from BHEL. BHEL also reserves the right to direct the contractor to dis-continue/ de-mobilize any/ all of these cranes within the contract period/ extended contract period with 60 days advance written notice without assigning any reason. No payment will be made for the period after the date of demobilization/ discontinuance notified by BHEL.**
- 4.21 Any or part or all of the T&Ps of the contractor identified for the tendered package shall not be engaged by contractor for any works other than that of the works intended in this tender. **However BHEL reserves the rights to engage those T&Ps for which separate monthly rates are being paid as per PART-I-B OF RATE SCHEDULE for its own works other than that of the works intended in this tender during the period of contract. In such cases fuel will be provided by BHEL. However operator for the same shall be provided by contractor.**

TECHNICAL CONDITIONS OF CONTRACT (TCC)
CHAPTER - V: T&PS TO BE DEPLOYED BY BHEL ON SHARING BASIS

5.0 T & Ps AND IM TEs DEPLOYED BY BHEL ON SHARING BASIS

| LIST OF T & P BEING PROVIDED BY BHEL ON FREE OF HIRE CHARGES AND ON SHARING BASIS | | | |
|---|----------------------------------|-----------------|------|
| Sl. No. | Equipment | Capacity | Qty. |
| 1 | EOT Crane (Inside Turbine bldg.) | 125/ 25 MT | 1 No |
| 2 | CRAWLER CRANE | 55/ 100/ 135 MT | APR |

APR- As per requirement

NOTES:

- Cl.4.2.2.16 c) of SCC** shall be read as day-to-day upkeep and running maintenance like filling topping up of lubricants, changing filters, etc including repair of self-starter, batteries and dynamo of these cranes shall be excluded from the scope of the contractor. In case of breakdown of crane, contractor shall provide the necessary manpower for maintenance of the crane to maintenance agency, failing to do so BHEL will get the job done at the risk and cost of contractor. BHEL may also provide cranes through crane hiring agencies in which case the day-to-day upkeep and running maintenance shall be excluded from scope of contractor.
- Cl.4.2.2.16 e) of SCC - The operator for BHEL's cranes 75 MT & above capacity are being provided by BHEL free of cost. For cranes capacity less than 75 MT valid operator is to be arranged by vendor. Further fuel for operation of all BHEL cranes, shall be provided by contractor within the final accepted rates.**
- The contractor shall make necessary arrangement like lying of special sleeper beds, assembly & dismantling of heavy lift attachment, boom, jib etc. for movement and operation of crane.
- Other T&P mentioned above, contractor shall transport from BHEL stores, install, operate, carry out maintenance, dismantle after use and return to BHEL stores.

Cranes provided by BHEL will be on sharing basis with other agencies / contractors of BHEL. The allocation of cranes shall be the discretion of BHEL engineer, which shall be binding on the contractor. Cranes will be deployed at appropriate time as decided by BHEL for suitable duration and intended purpose. Augmentation of BHEL T & P under special circumstances shall be discretion of BHEL.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - VI: TIME SCHEDULE

6.0 TIME SCHEDULE

6.1 INITIAL MOBILIZATION

PART-I & II:

After receipt of LOI, contractor shall discuss with Project Manager / Construction manager regarding initial mobilization. Contractor shall mobilize necessary resources within **15 days of issue of LETTER OF INTENT** or as per the directive of BHEL. Such resources shall be progressively augmented to match the schedule of milestones and commissioning. However, BHEL Engineer will certify the actual date of start of work after adequate mobilization of manpower, material handling equipment and other T&P by the contractor.

6.2 AUGMENTATION OF MOBILISATION

PART-I:

Contractor shall subsequently augment his resources in such a manner that daily errands/activities shall be completed on daily basis and the entire work is completed within the time schedule/contract period. Mobilization of contractor's resources shall be made and augmented from time to time in such a manner that the work in scope is carried out in an uninterrupted manner.

PART-II:

The contractor shall have to subsequently augment his resources in such a manner that the entire facility for Weigh Bridge is ready for BHEL's use within **TWO MONTHS**.

6.3 CONTRACT PERIOD

PART-I:

Major materials as covered within the scope of this tender are likely to be received in stages up to 45 months from the actual date of start of work. **The Contract period shall be considered as 45 (Forty Five) months from "The Start of Contract Period"**. The deployment period of T&Ps, Manpower Services, Water Sprinkling services and Mobile Toilets shall be as per scope in TCC.

PART-II:

The total contract period for providing services of **Pit-less Weighbridge** shall be 45 months and be divided in two parts as under:

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - VI: TIME SCHEDULE

- a) **INSTALLATION PERIOD:** The installation period of 2 months is provided for contractor to supply, install & commission his equipment, set up the necessary establishment and make operational all his facilities for rendering the service.
 - b) **OPERATION PERIOD:** The operation period shall be 43 months from the date of completion of declaring the facilities of contractor as “Operational” as per relevant clause.
- 6.4 If work is not completed within contract period the same may be extended at the discretion of BHEL.
- 6.5 The scope of work under this contract is deemed to be completed, when so certified by the Engineer.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - VII: TERM S OF PAYM ENT

7.0 TERM S OF PAYM ENT

- 7.1 BHEL Engineer will certify regarding the actual work executed in the measurement books and bills, which shall be accepted by the contractor in measurement book.
- 7.2 Contractor shall submit bills for the work completed under the specification, once in a month detailing work done during the month. The format for billing shall be approved by BHEL before raising invoices and payment shall be released after receipt of bill complete in all respect.
- 7.3 Shortage / damage reports on BHEL's standard materials management forms and No payment shall be released till the contractor submits these reports and are verified by the Engineer.
- 7.4 Subject to any deduction which BHEL may be authorized to make under the contract, the contractor on the certificate of the Engineer at site be entitled for payment as explained hereunder:-

PART-I:

7.5 **PAYM ENT FOR T&P DEPLOYM ENT (31.66 % of Lumpsum Price Quoted by Bidder)**

1. Payment for the month as given in (c) below shall be paid on monthly basis on meeting the conditions (a) & (b) below:
 - a) If respective crane/trailer is available in working condition in line with clause no 4.0 of Chapter-IV.
 - b) If unloading of all the received materials in that billing month is completed.
 - c) **Monthly pro-rata payment for deployment of T & Ps** = The amount of Charges per month calculated as per RATE SCHEDULE of Price bid and value which comes for each item (crane / trailer) shall be the amount payable towards deployment of respective T&Ps (crane / trailer) for each month.

