



ISO 9001/14001/27001,
OHSAS18001 & SA8000

भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

Bharat Heavy Electricals Limited

(A Govt. of India Undertaking)

पावर सेक्टर-उत्तरी क्षेत्र, नोएडा

Power Sector - Northern Region, NOIDA

NOTICE INVITING TENDER

To

M/s

BY REGISTERED POST/COURIER/HAND

Ref. No.: BHEL/R, M &U/Obra/BLR

11:014-02

Date:30.10.12

Sub: DEMOLISHMENT AND RECASTING OF ID FAN PEDESTALS (14 NOS. PER UNIT) AND FOUNDATION OF OUTLET DUCT (04 NOS. PER UNIT) IN UNIT 10 AND 11, 200MW, OBRA TPS

Dear sir,

1. Offers, are invited as per terms and conditions enclosed and GSCC (given as General and Special conditions for Services page www.bhelpsnr.co.in at Service Tender)
2. Offer should be sent in Separate envelopes for Techno-commercial and Price bids. Offerers distinctive identification (Company Name), tender no. BHEL/R, M &U/Obra/BLR 11:014-02 due on 30.11.12 'Techno-commercial' and 'price bid' should be mentioned clearly on cover of each envelope. In case it is holiday on 30.11.12 the tenders will be opened on next working day.
3. Offer should be free from overwriting. Corrections and additions, if any should be attested. The rates should be quoted for scope as per Annexure A and in line with Annexure B&C Price quoted should be exclusive of SERVICE TAX and after considering CENVAT credit. The service tax, as legally leviable & payable by the contractor under the provisions of applicable law/act, shall be paid by BHEL as per contractor's bill. However, contractor shall have to submit proof of service tax deposited by them immediately after the deposit but not later than the next bill submitted after the due date of deposit. The contractor shall furnish proof of Service Tax registration with Central Excise Division covering the services covered under this contract. Registration should also bear endorsement for the premises from where the billing shall be done by contractor on BHEL for this project.
4. The rates should be valid for a period of six months from the date of opening tender. The rates should be quoted both in figures and words. Please note that if there is mismatch between price given in figures and in words BHEL reserves its right to accept maximum of the two for evaluation, and minimum of the two for award and BHEL's decision in this regard should be acceptable to the party.
5. The offer should reach this office on or before 12:00 on 09.12.12. The offer will be opened at 15:00 on same day (In case it is holiday on 09.12.12 the tenders will be opened on next working day) in presence of such tenderers or their authorised representatives as may be present.
6. Earnest money of Rs.20000/-is to be sent (in cash, Pay Order/ DD) along with the offer in favour of BHEL NOIDA . Adjustment of earnest money submitted with any earlier offer will not be considered.
HOWEVER ONE TIME EMD SHALL BE Rs 1,00,000/= (Rs. One Lakh) .
7. The cost of Tender is Rs. 200/- . Tenderers shall have to submit Demand Draft of Rs. 200/- in favor of BHEL RSC Varanasi payable at Varanasi along with their bid. The enclosed scope of work, details out the major activities only. However as per general maintenance requirement and site conditions certain related activities may have to be carried out without any extra cost.
8. BHEL reserves the right to process the tender on reverse auction basis and also the right to award the job to one or distribute the job among one or more contractors. In case it is not agreeable, the party need not quote.
9. It will be in interest of the contractor to visit site before submitting offer to have clear idea about the site conditions.

Telephone : 05445 291010 262872

e-mail : yeshu@bhelpsnr.co.in

BHEL SITE OFFICE, R&M OF 5X200 MW UNITS BTPS, OBRA

HQ : HRDI & PSNR Complex, Plot No. 25, Sector-16A

P.B. No. 55, Noida - 201 301, Distt. Gautam Budh Nagar (UP)