Explanation: Monthly pro-rata payment for deployment of T&Ps as mentioned below:-

2. **Monthly pro- rata payment for cranes/ trailer**

| Sl.no | Crane / Trailer | % of Lumpsum Price Quoted by Bidder |
|-------|-----------------|-------------------------------------|
| 1. | 18/20 MT Crane | 0.337006% |
| 2. | 12/14 MT Crane | 0.299746% |
| 3. | 20 MT Trailer | 0.300158% |

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - VII: TERM S OF PAYM ENT

The percentage of charges per month per item to be considered for the purpose of payment for mentioned T&Ps deployed during the original & extended period of contract, if any.

7.6 If the clause 7.5.1 (a) above is not fully satisfied, then the payment shall be calculated as governed by the clause no 4.6, 4.7 & 4.8 of Technical conditions of contract. **The deducted amount on this account shall not be returned back in any situation.**

7.7 **40.81% of Lumpsum Price Quoted by Bidder will be paid per ton basis for Handling all items of Manufacturing Units, Chemicals, Structural steel, Reinforcement steel and Cement as below:**

The 'Rate per MT of materials' calculated as above shall be paid on completion of the activities mentioned in the following table on pro-rata basis.

| Sl.No. | Description of Activity | % of Payment |
|--------|---|--------------|
| 1. | UNLOADING, SHIFTING TO OPEN/ COVERED STORES | 30% |
| 2. | UPDATION OF RECEIPT DETAILS, IN STORE MATERIAL REGISTERS/ BHEL MM PACKAGE SYSTEM | 15% |
| 3. | STACKING AND VERIFICATION | 15% |
| 4. | UPDATION OF VERIFICATION DETAILS IN MATERIAL STOCK REGISTERS, SUBMISSION OF REPORTS AS PER SPECIFIED FORMATS FOR SHORTAGE/ OPEN DELIVERY, LODGING OF POLICE REPORTS IF REQUIRED, DOCUMENTS FOR INSURANCE CLAIMS ETC, AND PREPARATION OF MATERIAL RECEIPT CERTIFICATES IN PRESCRIBED FORMATS WHERE EVER APPLICABLE | 25% |
| 5. | IDENTIFICATION OF MATERIAL IN READY TO LIFT POSITION FOR ISSUE TO BHEL/ ERECTION AGENCY, AND UPDATION OF ISSUE DETAILS IN STORES RECORDS | 12% |
| 6. | COMPLETION OF CONTRACTUAL OBLIGATIONS (7.15 OTHERS) | 3% |
| | Total | 100% |

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - VII: TERM S OF PAYM ENT

- 7.8 **3.59% of Lumpsum Price Quoted by Bidder will be paid per ton basis for Re-Shifting, Re-Stacking & Dispatch all items of Manufacturing Units, Chemicals, Structural steel, Reinforcement steel and Cement as below :**

The 'Rate per MT of materials' calculated as above shall be paid on completion of the activities mentioned in the following table on pro-rata basis.

| Sl.No. | Description of Activity | % of Payment |
|--------|--|--------------|
| 1. | M ATERIAL RE-SHIFTING & RE-STACKING | 35% |
| 2. | IDENTIFICATION OF MATERIALS, TAGGING, PACKING IF REQUIRED,PREPARATION OF GATE PASSES ETC | 15% |
| 3. | LOADING OF MATERIALS, INCLUDING T&P OF BHEL, INTO TRUCKS/ CARRIERS AT SITE STORES/ERECTION SITE FOR ONWARD TRANSPORTATION TO OTHER DESTINATIONS, IF REQUIRED (TRANSPORTATION BY OTHER AGENCIES). | 35% |
| 4. | UPDATION OF STORE DOCUM ENTS/ BHEL M M PACKAGE SYSTEM | 12% |
| 5. | COM PLETION OF CONTRACTUAL OBLIGATIONS (7.15 OTHERS) | 3% |
| | Total | 100% |

- 7.9 **6.03% of Lumpsum Price Quoted by Bidder will be paid for Water Sprinkling services:**
- Shall be paid in 40 equal instalments as regular monthly payment toward each completed month of service on providing satisfactory services and certification thereof by BHEL engineer. For this work contractor has to deploy minimum 6000 ltr water tanker with water sprinkling arrangement. 05 trips of sprinkling are to be done every day or as per instructions of BHEL Engineer. Payment shall be made on prorata basis of actual number of trip(s) as certified by BHEL engineer.

Cost of water shall be separate and as per rates notified by HI & WRD from time to time. Present rate is Rs. 300 per 2500 cft i.e. Rs. 0.12/ cft. Cost of water shall be revised based on latest official circulars and shall be reimbursed as per actuals on submission of proper documents. The cost of driver, helper and fuel is in the scope of Contractor only.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - VII: TERM S OF PAYM ENT

7.10 **3.43% of Lumpsum Price Quoted by Bidder will be paid for supply, installation & maintenance of 04 nos. Mobile Toilets. Maintenance charges shall be paid on monthly basis:-**

- a. 0.66% shall be paid on supply & installation of 04 nos. mobile toilets
- b. 2.77% shall be paid in 43 equal instalments post installation as regular monthly payment towards each completed month of maintenance on providing satisfactory services and certification thereof by BHEL engineer.