Regd.Office : BHEL House, Siri Fort, New Delhi-110049

- 10 Time period for completion of job will be 80 DAYS from the date of commencement of work. However in case inputs for the critical path are not provided by BHEL in time, the completion period shall be extended for the period for which the inputs are not provided. Decision of BHEL in this regard shall be final. Penalty for delay will be AS PER GSCC
- 11 Terms of Payment:- Payment will be made up to a total of 90% against 3 progress bills of 30% each submitted by the contractor in quadruplicate mentioning the activities completed based on measurement of work done. The bills will be verified by BHEL site engineer and certified by BHEL Resident Engineer for arranging payment. The balance 10% shall be payable after successful completion of the job. All payments are subject to Income-tax deduction at source as per Central Government laws an compliance to all statutory requirements indicating in the NIT. All payments shall be made through E-payment system. Contractor has to give Bank name, Branch & Account number alongwith the bills as these shall be incorporated in the system.
- 12 BHEL reserves the right to reject a bidder based on their unsatisfactory past performance at any other project in any centre/region.
- 13 BHEL is not responsible for tenders/offers lost/delayed in transit/ by post etc. The offers reaching this office after due date and time and/or without earnest money as per item no. 6 above, will not be considered. The offer should also accompany all documents as per clause no. 1 of General And Special terms and conditions of contract.
- 14 The selected contractor will have to mobilise for the job within 7 DAYS of the issue of the letter of intent/ work order/work instruction from BHEL.Unit is already under shutdown.
- 15 Offers not received in line with the tender enquiry are liable to be rejected
- 16 It is requested that only authorised representative of the tenders attend the tender opening. They should further be available on the same day for any further clarification in the matter, in the office of undersigned.
- 17 Successful tenderer will have to submit Security deposit as calculated below before start of work :

Order value	SD Amount (Rs)
Upto Rs 10 Lakh	10%
Above Rs 10 Lakhs and upto Rs 50 Lakhs	Rs 1 Lakh + 7.5% of the amount exceeding Rs 10 Lakhs
Above Rs 50 Lakhs	Rs 4 Lakh + 5 % of the amount exceeding Rs 50 Lakhs

- 18 The contractor has to ensure that the staff/ workmen deployed for execution of work uses necessary safety appliances. Surprise checks shall be done by BHEL and in case of non-compliance of above penalty of RS 500/= (five hundred) may be imposed for each case on each occasion of surprise check.
- 19 Contractor shall ensure use of only calibrated Inspection, Measuring & Testing equipment confirming traceability to national standards. Valid calibration certificates shall accompany these IMTEs.
- 20 "Code for Safety Management at Services Sites" as detailed in letter no PSNR/RSC-NOIDA/SAFETY dtd 24/12/2001 will have to be accepted by the party for qualifying in Techno-Commercial bid.
- 21 The contractor shall ensure compliance to all statutory requirements including but not limited to EPF deposition, Labour Licence, Insurance under applicable WC act & ESI failing which shall be liable for penal action as deemed by relevant act.
- 22 May see "General & Special conditions of contract(GSCC)- for Services jobs" on web page www.bhelpsnr.co.in at Service Tender.
- 23 All payments shall be made through E-payment system. Contractor has to give Bank name, Branch & Account number alongwith the bills as these shall be incorporated in the system.
- 24 PRICE BID OF ONLY THOSE PARTIES WILL BE OPENED WHO QUALIFY IN TECHNO-COMMERCIAL BID.

Encl.

Thanking you,

Yours truly,

1. Scope of work & Special Conditions of Contract - Annexure A

2. Schedule of rates - Annexure B & C


 Engineer, Obra R&M

TECHNICNO-COMMERCIAL BID FOR :

Tender BHEL/R, M &U/Obra/BLR 11:014-02 Date : 30.10.12

Sub: DEMOLISHMENT AND RECASTING OF ID FAN PEDESTALS (14 NOS. PER UNIT) AND FOUNDATION OF OUTLET DUCT 04 NOS. PER UNIT) IN UNIT 10 AND 11, 200MW, OBRA TPS

NAME & ADDRESS	:	
PAN NO.	:	
Provident Fund	:	
OFFER NO	:	
EMD	:	
VALIDITY OF OFFER	:	6 Months
COMPLETION PERIOD	:	80 DAYS
MOBILISATION PERIOD	:	7 DAYS
GUARANTEE PERIOD	:	3 Months

Following are enclosed/ certified/accepted as part of Technical bid.