PART-II:

7.11 **14.48% of Lumpsum Price Quoted by Bidder will be paid for services of Weigh Bridge:**

7.12 **TERM S OF PAYM ENT FOR PROVIDING WEIGH SERVICE ONLY:-** Shall be paid in 43 equal installments as regular monthly payment toward each completed month of service on providing satisfactory services and certification thereof by BHEL engineer. The period for payment shall start after weigh bridge is made operational during first 02 (TWO) months of mobilization.

7.13 BHEL shall not pay any charges other than those specified in these specifications.

7.14 During the extended period of contract of weighbridge, services of Weigh Bridge shall be provided by the contractor as per the instruction of BHEL engineer. The monthly charges towards services of Weigh Bridge shall be made on pro-rata basis for the utilized number of days at the monthly awarded rates derived as per SI no 7.12.

7.15 **OTHERS**

% from every RA Bill to be paid only after satisfactory completion otherwise forfeited:

| SL NO | Description of Activity | % of Payment |
|-------|---|--------------|
| 1. | Removal of grass/weeds and other plant growth in the store area | 0.5% |
| 2. | Housekeeping & cleaning of all closed sheds | 0.5% |
| 3. | Safety + Illumination | 0.5% |
| 4. | Preservation planned for month | 0.5% |
| 5. | Implementation of E-stores for records/data and completion of monthly reconciliation (as per clause 2.48.3) | 1% |

7.16 **M ATERIAL M ANAGEM ENT SERVICES:-** Payment shall be made as per the man-month rate fixed in PART-I-C OF RATE SCHEDULE, on pro-rata basis as at actuals and as per TCC clause 2.46.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - VIII: TAXES AND OTHER DUTIES

8.0 TAXES & DUTIES

- 8.1 Price quoted should be inclusive of all applicable Taxes/ charges excluding GST.
- 8.2 The contractor shall pay all (save the specific exclusions as enumerated in this clause) taxes, fees, license, charges, deposits, duties, tools, royalty, commissions, other charges, etc. which may be levied on the input goods & services consumed and output goods & services delivered in course of his operations in executing the contract. In case BHEL is forced to pay any of such taxes/ duties, BHEL shall have the right to recover the same from his bills or otherwise as deemed fit.

However, provisions regarding GST on output supply (goods/ service) and TDS/ TCS as per Income Tax Act shall be as per following clauses.

8.3 GST (Goods and Services Tax):

- 8.3.1 GST as applicable on output supply (goods/services) are excluded from contractor's scope; therefore, contractor's price/rates shall be exclusive of GST. Reimbursement of GST is subject to compliance of following terms and conditions. BHEL shall have the right to deny payment of GST and to recover any loss to BHEL on account of tax, interest, penalty etc. for non-compliance of any of the following condition.
- 8.3.2 The admissibility of GST, taxes and duties referred in this chapter or elsewhere in the contract shall be limited to direct transactions between BHEL & its Contractor. BHEL shall not consider GST on any transaction other than the direct transaction between BHEL & its Contractor.
- 8.3.3 Contractor shall obtain prior written consent of BHEL before billing the amount towards such taxes. Where the GST laws permit more than one option or methodology for discharging the liability of tax/levy/duty, BHEL shall have the right to adopt the appropriate one considering the amount of tax liability on BHEL/ Client as well as procedural simplicity with regard to assessment of the liability. The option chosen by BHEL shall be binding on the Contractor for discharging the obligation of BHEL in respect of the tax liability to the Contractor.
- 8.3.4 Contractor has to submit GST registration certificate of the concerned state. Contractor also needs to ensure that the submitted GST registration certificate should be in active status during the entire contract period.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - VIII: TAXES AND OTHER DUTIES

- 8.3.5 Contractor/Vendor has to issue invoice indicating HSN/SAC code, Description, Value, Rate, applicable tax and other particulars in compliance with the provisions of relevant GST Act and Rules made thereunder.
- 8.3.6 Vendor has to submit GST compliant invoice within seven days from the due date of invoice as per GST Law. In case of delay, BHEL reserves the right of denial of GST payment if there occurs any hardship to BHEL in claiming the input thereof. In case of goods, vendor has to provide scan copy of invoice & GR/ LR/ RR to BHEL before movement of goods starts. Special care should be taken in case of month end transactions.
- 8.3.7 Vendor has to ensure that invoice in respect of such services which have been provided/ completed on or before end of the month should not bear the date later than last working day of the month in which services are performed.
- 8.3.8 Subject to other provisions of the contract, GST amount claimed in the invoice shall be released on fulfilment of all the following conditions by the Contractor: -
- a. Supply of goods and/or services have been received by BHEL.
 - b. Original Tax Invoice has been submitted to BHEL.
 - c. Contractor/ Vendor has submitted all the documents required for processing of bill as per contract/ purchase order/ work order.
 - d. In cases where e-invoicing provision is applicable, vendor/ contractor is required to submit invoice in compliance with e-invoicing provisions of GST Act and Rules made thereunder.
 - e. Contractor has filed all the relevant GST return (e.g. GSTR-1, GSTR-3B, etc.) pertaining to the invoice submitted and submit the proof of such return along with immediate subsequent invoice. In case of final invoice/ bill, contractor has to submit proof of such return within fifteen days from the due date of relevant return.
 - f. Respective invoice has appeared in BHEL's GSTR - 2A for the month corresponding to the month of invoice. Alternatively, BG of appropriate value may be furnished which shall be valid at least one month beyond the due date of confirmation of relevant payment of GST on GSTN portal or sufficient security is available to adjust the financial impact in case of any default by the contractor.
 - g. Contractor has to submit an undertaking confirming the payment of all due GST in respect of invoices pertaining to BHEL.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - VIII: TAXES AND OTHER DUTIES

8.3.9 Any financial loss arises to BHEL on account of failure or delay in submission of any document as per contract/purchase order/work order at the time of submission of Tax invoice to BHEL, shall be deducted from contractor's bill or otherwise as deemed fit.

8.3.10 TDS as applicable under GST law shall be deducted from contractor's bill.

8.3.11 Contractor shall comply with the provisions of e-way bill wherever applicable. Further wherever provisions of GST Act permits, all the e-way bills, road permits etc. required for transportation of goods needs to be arranged by the contractor.

8.3.12 Contractor shall be solely responsible for discharging his GST liability according to the provisions of GST Law and BHEL will not entertain any claim of GST/interest/penalty or any other liability on account of failure of contractor in complying the provisions of GST Law or discharging the GST liability in a manner laid down thereunder.

8.3.13 In case declaration of any invoice is delayed by the vendor in his GST return or any invoice is subsequently amended/ altered/ deleted on GSTN portal which results in any adverse financial implication on BHEL, the financial impact thereof including interest/penalty shall be recovered from the Contractor's due payment.

8.3.14 Any denial of input credit to BHEL or arising of any tax liability on BHEL due to non-compliance of GST Law by the Contractor in any manner, will be recovered along with liability on account of interest and penalty (if any) from the payments due to the Contractor.

8.3.15 In the event of any ambiguity in GST law with respect to availability of input credit of GST charged on the invoice raised by the contractor or with respect to any other matter having impact on BHEL, BHEL's decision shall be final and binding on the contractor.

8.4 Variation in Taxes & Duties

Any upward variation in GST shall be considered for reimbursement provided supply of goods and services are made within schedule date stipulated in the contract or approved extended schedule for the reason solely attributable to BHEL. However downward variation shall be subject to adjustment as per actual GST applicability.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - VIII: TAXES AND OTHER DUTIES

In case the Government imposes any new levy/tax on the output service/ goods after price bid opening, the same shall be reimbursed by BHEL at actual. The reimbursement under this clause is restricted to the direct transaction between BHEL and its contractor only and within the contractual delivery period only.

In case any new tax/levy/duty etc. becomes applicable after the date of Bidder's offer but before opening of the price Bid, the Bidder/ Contractor must convey its impact on his price duly substantiated by documentary evidence in support of the same before opening of price bid. Claim for any such impact after opening the price bid will not be considered by BHEL for reimbursement of tax or reassessment of offer.

8.5 Income Tax

TDS/ TCS as applicable under Income Tax Act, 1961 or rules made thereunder shall be deducted/collected from contractor's bill.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - IX: OTHERS

- 9.1 The intent of specification is to provide material handling and materials management services according to the most modern and proven techniques and codes. The omission of specific reference to any method, equipment or materials necessary for proper and efficient unloading, transportation, verification, stacking & preservation etc. shall not relieve the contractor of the responsibility of providing such facilities to complete the work without any extra compensation.
- 9.2 The work shall be executed under typical conditions of major nuclear power projects and in conjunction with numerous other operations at site. The contractor and his personnel shall cooperate with personnel of customer's contractors, coordinating his work with others and proceed in a manner that shall not delay or hinder the progress of work as a whole.
- 9.3 All the work shall be carried out as per the instructions of BHEL engineer. BHEL engineer's decision regarding correctness of the work and method of working shall be final and binding on the contractor.
- 9.4 The contractor shall perform all required services which may not be specified herein but nevertheless required for the completion of work within quoted rates.
- 9.5 All necessary certificates and licenses required to carry out this work are to be arranged by the contractor expeditiously.
- 9.6 All cranes, transport equipments, handling equipment, tools, tackles, fixtures, equipment, manpower, supervisors/ engineers, consumables etc required for this scope of work shall be provided by the contractor.
- 9.7 All expenditure including taxes and incidentals in this connection will have to be borne by the contractor unless otherwise specified in the relevant clauses elsewhere in these specifications. The contractor's quoted rates shall include all such contingencies. In this connection refer relevant clause of general conditions of contract.
- 9.8 The contractor shall perform all required services which may not be specified herein but nevertheless required for the completion of work within quoted rates.
- 9.9 The distances indicated in these specifications are only approximate. However, the tenderers should assess the various distances and site conditions by visiting site before submitting their offer. No additional/ extra claims for any variation in this regard will be entertained.
- 9.10 Contractor shall arrange for cutting and removal of vegetation growth/grass etc in the storage yard/ store as and when called for by BHEL as incidental to work. BHEL will take

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - IX: OTHERS

appropriate action at the risk & cost of the contractor in case of failure in this regard. Contractor shall use latest available methodology to ensure removal of vegetation.

- 9.11 If the contractor or his workmen or employees break, deface, injure or destroy any part of a building, road, kerbs, fence, enclosures, water pipes, cables, drains, electric or telephone posts or wires, trees or any other property or to any part of erected equipments, stored components etc. within the project premises or outside, the contractor shall make the same good at his own expenses.
- 9.12 Sleepers will be taken back by contractor after the completion of contract period on "as is where is" basis.
- 9.13 Housekeeping of closed sheds are also included in the scope of work. Contractor shall carry out the housekeeping works on regular intervals (once a week).
- 9.14 Fabrication & placement of racks in close sheds, if required - For fabrication of racks BHEL will provide the steel on free of cost. The contractor will be paid @ Rs. 13,000/- per MT for fabrication of such works.
- 9.15 **OVERRUN COMPENSATION (Clause no. 2.12 of GCC)**
Overrun compensation during extended period shall be applicable only for **Part-I-A of RATE SCHEDULE**.
- 9.16 **PRICE VARIATION (Clause no. 2.17 of GCC)**
PVC during extended period will be applicable only for **Part-I-A of RATE SCHEDULE**.
- 9.17 **PERFORMANCE GUARANTEE (Clause no. 2.24 of GCC)**
Irrespective of provisions in tender elsewhere, in view of nature of work, performance guarantee is not required under this contract.