- Signed copy of NIT along with scope of work. Technical bid (annex. B) and Price bid (annex. C) are enclosed.
- Code for Safety Management at Services Sites as detailed in letter no PSNR/RSC-NOIDA/SAFETY dtd 24/12/2001 safe work practices issued by PSNR are accepted.
- Even though offer has been given for a particular unit, it is valid for any Unit of same rating in the same PowerHouse, provided there is no change in activities listed in scope of work.
- Activity- wise percentage breakup has been indicated against each activity in the scope of work as per Annexure - 'A'. In case of reduction in quantum of work at site, payment shall be released only for the activities actually carried out as per the percentage allotted
- All documents as required in "DOCUMENTS TO BE ATTACHED WITH BILLS" given in web page www.bhelpsnr.co.in "Service Tender" of BHEL PSNR shall be submitted along with bills.
- Use of all necessary safety appliances by all the staff/ workmen deployed for execution of work will be ensured. If during surprise checks done by BHEL any non-compliance is observed penalty of RS 500/= (five hundred) may be imposed for each case on each occasion of surprise check.
- It is certified that all statutory requirements including but not limited to payment of wages, deposition EPF, Labour Licence, Insurance etc governed by the provisions of applicable acts shall be our liability without any extra cost to BHEL. Further without limiting obligations and liabilities provided elsewhere in the contract, BHEL shall be kept harmless and indemnified against all claims, damages and compensations, as well as breach of such requirements. Release of progressive payments shall be subject to, inter alia, compliance to such statutory requirements.
- If there is mismatch between price given in figures and in words BHEL shall have right to accept maximum of the two for evaluation, and minimum of the two for award.
- There are no deviations from the NIT and all Terms & Conditions of NIT including those given in "General & Special conditions of contract (GSCC)- for Services jobs" on the web page www.bhelpsnr.co.in of BHEL PSNR are accepted.

Sign of
contractor:
Date:

Seal

M. Kumar

PRICE BID FOR :

Tender No. BHEL/R, M &U/Obra/BLR 11:014-02 **Date:** 30.10.12

Sub: DEMOLISHMENT AND RECASTING OF ID FAN PEDESTALS (14 NOS. PER UNIT) AND FOUNDATION OF OUTLET DUCT (04 NOS. PER UNIT) IN UNIT 10 AND 11, 200MW, OBRA TPS

NAME & ADDRESS	:	
OFFER NO.	:	
OFFER DATE	:	

Rate are quoted as below and are exclusive of Service Tax and after considering CENVAT

1.	Lumpsum (LS) price for the entire scope of work as per Annexure-A (inclusive of all consumables, input materials and supervision)	(Amount In Figure) Rs. : (Amount in Words) Rupees :
2.	Extra work rate on per man-hour basis (inclusive of supervision, T&P, consumables and all other costs)	Rs. 60/- Only

Sign of
contractor: _____
Date:

Seal

Y. Kumar

1. SCOPE OF WORK

- 1.1. The tender specification covers the Execution of all works for "Demolishment & Recasting of ID Fan Pedestals (14 nos. per unit) & foundation of outlet duct (04 nos. per unit) in unit 10 & 11, obra TPS". Work under this tender includes Dismantling/demolishing of existing RCC pedestals, RCC work, Shuttering, reinforcement steel, etc. including supply of all materials, labour, consumables, transportation, sample testing etc.
- 1.2. The scope of work shall generally include but not limited to the construction of the following. The contractor is required to carry out all the items indicated in the BOQ cum rate schedule enclosed.
- Dismantling/Demolishing existing RCC pedestals and disposal of unserviceable materials.
 - Removal of existing foundation bolts.
 - RCC work (1:1:2).
 - Strengthening/providing additional steel Reinforcement.
 - Centering and shuttering work
 - Plastering work

DEMOLISHMENT & RECASTING OF ID FAN PEDESTALS & OUTLET DUCT FOUNDATIONS

Twelve (12 per unit) Nos. pedestals of ID Fan (2 Nos. per unit) support, 2 Nos.(per unit) IGV power cylinders & foundation of outlet duct (04 nos. per unit) are to be dismantled and recast for both units 10 & 11.

Dimension of foundation pedestals:

S No.	Item	Dimension	Qty	QTY Unit 10 (nos.)	Qty Unit 11 (nos.)	Total Qty (nos.)
1.	ID Fan Suction Chamber Foundation	L = 900 mm W = 500 mm H = 1380 mm	02 nos. per fan	4	4	8
2.	IGV Foundation	L = 1000 mm W = 1000 mm H = 600 mm	01 no. per fan	2	2	4
3.	Impeller Housing Foundation	L = 1400 mm W = 650 mm H = 1640 mm	02 nos. per fan	4	4	8
4.	Diffuser Cone Foundation	L = 900 mm W = 500 mm H = 1680 mm	02 nos. per fan	4	4	8
5.	Outlet Duct Foundation	L = 500 mm W = 500 mm H = 600 mm	02 nos. per fan	4	4	8

General arrangement drawing of ID fan is also attached as Annexure-D .

Y. Kumar

The detailed work procedure and technical specifications are as follows:

1. Suitable approach/working space for the abovementioned pedestals may be created by site clearance, removal of debris, etc to ensure hindrance free, safe and barricaded area for execution of the work as per above scope.
2. The existing packer plates, MS inserts, foundation bolt nuts shall be removed manually/mechanically and stacked as per instructions of Engineer I/C. If required and as approved by site Engineer, welding sets may be used for cutting of existing structural steel (NOT REINFORCEMENT STEEL).
3. The existing pedestals shall be demolished using jack hammer/concrete breaker with air compressor up to a depth as indicated in above table. Special care shall be taken while demolition works so that the existing steel reinforcement and foundation bolts are not be damaged or disturbed.

The demolished RCC rubbish/debris shall be disposed as per BOQ and as per instructions of EIC.

4. The existing Re Bars shall be checked for any damage, corrosion/rusting and accordingly straightened, cleaned by scrapping, reinforced with overlapping with additional bars of same size wherever reqd. and binding as per standards. The stirrups/rings shall be readjusted at original spacing if displaced while demolition works.
5. Shuttering/form work of approved material shall be provided complete with strutting and propping as required for proper execution of new concreting work. Necessary and special formwork for leaving pockets, holes, cutouts for grouting of new foundation bolts at later stage shall be made as per drawings. The formwork shall be thoroughly checked and approved by Site Engineer before start of concreting work.
6. Approved bonding agent shall be applied to the mother (original/existing) concrete as per manufacture specifications before start of new concreting to achieve proper bonding between old and new concrete. The bonding agent of **SIKADUR 32 LP, DR FIXIT EPOXY BONDING AGENT** or equivalent may be used after approval of Engineer I/C.
7. RCC work 1:1:2 (1 part cement, 1 part coarse sand and, 2 parts 20 mm downgraded aggregate) shall be done as per standard specifications. Use of needle vibrators shall be mandatory to achieve adequate compaction of fresh concrete. The same shall be achieved by taking special care and without disturbing the formwork for pockets/cutouts etc.
8. Providing, fixing and removing formwork in block-outs/pockets, cutouts and openings at all elevations including cutting, formation of all shapes & depth up to 1000 mm and all other operations required for making the required shape and size for foundation bolts as per specification, drawing and instruction of engineer in charge.
9. It may also be noted that the top level of new concrete may be 50-100 mm higher than the existing RCC work but shall be according to the elevation drgs.
10. The formwork for pedestal and pockets shall be removed and curing shall be done as per standard IS guidelines and procedures.
11. Any defects observed while execution/ completion of above works including defect liability period shall have to be rectified by contractor at its own cost and as per BHEL norms.



- 1.3. The work to be performed under this specification consists of providing labor, supervision, all materials (except those to be issued by BHEL as free issue items), scaffoldings, Construction equipment, tool & plants, supplies, transportation and storage of all items including such items which are not shown or specified but reasonably implied or necessary for successful completion of work including contractor's supervision and in accordance with drawings and specifications.
- 1.4. The work under this contract shall be carried out as per BOQ (Annexure – III. Quantities mentioned in the BOQ are approximating only and liable for variation due to change of scope of work / variation in schedule of quantities, changes in design etc. The bidders shall undertake to execute actual quantities as per advice of BHEL Engineer and accordingly the final contract price shall be worked out on the basis of quantities actually erected at site and payments will also be regulated for the same.
- 1.5. The contractor shall also comply with applicable legislation and regulations with regards to Health, Safety and Environmental aspects (HSE) for minimizing risk arising from occupational health, safety hazards, controlling pollution and wastage and he will be responsible for Health, Safety & Environment management at site for the construction activities to be carried out by them in accordance with requirements given under section I (a) of GCC.