TECHNICAL CONDITIONS OF CONTRACT (TCC)
CHAPTER - X: ANNEXURES

ANNEXURE – I

GENERAL IDEA OF WEIGHTS TO BE HANDLED

The information given below is very tentative and not complete. Only a few of the typical components are listed below to give a general idea to the bidder. The weights indicated below are only approximate and are liable to vary.

| | | |
|-----------|---|------------------|
| A. | Approximate total weight of material | 67,736 MT |
| i. | Reinforcement Steel | 21,589 MT |
| ii. | Structural Steel | 3,937 MT |
| iii. | Cements in bag | 10,000 MT |
| iv. | Approximate Weight of Piping System | 14,853 MT |
| v. | Approximate Weight of TG & Aux. | 11,957 MT |
| vi. | Approximate Weight Electrical, C&I, Station C&I, Chemicals, Mandatory Spares, Packing/ PSNR Material, etc | 5,400 MT |

NOTES:-

1. The description and weight mentioned above are approximate and liable to vary as per design consideration of the manufacturing unit.
2. The payment will be made at the quoted / accepted rates for the tonnage actually handled.
3. The list is only illustrative and not exhaustive. Handling of all the material has to be done as per instructions of BHEL Engineer.

TECHNICAL CONDITIONS OF CONTRACT (TCC)
CHAPTER - X: ANNEXURES

ANNEXURE-II

TECHNICAL SPECIFICATION OF WEIGH BRIDGE

| S. No. | PARTICULARS & BHEL SPECIFICATION | |
|--------|--|----------------------------------|
| 1. | CONFIGURATION | |
| 1.1 | Construction | Pit Less Type |
| 1.2 | Weighing Capacity | 100 metric ton (10000 kg) |
| 1.3 | Platform Size (minimum) | 20 m x 3.5 m |
| 1.4 | Platform height from ground level | Bidder to Specify |
| 1.5 | Ramp inclination ratio | Bidder to Specify |
| 1.6 | Mechanism / Principle | Electronic with Load Cells |
| 1.7 | No. of Load Cells | Minimum 8 Nos. Bidder to Specify |
| 1.8 | Weight Indication | Digital Indication System |
| 2 | BASIC DESIGN & CONSTRUCTIONAL FEATURES | |
| 2.1 | The basic design shall be suitable for electronic measuring system using load cells and digital indication system. | |
| 2.2 | The measuring accuracy shall be as per Class III Accuracy and abided by Indian Weights & Measures Act. | |
| 2.3 | The weigh bridge shall be of free motion strut mounted type construction. | |
| 2.4 | For a better and balanced weighing, the load cell should be suitably arranged for supporting the platform. Vendor to confirm and give details. | |
| 2.5 | The platform structure shall be fabricated type with welded rolled steel sections and plates of reputed make like SAIL, JINDAL, TISCO, etc. Bidder has to submit the details on the platform construction with outline drawings and material used, along with the offer. Thickness of Plate used for the platform to be specified. | |
| 2.6 | The fabricated platform structures are to be shot blasted prior to painting and finished with primer and epoxy coating of required Dry Film Thickness (DFT). Bidder to give details on paints applied and DFT. | |
| 2.7 | The platform plates are to be provided with anti-skid ribbing or made of checkered plates. | |
| 2.8 | Bolt on type side railing with brackets are to be provided for the platform. | |
| 2.9 | Stoppers or bumpers are to be provided in longitudinal and transverse directions. | |

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - X: ANNEXURES

| S. No. | PARTICULARS & BHEL SPECIFICATION | |
|--------|---|---|
| 2.10 | The design of the weigh bridge shall be such that all the load cells can be accessed easily during maintenance/ breakdown. | |
| 2.11 | The weigh bridge indicator cum display system shall be compatible with a PC, for taking print outs, data entry to hard disk of the PC and giving connectivity to external IT network system through suitable and reliable communication cables and ports. | |
| 3 | LOAD CELL DETAILS | |
| 3.1 | Rated Capacity of each Load Cell (metric ton) | Bidder to Specify |
| 3.2 | Type of Load cell | Compression type Bidder to specify and give complete details |
| 3.3 | Load cell technology | Analog / Digital Bidder to Specify and give complete details |
| 3.4 | Make & Model no. | Bidder to Specify |
| 3.5 | Accuracy Level | In the order of 0.02% Bidder to Specify |
| 3.6 | Electrical Input Supply [Minimum & Maximum] | Bidder to Specify |
| 3.7 | External Communication | Bidder to Specify |
| 3.8 | Output Resolution | Bidder to Specify |
| 3.9 | Output Update Rate | In the order of 10 readings per second. Bidder specify |
| 3.10 | Repeatability | Bidder to Specify |
| 3.11 | Overload Rating (Safe) | Not less than 125% of rated capacity. Bidder to Specify |
| 3.12 | Overload Rating (Ultimate) | Not less than 250% of rated capacity. Bidder to Specify |
| 3.13 | Sensitivity in mV/V | 2.0 ± 0.1% |