Y. Kumar

BILL OF QUANTITY

S. No.	Work	% Allo tted	% Comp tted
1.	Unit 10		
1.1	Demolishment of Twelve (12 per unit) Nos. pedestals of ID Fan support, & 04 nos. foundation of outlet duct in Unit 10. Approx. 17 cum	8	
1.2	Shuttering/form work of approved material to be provided complete with strutting and propping as required for proper execution of new concreting work. Necessary and special formwork for leaving pockets, holes, cutouts for grouting of new foundation bolts . Approx 35 sqm.	2	
1.3	Providing and applying two component bonding compound SIKADUR 32 LP/Dr FIXIT epoxy bonding agent or equivalent as per manufacturer's specifications including preparation of concrete surface by cleaning and chipping as required.	3	
1.4	Reinforced cement concrete of mix 1:1:2 (1 cement, 1 coarse sand and ,2 :20 mm down graded aggregate) for column footing, pedestals etc.. Approx 17 cum. Providing/overlapping and placing mild steel/ tor steel reinforcement on existing rusted/corroded re bars wherever required for RCC work approx 400 Kg. The formwork for pedestal and pockets to be removed and curing as per standard IS guidelines and procedures.	30	
1.5	Plastering work with cement mortar 1:6 (1 cement : 6 fine sand) 12 mm thick after scrapping and cleaning the masoary joints including scaffolding, cost of materials, labour, mixing , leads & lifts, curing etc. complete. Approx 60 sqm.	2	
1.6	Removal of all debris, scrap & area cleaning.	5	
2.	Unit No. 11		
2.1	Demolishment of Twelve (12 per unit) Nos. pedestals of ID Fan support, & 04 nos. foundation of outlet duct in Unit 10. Approx. 17 cum	8	
2.2	Shuttering/form work of approved material to be provided complete with strutting and propping as required for proper execution of new concreting work. Necessary and special formwork for leaving pockets, holes, cutouts for grouting of new foundation bolts . Approx 35 sqm.	2	
2.3	Providing and applying two component bonding compound SIKADUR 32 LP/Dr FIXIT epoxy bonding agent or equivalent as per manufacturer's specifications including preparation of concrete surface by cleaning and chipping as required.	3	
2.4	Reinforced cement concrete of mix 1:1:2 (1 cement, 1 coarse sand and ,2 :20 mm down graded aggregate) for column footing, pedestals etc.. Approx 17 cum. Providing/overlapping and placing mild steel/ tor steel reinforcement on existing rusted/corroded re bars wherever required for RCC work approx 400 Kg. The formwork for pedestal and pockets to be removed and curing as per standard IS guidelines and procedures.	30	
2.5	Plastering work with cement mortar 1:6 (1 cement : 6 fine sand) 12 mm thick after scrapping and cleaning the masoary joints including scaffolding, cost of materials, labour, mixing , leads & lifts, curing etc. complete. Approx 60 sqm.	2	
2.6	Removal of all debris, scrap & area cleaning.	5	
	Total	100	

J. Kumar

SPECIAL CONDITIONS OF CONTRACT

2. INSTRUCTIONS TO TENDERERS

- 2.1. The bidders are advised to physically visit the site and fully acquaint themselves with site conditions, transportation routes, various distances and the fact that other contractors would be working in this area their structures are to be protected. The material brought and stacked for construction should not make hindrance to other contractors. Necessary precaution and arrangements including sprinkling of water during work as acceptable to BHEL for safety & security for the above have to be made by the contractor. No claim will be entertained by BHEL on ground of lack of knowledge and the contractor's rates shall be deemed to have taken this into account.
- 2.2. The contractor, in the event of this work awarded to him, shall establish a office at site and keep posted an authorized, responsible officer with valid Power of Attorney for the purpose of the contract. Any order or instructions of the 'BHEL Engineer' or his duly authorized representative, communicated to the contractor's representative at site office will be deemed to have been communicated to the contractor at his legal address.

3. CONTRACTOR'S SUPERVISION

- 3.1. The Contractor shall either himself supervise the execution of the Contract or shall appoint a competent Engineer / agent approved by the BHEL Engineer to act in his stead.
- 3.2. Orders given to the Contractor's Engineer / Agent shall be considered to have the same force as if they had been given to the Contractor himself.
- 3.3. The Contractor or his Agent shall be in attendance at the site during all working hours and shall superintend the execution of work with such additional assistance in each grade as the BHEL Engineer may consider necessary.

4. SUPERVISORY STAFF AND WORKMEN

- 4.1. The contractor shall deploy all the experienced skilled, semiskilled and unskilled workmen required for all the works under these specifications. BHEL reserves the right to decide on the suitability of the workers and other personnel who will be deployed by the contractor. BHEL reserves the right to insist on removal of any employee of the contractor at any time, if they find him unsuitable and the contractor shall forth with remove him.
- 4.2. The work shall be executed under the usual conditions like rain, insufficient space, improper approach roads etc., and effecting major construction work and in conjunction with numerous other operations at site. The contractor and his personnel shall cooperate with other personnel / contractor, coordinating their work with others and proceed in a manner that shall not delay or hinder the progress of work as a whole.
- 4.3. It is the responsibility of the contractor to engage his workmen in shifts or on overtime basis for achieving the targets set by BHEL. The contractor's finally accepted rates shall include all these contingencies.
- 4.4. If the contractor or his workmen or employees shall break, deface, injure or destroy any part of a building, road kerb, fence, enclosure, water pipes, cables, drains, electric or telephone posts or wire, trees or any other property or to any part of erected components etc., the contractor shall make the same good at his own expense or in default, BHEL may cause the same to be made good by other workmen or by other means and deduct the expenses (of which BHEL's decision will be final) from any money due to the contractor.
- 4.5. It shall be the contractor's responsibility to deploy the required manpower, for timely and successful completion of the job, to any extent over and above those indicated in the above

J. Kumar

deployment plan (including those which are not covered in the plan submitted) without any compensation on this account.

5. TOOLS AND PLANTS / IMTEs

- 5.1. All the T&Ps and IMTEs (Inspection Measuring and Testing Equipment) required for successful and timely execution of the work covered within the scope of this tender, shall be arranged and provided by the contractor at his own cost in working condition. In the event of the failure of contractor to bring necessary and sufficient T&Ps/ and IMTEs, BHEL will be at liberty to arrange the same at the risk and cost of contractor including transportation cost of same from any of BHEL site/place and hire charges as applicable shall be deducted from contractor's bill. Decision of BHEL in this regard shall be final and binding on contractor.
- 5.2. Consolidation of ground and arrangement of sleepers / sand bag filling etc. for safe operation / movement of equipment including cranes / trailers etc. shall be the responsibility of the contractor at his cost.
- 5.3. Contractor shall ensure deployment of serviced and healthy T&Ps including cranes, lifting tackles, wire ropes, Manila ropes, winches and slings etc. History card and maintenance records for major T&Ps will be maintained by the contractor and will be made available to BHEL Engineer for inspection as and when required. Identification for such T&Ps will be done as per BHEL Engineer's advice.
- 5.4. It shall be the contractor's responsibility to deploy the required T&P, for timely and successful completion of the job, to any extent over and above those indicated in the above deployment plan (including those which are not covered in the plan submitted) without any compensation on this account.

6. MATERIALS

- 6.1. The contractor shall, at his own expenses (Inclusive of Taxes), provide all materials required for the work.
- 6.2. All stores and materials to be provided by the Contractor shall be of the best kind in conformity with the as per relevant Indian standard and the Contractor shall, if requested by the BHEL Engineer, furnish proof to the satisfaction of BHEL Engineer that the materials so comply.
- 6.3. The BHEL Engineer shall have full powers for removal of any or all of the materials brought to site by the Contractor which are not in accordance with the Contract specifications or do not conform in character or quality to samples approved by him. In case of default on the part of the Contractor in removing rejected materials, the Engineer shall be at liberty to have them removed by other means. The BHEL Engineer shall have full powers to procure other proper material to be substituted for rejected materials and in the event of the Contractor refusing to comply; he may cause the same to be supplied by other means. All costs, which may attend upon such removal and / or substitution, shall be borne by the Contractor.
- 6.4. Material required for the works, whether brought by the Contractor, shall be stored by the Contractor only at places approved by the Engineer. Storage and safe custody of material shall be the responsibility of the contractor.
- 6.5. All charges on account of Octroi, terminal or sales tax and other duties on material obtained for the works from any source shall be borne by the contractor.

Y. K. Sharma

6.6. EXECUTION OF WORK

6.6.1. The work shall be executed in a workman like manner and to the entire satisfaction of the Engineer and as per technical specification issued with tender, IS codes, CPWD specifications as applicable. In case of conflict, the decision of the BHEL Engineer shall be final & binding.

6.7. SETTING OUT

6.7.1. All the works shall be set out to the true lines, grades and elevation indicated on the drawing. The contractor shall be responsible to locate and set out the works. Only one grid reference line and bench mark shall be made available for setting out the works under the contract. This reference lines shall be used as datum for the works under the contract and the contractor has to establish for his work area at available points horizontal and vertical control points. The contractor shall inform BHEL well in advance of the times & places at which he wishes to do work in the area allotted to him so that suitable datum points established by him are checked by BHEL / Customer to enable the contractor to proceed with the works. Any work done without being properly located may be removed and / or dismantled by BHEL / Customer at contractor's expenses.

6.7.2. The contractor shall at his own expense take all proper and responsible precautions to preserve and maintain these datum marks to its true position. In the event of these marks being disturbed or obliterated by accident or due to any other cause whatsoever, the same may be deemed necessary placed by BHEL / Customer at contractor's expenses.