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - X: ANNEXURES

| S. No. | PARTICULARS & BHEL SPECIFICATION | |
|--------|--|--|
| 3.14 | Operating Temperature Range | -01 °C to +50 °C |
| 3.15 | Temperature Effect on Sensitivity | Bidder to Specify |
| 3.16 | Temperature Effect on Zero Balance | Bidder to Specify |
| 3.17 | Protection Class | IP 67/ IP 68 |
| 3.18 | Citation (For Test Certificate) | OIM L R60 |
| 3.19 | Creep in 30 min. | Bidder to Specify |
| 3.20 | Shall be unaffected by 'off-centre' loads | |
| 3.21 | Canister design to be strong enough to withstand wear, tear and accidental damage due to harsh usage | |
| 3.22 | Shall be hermetically sealed | |
| 3.23 | Shall be provided with automatic diagnostics | |
| 3.24 | Shall withstand hostile conditions due to extreme temperatures, lightning, wind, shock and vibration | |
| 3.25 | Shall be provided with over load protection | |
| 3.26 | Shall be provided with 'low torque' anti rotation load button | |
| 3.27 | Shall be provided with waterproof connectors | |
| 3.28 | Test Certificate for Load Cell's Accuracy Test conducted from reputed laboratory is required | |
| 4 | DIGITAL INDICATION SYSTEM | |
| 4.1 | Make & Model no. | Bidder to specify |
| 4.2 | Processor | Micro Processor based [Bidder to specify make and model] |
| 4.3 | Processor Clock | Bidder to specify |
| 4.4 | Real Time Clock | On Board Battery Backed |
| 4.5 | Memory | For data storage, capable of storing around 1500 weighment records with battery backup. Bidder to specify the memory storage capacity. |
| 4.6 | Power Supply | Switched Mode Power Supply |
| 4.7 | Input Voltage | 230 V AC, 50 Hz |
| 5 | Protection | |
| 5.1 | Fuse of suitable rating for It AC Mains. | Bidder to specify |
| 5.2 | Input Line Filter for EMI and RFI Suppressions | Bidder to confirm |
| 5.3 | Spike Suppressors for input transits. | Bidder to confirm |
| 5.4 | High voltage protectors. | Bidder to confirm |

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - X: ANNEXURES

| S. No. | PARTICULARS & BHEL SPECIFICATION | |
|--------|--|---|
| 5.5 | Degree of Resistance to dirt and moisture. | Vendor to specify the IP (Ingress Protection) number |
| 5.6 | Splash proof keypad | Bidder to specify |
| 5.7 | Power Consumption (Watts) | Bidder to specify |
| 5.8 | A/D Conversion | Bidder to furnish details |
| 5.9 | Load Cell Excitation | Bidder to furnish details |
| 5.10 | Repeatability | ± 0.01% of Full Scale |
| 5.11 | Display | A suitable Illuminated Display (with Backlight) for displaying numerals as well as alphabets, at any time. |
| 5.12 | Remote Display | Remote Display port to connect to red LED seven segment display to indicate weight on the platform |
| 5.13 | Reading Capacity of Display unit | Minimum 80 metric ton (i.e. 20 metric ton above the rated capacity of the weigh bridge) Vendor to specify |
| 5.14 | Features | <ul style="list-style-type: none"> Configurable Decimal points Flicker free display of weight Configurable Zero tracking Over & Under Range Indication Character height (mm) Number of digits Vendor to specify |
| 5.15 | Printer Port | Compatible for connecting dot matrix/ laser printer for printing of weighment of records and reports. |
| 5.16 | Serial Port / Ethernet | RS-232 Serial Port for computer interfacing or driving remote display and provision of Ethernet to Net Connectivity. Vendor to specify. |
| 6 | Computer and Printer | |

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - X: ANNEXURES

| S. No. | PARTICULARS & BHEL SPECIFICATION | |
|--------|---|---|
| 6.1 | Computer installed with Windows Operating System, Keyboard, Mouse and Printer will be arranged by BHEL. Vendor to specify the configuration details like OS version, Size of RAM and HDD, type of printer required etc. | |
| 6.2 | LAN connection with BHEL site office. | |
| 7 | WEIGHBRIDGE SOFTWARE | |
| 7.1 | The OFFER shall also mention the SOFTWARE required to integrate the function of the Hardware with Operations of the Weigh-Bridge offered. Bidder to specify the software capability to interface with SAP or other software at BHEL. NOTE: Bidder to list down the technical features/ functions of the SOFTWARE in detail. | |
| 7.2 | Software for SMART CALIBRATION (minor weigh correction by software) shall be provided by the vendor. In addition to Software for pre-start data entry for loading details, date & time, location, etc. Bidder to specify. | |
| 8 | PRINT-OUT FIELD | |
| 8.1 | <p>The print out slip should contain the following details:-</p> <ul style="list-style-type: none"> a) BHEL Logo b) Ticket number and Date auto generated c) Vehicle Registration Number up to 25 space alphanumeric and special characters d) Tare Weight, Net Weight, Gross Weight -in kg e) Date (DD/MM/YYYY) & Time (hh:mm:ss 24 hour format) of each Weighment f) Item Particulars / Description minimum 32 characters comprising of space, alpha numeric and special characters mode. g) Address of Transporter with Phone Number 50 characters. h) Invoice number (manually entered) comprising of alphanumeric, space and special characters. i) Stores Dept. Code Number, Designation of persons for Weighing and Authority, etc. in a PRINTABLE FORMAT <p>To be discussed in detail at the time of order finalization.</p> | |
| 8.2 | Report generation | Date wise, Vehicle wise, sorting data based on print out fields. Bidder to specify |
| 9 | Hardware | The Bidder has to list down the Hardware required to be supplied to assure the specified functions from the weigh bridge offered. |
| 10 | Additional Features | Bidder to list down the list of additional features available in the OFFERED Weight Bridge & Control Unit. |