6.8. SITE DRAINAGE

6.8.1. All water including sub-soil water which may accumulate on the Site during the progress of the works or in trenches and excavations, including monsoon period shall be removed by the contractor from the Site to the satisfaction of the Engineer. It will also be responsibility of the contractor to de-water all the foundation pits, trenches with suitable de-watering methods like, pumping out, well point system etc. considering the depth of water table at plant site. All such expenditure on de-watering shall be deemed to be included in quoted rates.

6.9. INSPECTION AND STAGE APPROVAL OF THE WORK

6.9.1. The owner or his duly authorised representative shall have at all reasonable times access to the contractor's premises or works and shall have the power to inspect drawings or any portion of the work, examine the materials and workmanship and shall have the authority to reject any work. This would be implemented through joint inspection by the representative of the owner and BHEL and in the form of joint protocols without any extra claims and loss of time and amount.

6.9.2. All work embracing more than one process shall be subject to examination and approval at each stage thereof and the Contractor shall give due notice in writing to the Engineer when each stage is ready. In default of such notice being received, the Engineer shall be entitled to approve the quality and extent thereof at any time he may choose and in the event of any dispute, the decision of the Engineer thereon shall be final and conclusive.



6.10. COMPLETION OF WORK

6.10.1. The works shall be completed to the entire satisfaction of the Engineer and in accordance with the **completion schedule** as specified in the Contract, and all unused stores and materials, tools, plant, equipment, temporary buildings, site office, labour hutments and other things shall be removed and the site and work cleared of rubbish and all waste materials and delivered up clean and tidy to the satisfaction of the Engineer at the Contractor's expenses.

6.10.2. The Engineer shall certify to the contractor the date on which the work is completed and the date thereof.

7. DEVIATION

7.1. The Contractor shall not make any alteration in, addition to or omission from the work as described in the tender documents except in pursuance of the written instructions of the Engineer. No such deviation from the work described in the tender documents shall be valid unless the same has been specifically confirmed and accepted by the Engineer in writing and incorporated in the Contract.

8. FACILITIES TO BE PROVIDED BY BHEL / CONTRACTOR

8.1. BHEL may/ may not provide limited open space for office and store **as and where made available by its customer**. It is the responsibility of the contractor to construct sheds, provide all utilities as a part of his scope of work.

8.2. Contractor shall build office (10 ft. x 12 ft.) exclusively for use of BHEL. Furnishing including doors & windows & providing amenities such as lighting, fans etc. shall also be provided by contractor. Steel structures/ angles/channels & wooden planks for frame work, flooring may be provided by BHEL as per site availability. Other consumables shall be provided by contractor.

8.3. Similarly, limited open space will be provided to the contractor for building labour hutments and it will be the responsibility of the contractor to construct sheds, provide all utilities as a part of his scope of work.

8.4. Contractor shall be responsible for providing all necessary facilities like residential accommodation, transport, electricity, water, medical facilities etc. as required under various labour laws and statutory rules and regulations framed there under to the personnel employed by him.

8.5. **Construction power for Civil Works will have to be arranged by the contractor for civil construction.**

8.6. Provision of distribution lines of power from the central points to the required place with proper distribution boards observing the safety rules laid down by the 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 / 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 shift / hours accordingly and deploy additional manpower if necessary so as to achieve the targets.

J. K. Sharma

- 8.7. 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.
- 8.8. Adequate lighting facilities such as flood lamps, hand lamps and area lighting shall be arranged by the contractor at the site of construction, contractor's material storage area etc. within finally accepted rates.
- 8.9. No claim for damages will be entertained by the Company on account of interruptions of water supply or limitation of quantity of water as aforesaid or on account of the water so taken being not fit for construction purposes or on any other account in connection with such water supply.
- 8.10. **CONTRACTOR HAS TO ARRANGE FOR CONSTRUCTION WATER BY THEMSELVES WITHIN THE QUOTED RATES.** Contractor to satisfy himself that the water drawn by him is fit for construction / consumption and adequately treat such water at his cost when it is not found fit for the said purposes.
- 8.11. **CONTRACTOR HAS TO ARRANGE AIR COMPRESSORS FOR PNEUMATIC JACK HAMMER/CONCRETE BREAKERS ON THEIR OWN.**
- 8.12. Contractor shall have to provide unskilled/semiskilled manpower for 06 man months exclusively for use of BHEL site office. In case contractor fails to provide manpower then Rs. 10,000/- per man month shall be deducted from contractor Bills.
- 8.13. On completion of work or as and when required by BHEL, all the temporary buildings, structures, pipe lines, cables etc. shall be dismantled and leveled and debris shall be removed as per instruction of BHEL by the contractor at his cost. In the event of his failure to do so, same will be got done by the Engineer and expenses incurred shall be recovered from the contractor along with prevailing overhead. The decision of BHEL Engineer in this regard shall be final.

9. INCOME TAX, SERVICE TAX, VAT AND SALES TAX ETC.

- 9.1. TDS under Income Tax, Sales Tax, VAT etc, if any, shall be deducted at prevailing rates on gross invoice value from the running bills unless Exemption Certificate from appropriate Authority / Authorities is furnished.
- 9.2. Road permit, if required shall be arranged by contractor at its own cost & expenses.
- 9.3. Price quoted shall be inclusive of all taxes except service tax. The service tax, as legally leviable & payable by the contractor under the provisions of applicable law/act, shall be paid by BHEL as per contractor's bill. However, contractor shall have to submit proof of service tax deposited by them immediately after the deposit but not later than the next bill submitted after the due date of deposit. The contractor shall furnish proof of Service Tax registration with Central Excise Division covering the services covered under this contract. Registration should also bear endorsement for the premises from where the billing shall be done by contractor on BHEL for this project The contractor shall obtain prior approval of BHEL before billing the service tax amount.
- 9.4. With introduction of Cenvat credit rules 2004 which came into force w.e.f. 10.09.2004, excise duty paid on input goods including capital goods used for providing the output service and service tax paid on input service can be taken credit of against the service

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tax payable on output service. As such, while offering the rates, the contractors may take into account the benefit of above provisions as the cost of input to contractors will be the cost net of excise duty and service tax and adjust their offer price accordingly to make it more competitive.

- 9.5. In VAT applicable States, "Tax Invoice" if required under the relevant State VAT law shall be submitted along with other compliances as per concerned VAT Act.
- 9.6. Contractor has to make his own arrangement at his cost for completing the formalities, if required, with Sales Tax/VAT Authorities, for bringing their materials, plants, and equipment at site for the execution of the work under this contract.

10. TIME SCHEDULE

- 10.1. The contractor is required to commence the work within 7 days from the date of issue of letter of intent unless BHEL decides to fix any other later date. However, the actual date of start of work will be certified by BHEL Engineer after adequate mobilization of materials, manpower and T&Ps by the contractor.
- 10.2. All the works under this contract is required to be completed within **80 (Eighty)** days from start of work.
- 10.3. The work under the scope of this contract is deemed to be completed in all respects, only when all the works are carried out as per satisfaction of BHEL decision of BHEL on completion date shall be final and binding on the contractor.

11. TERMS OF PAYMENT

- 11.1. The Contractor shall be paid monthly running bill to a maximum of 90% in progressive bills of 30% each of the value of the work actually executed on site provided the work has been executed to the satisfaction of the Engineer. The Engineer may after a measured bill allow and certify payment to the contractor on the basis of abstract measurement bill submitted by the contractor. The certificate of the Engineer regarding such approval and passing of sums so payable shall be final and conclusive against the contractor.

- 10% of Final contract value (worked out based on actual work carried out) shall be payable on completion of all pending work, rework wherever required, site clearing, IR clearance, Final wage sheet, Challan for Service Tax, Challan for PF, certificate to the effect that final payment is towards full & final settlement of all their dues against this contract, reconciliation of materials with our stores.

12. Security Deposit will become payable after completion of defect liability period



INDICATIVE LIST OF T & Ps TO BE ARRANGED BY THE CONTRACTOR AT HIS OWN COST

Sl. No.	EQUIPMENT	QTY
1	CONCRETE MIXER M/C of SUITABLE CAPACITY	1 NO (minimum)
2	CONCRETE VIBRATORS	2NO (minimum)
3	Jack Hammers/concrete breakers with compressor,	2NO (minimum)
4	Trucks/trolley	AS PER WORK REQUIREMENT
5	WATER TANKER	AS PER WORK REQUIREMENT
8	WELDING MACHINES	AS PER WORK REQUIREMENT

Notes:

1. The above list specifies only major T&Ps (may not be complete to be deployed by the contractor). All additional / other tools and plants including lorries/trucks, tools & tackles, devices, machines, measuring instruments etc. in good and safe working conditions which are required for satisfactory & timely completion of work shall also be deployed by the contractor within finally accepted rate / price.

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