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - X: ANNEXURES

| S. No. | PARTICULARS & BHEL SPECIFICATION |
|--------|---|
| 11 | LIGHTING SYSTEM |
| 11.1 | A spot light with sufficiently long cable shall also be provided for 24 V AC supply |
| 12 | UN-INTERRUPTED POWER SUPPLY UNIT (UPS) |
| 12.1 | UPS of suitable rating with maintenance free dry batteries shall be provided for operations lasting over three continuous hours. |
| 12.2 | Make. : APC / MICROTEK / AMARON or any other reputed make acceptable to BHEL |
| 12.3 | Model & Rating (kVA): Bidder to specify |
| 12.4 | Catalogue of the UPS and battery shall be submitted with the Technical Offer. |
| 12.5 | Spares Package for the UPS for 2 years working also shall be offered. |
| 13 | IMPORTANT POINTS |
| 13.1 | Single Phase AC 230V \pm 10%, 50 Hz \pm 1.5 Hz, Power Supply Source will be provided by BHEL at a single point near the weighing machine, as per the layout recommended by Vendor. All types of cables, connections, circuit breakers etc. required for connecting BHEL's power supply point to different parts of the machine/control cabinets, shall be the responsibility of vendor. |
| 13.2 | All electrical equipment shall be tropicalized and shall have IP 54 degree of protection |
| 13.3 | All electrical control cabinets & panels should be dust and vermin proof |
| 13.4 | Vendor should ensure the proper Earthing for the machine and its accessories. Bidder has to ensure the works relating to the running of earth flat from all the load cells used, and connecting to the common earth pit provided for the subject weigh bridge. This complete work is under the scope of the Bidder. |
| 14 | ENVIRONMENTAL PERFORMANCE OF THE MACHINE |
| 14.1 | The machine shall be suitable for an ambient temperature of around 50 °C and relative humidity of 95 % respectively, but both do not occur simultaneously. |
| 14.2 | Weather conditions are extreme type, Atmosphere will be dust laden during some part of the year. |
| 14.3 | Paint of the machine shall be weather resistant and shall not peel off due to weathering. |
| 14.4 | Vendor to ensure that the Thermal Stability of the complete machine to be designed keeping in view the specified Ambient Conditions and accuracy requirements of BHEL for trouble free operation of the weighing machine. |
| 14.5 | If any safety / environmental protection enclosure is required it shall be built in the weighing machine by the vendor. |
| 15 | MACHINE SPARES |
| 15.1 | Load Cell 2 nos. |
| 15.2 | Digital Indicating System 1 set. Remote Display Unit 1 No. Itemized break up of mechanical and electrical spares used on the machine in sufficient quantity as per recommendation of Vendor for 2 years of trouble free operation on two shifts continuous running basis should be offered by vendor. Unit Price of each item of spare shall be offered. |

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - X: ANNEXURES

| S. No. | PARTICULARS & BHEL SPECIFICATION |
|--------|--|
| 15.3 | Electrical: All types of Relays/ Contactors/ Push Buttons, Indicating Lamps/ Fuses, and PCBs shall be quoted. |
| 15.4 | All types of spares for total machine and accessories should be available for at least ten years after supply of the weighing machine. |
| 16 | DOCUM ENTATION |
| 16.1 | THREE sets of following documents (Hard Copies) in English language shall be supplied along with machine |
| 16.2 | Operating Manuals of Weighing Machine and Indicator System |
| 16.3 | Programming Manuals for the Weighing Machine |
| 16.4 | Detailed Maintenance Manual (for troubleshooting and service) of machine with all drawings of machine assemblies/ sub-assemblies/ parts including Electrical / Mechanical and Instrumentation circuit diagrams. Technical Manual & Data sheet for Load cell, Indicating system and other components |
| 16.5 | Complete back up of hard disk / software on GHOST CD and clear written Instructions (3 copies) to take back-up and reloading of a new hard disk. |
| 16.6 | One additional set of all the above documentation on CD ROM , wherever possible. |
| 17 | M ACHINE FOUNDATION |
| 17.1 | Vendor shall submit the preliminary layout drawing for getting BHEL's approval within FOUR WEEKS from the date of issue of BHEL Purchase Order. Vendor shall submit complete foundation details including static and dynamic loads within a month after getting BHEL's approval. The layout should consist of all requirements pertaining to complete weighing machine including control room. |
| 18 | INSPECTION & M ACHINE ACCEPTANCE |
| 18.1 | Pre-dispatch inspection Machine shall be offered for inspection by BHEL engineers at vendor's works. Vendor to confirm Vendor to give details on MACHINE INSPECTION Tests to be performed by Vendor at Vendor's works, on the machine, before dispatch. |
| 18.2 | Full load test to demonstrate the maximum capacity of the weighing machine. (If possible) |
| 18.3 | Demonstration of all features of the weighing machine, indicator system & accessories |
| 18.4 | Travel, boarding & lodging for the BHEL Engineers who will be visiting vendor's works for re-dispatch inspection shall be borne by BHEL. Vendor to note Tests / Activities to be carried out by Vendor at BHEL site commissioning of machine. |
| 18.5 | Tests / Activities to be carried out by Vendor at site while commissioning the machine: Accuracy, Repeatability, Safe Over Load Testing, Communication Connectivity and tests recommended by the Vendor |

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - XI: RATE SCHEDULE

RATE SCHEDULE BREAK-UP

| PART-I - A. Material Handling | | | | | | | |
|----------------------------------|--|------------------------------|--------------------------|---|-------------------------|-----------------------|------------------|
| Sl No. | Description | | | Qty.(IN M T) | | %Allocated of LS | |
| A.1 | For Handling all items of Manufacturing Units, Chemicals | | | 32,210 | | 22.62% | |
| A.2 | For Handling all items of Structural steel, Reinforcement steel | | | 25,526 | | 14.12% | |
| A.3 | For handling of Cement | | | 10,000 | | 4.07% | |
| A.4 | Reshifting, Restacking & Dispatch of Plant Material, Structural Steel, Reinforcement Steel | | | 5,774 | | 3.24% | |
| A.5 | Reshifting, Restacking & Dispatch of Cement | | | 1,000 | | 0.34% | |
| | TOTAL (A) | | | | | 44.40% | |
| PART-I - B. T&P Deployment | | | | | | | |
| Sl No. | Major T&P requirement for NPCIL Gorakhpur | | | Deployment period (months) | | %Allocated of LS | |
| B.1 | Crane Capacity 18/20T(1 nos) | | | 45 | | 15.17% | |
| B.2 | Crane Capacity 12/14T(1 nos) | | | 35 | | 10.49% | |
| B.3 | 20 T trailer (1 nos) | | | 20 | | 6.00% | |
| | TOTAL (B) | | | | | 31.66% | |
| PART-I - C. Manpower Deployment* | | | | | | | |
| Sl No. | Major Manpower requirement | Deployment period man-months | Per Day Basic Wages Rate | Factor of Special Allowance (Fixed) (N) | Minimum Wages Per day | MONTHLY RATE (IN RS.) | TOTAL (IN RS.) |
| | | | (Rs.) (M) | | (Rs.) M xN | | |
| C.1 | Skilled | 180 | 671.00 | 1.2858 | 862.7718 | 22432.07 | 4037772.02 |
| C.2 | Semi-Skilled | 180 | 557.00 | 1.2858 | 716.1906 | 18620.96 | 3351772.01 |
| C.3 | Unskilled | 180 | 477.00 | 1.2858 | 613.3266 | 15946.49 | 2870368.49 |
| | TOTAL (C) | | | | | 1,02,59,912.52 | |
| PART-I - D. Water Sprinkling | | | | | | | |
| Sl. No. | Water Sprinkling Services | | Quantity | | | UNIT | %Allocated of LS |
| D.1 | Water Sprinkling Services | | 40 | | | MONTHS | 6.03% |
| | Water Charges | | Quantity | UNIT | UNIT RATE (IN RS./ Cft) | MONTHLY RATE (IN RS.) | TOTAL (IN RS.) |
| D.2 | Water charges of 5 trips (5x6000 Ltrs) | | 40 | MONTHS | 0.12 | 3814.02 | 1,52,560.80 |
| | TOTAL (D.1) | | | | | | 6.03% |

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER - XI: RATE SCHEDULE

| PART-I - E. Mobile Toilets | | | | |
|----------------------------|--|--|--------|------------------|
| Sl. No. | Description | Quantity | UNIT | %Allocated of LS |
| E.1 | Supply of Mobile Toilets | 4 | Nos. | 0.6657% |
| E.2 | Installation and Maintenance (01 no Unskilled manpower) | 43 | Months | 2.7666% |
| | TOTAL (E) | | | 3.43% |
| PART-II - F. Weigh Bridge | | | | |
| Sl No. | Description | Deployment period for NPCIL Gorakhpur (months) | | %Allocated of LS |
| F.1 | Providing services of Pit less weigh bridge of 100MT weighing capacity of size 20m X 3.5m on build, own and operate basis as per Technical Specification provided elsewhere in the tender for an overall contract period of 45 Months that includes 2 Months installation period and 43 Months operation period. | 43 | | 14.48% |
| | TOTAL (F) | | | 14.48% |

Factor of Special Allowance = Certain additional allowances are added extra to the wages of labour (i.e. only on labour component in the work item) in the form of percentage, as recommended by the Government due to statutory and other provisions. 1.2858 factor can be used for covering PF, ESI, BONUS, LEAVE WITH WAGES, UNIFORM ALLOWANCE, PETTY CONTRACTOR PROFIT ETC. (PF:-12.00%, ESI:-3.25%, BONUS:-8.33%, Petty contractor Profit and Miscellaneous 5%).

* MONTHLY UNIT RATES ARE BASED ON MINIMUM WAGES AS PER NPCIL GHAVP GORAKHPUR CIRCULAR AT THE TIME OF NIT AND THE SAME SHALL BE REVISED AS WHEN IT IS CHANGED. THE MINIMUM WAGES PER MONTH SHALL BE PAID AS PER THE LATEST RATE GIVEN IN CIRCULAR ISSUED BY NPCIL GHAVP GORAKHPUR.

TECHNICAL CONDITIONS OF CONTRACT (TCC)
CHAPTER - XII: UNPRICED RATE SCHEDULE

UNPRICED RATE SCHEDULE

| DESCRIPTION OF WORK | TOTAL VALUE (in Rupees) |
|--|-------------------------|
| Total Price (X) for the work as per Tender Specification for Part-I & Part-II. | |

Note:

1. The quantities indicated against each item of rate schedule break-up are tentative and liable to vary depending upon site requirement. The contractor has to handle all items indicated by BHEL Engineer for achieving completion of work. Total payment made to contractor shall be on the basis of actual quantity handled as per certification of BHEL.
2. Incomplete offer received may not be considered for the subject work.
3. The Rate shall be entered in figures as well as in words. In case of difference in rates between words and figures THE LESSER OF THE TWO will be treated as valid rate. In case of omission in quoting any rate, the evaluation will be done considering the highest quoted rate obtained against that item but the work, if awarded, will be on the lowest quoted rate obtained against that item.
4. The rates of different items for the entire scope shall be worked out & awarded as per "RATE SCHEDULE".
5. Bidders need to quote the LUMP SUM PRICE (X) only (**PRICE FOR MATERIAL MANAGEMENT SERVICES EXCLUSIVE of PART-I – "C" & "D.2"**) & rate of all other items are fixed based on formulae.
6. Total Contract Value shall be treated as Price (X) plus (+) Value of PART-I – "C" & "D.2".
7. For cranes capacity less than 75 MT valid operator is to be arranged by vendor.