

Project Engineering
Management

BHARAT HEAVY ELECTRICALS LTD.
(A Govt. Of India Undertaking)
PURCHASE ENQUIRY



REF :	PE-LPE/250
REF. DATE	14/12/2016
DUE DATE	03/01/2017

To,
Open Tender

Dear Madam/Sir,

Subject: Repair and Waterproofing Treatment on roof of PPEI building in BHEL-PEM, Noida.

Quotations are Invited in two parts in sealed cover with Enquiry No., Enquiry Date, Quotation Due Date & Time, Name/ Address of the Organization submitting the offer legibly super- scribed on it, for the above- mentioned item so as to reach the Tender Room, BHEL, PS-PEM, Noida before 02:00 P.M. on or before the above mentioned Due Date.

SCOPE:

For Scope of work/services refer Technical Specification enclosed with NIT.

PAYMENT TERMS:

BHEL under any circumstance will not entertain the request for payment against material at site or any sort of advance payment. However, payment of running bills could be considered depending on the progress of actual work done subject to verification of measurements etc. by BHEL Engineers. The running bills to be claimed only at every 30% of actual work completed. The invoice shall be submitted in triplicate in conformation with the measurement books, along with specified documents to HR-GAX Department of BHEL/PS-PEM, PPEI Building, NOIDA and the payment will generally be made within 30 days after receipt of bill correct in all respects, measurements and verification by BHEL engineers for satisfactory completion of the work. Payment will be made through e-payment (through electronic fund transfer (EFT) / RTGS) only after deducting taxes (like Work contract tax, TDS, sale taxes, service taxes, etc.). Details of your bank account for the same shall be submitted by you. Also, no interest shall be paid due to delay in making the payment. Service Tax should be shown separately in the rates quoted. The same will be paid / remitted in accordance with the provisions of Reverse Tax Mechanism of Service Tax as applicable.

DELIVERY PERIOD:

The bidder should start the services within 7 days from the date of work order, on delay penalty will be levied as per penalty clause. The total time fixed for completion of all the works is 60 days including holidays from the date of start of work. On delay, penalty will be levied as per penalty clause.

PENALTY CLAUSE: as mentioned in technical specification at clause no. D of "General terms & conditions for the tender".

EVALUATION: will be done on the Grand total cost (all inclusive) to BHEL quoted by the bidder (Refer price format Annexure-I).

EMD: Each Tenderer have to submit an EMD of Rs.135000/- (Rupees One lakh thirty five thousand only) for the above job / services in the form of Pay Order or Demand Draft only in favour of BHEL, with the techno-commercial (Part-I) bid. Also bidders required to submit the **bank details along with a cancelled cheque for NEFT/RTGS details.**

SECURITY DEPOSIT: The contractor shall have to deposit an amount @ 5% of contract value as "Security deposit" to BHEL before the start of work in the form of Pay order / Demand Draft / Local Cheque / Bank guarantee in BHEL's format from scheduled banks / Fixed Deposit Receipt issued by Scheduled Banks (refer cl. 7 of commercial terms & conditions for the tender).

VALIDITY OF RATES: Once the contract is awarded, the quoted rate shall remain firm for the entire contract period & will not vary on any account whatsoever be the reason.

Enclosures: i) Enquiry Letter (this letter itself)
ii) Tender Document (22 pages)

Thanking You,

Yours faithfully,
For and on behalf of BHEL

N & Sharma/ Sr. Engr.
BHEL, PEM, Noida

Please reply to:
Power Project Engineering Institute
HRD & ESI Complex, Plot No 25, Sector 16 A
Noida

Phone:
Fax No:

Regd. Office:
BHEL House
Siri Fort

श्री अशोक शर्मा / Naresh Chandra Sharma
इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Ltd.
पावर सेक्टर-परियोजना इंजीनियरिंग प्रबंधन
Power Sector-Project Engineering Management
प्लॉट नं.-25, सेक्टर-16A, नोएडा-201 301
Plot No. 25, Sector-16A, Noida-201 301

PQR



Technical:

1. Experience of having successfully completed similar works* during last 7 years ending 30th Nov 2016, should be either of the following:
 - a. One similar completed work costing not less than the amount equal to Rs 54,00,240/- .
or
 - b. Two similar completed works costing not less than the amount Equal to Rs 33, 75,150/-.
or
 - c. Three similar completed works costing not less than the amount equal to Rs 27,00,120/-.
- *Similar work means: Water proofing treatment of civil structure with polyurethane based elastomeric water proofing membrane or equivalent.
2. Bidder should have a minimum experience of three years as on 30/11/2016 in similar works. Work Order along with the copy of successfully/satisfactorily completion of work clearly mentioning the work order details, to be attached as a proof of successful completion of similar work. The certificates shall be issued by competent authority with his / her contact details mentioned, for verification purpose BHEL reserves the right to verify the correctness of the documents of the clients. In case the bidder has done work earlier with BHEL, then only copy of work order should be submitted.
3. Bidder should have a Local office in Delhi/NCR.
4. Bidder should provide certificate for being manufacturer / authorized applicator of Water-proofing product (of the Water proofing items mentioned in BOQ).

Financial:

1. Average Annual financial turnover during the last 3 years, ending on 31st March 2016 should be at least Rs 20,25,090/-.

Note:

- i) In case the adopted accounting year is other than financial year than previous year to be considered accordingly.
- ii) The bidder shall provide the complete set of accounts for last 3 years duly signed & stamped by auditors and directors/owners i.e. Balance sheet, profit-Loss A/c, Schedules/notes to accounts, Auditors & Tax audit report.

Commercial:

1. EMD of Rs 1, 35,000/- in the form of Pay Order or Demand Draft or Electronic Fund Transfer in favour of BHEL, payable at New Delhi, must be submitted in a separate envelope.
2. Bidder should have PAN number.
3. Bidder should have VAT/Sales tax registration and Service tax registration.
4. Complete tender in all respects duly signed & stamped on each and every page by the authorized signatory of the bidder as a token of acceptance of all the terms and conditions of tender.

Technical specifications

Technical Terms & Conditions

1) SCOPE OF WORK

The scope of work covers supply & execution of roof water proofing treatment & allied civil works on old existing roof slab of BHEL-PPEI building at plot no.25 in sector 16A, Noida.

The scope of work includes all the following works but not limited to the following:

- a) Removing of existing screed concrete and plaster at roof top of BHEL-PPEI building so as to expose the existing RCC roof slab.
- b) Repairing of plaster of existing parapet wall.
- c) Replacing damaged existing rain water pipes including all related dismantling works
- d) Opening up of existing expansion joint in roof slab & providing fresh expansion joint sealing treatment to it.
- e) Providing brick work on both sides of existing expansion joint in roof slab with RCC canopy over it for stopping ingress of water into the expansion joint
- f) Disposal of all debris generated in (a), (b), (c) & (d) above.
- g) Providing treatment for sealing of cracks in existing roof slabs
- h) Making of fillet 50mm x 50 mm size at the junction of roof & parapet/column projections.
- i) Making of groove 25 X25mm in parapet wall for tucking of water proofing membrane with suitable polymer modified mortar.
- j) Making khurras 45x45 cm
- k) Preparation of surface of existing roof slab surface for receiving roof water proofing treatment.
- l) Providing and applying Liquid applied single component polyurethane based elastomeric water proofing membrane for roof treatment.
- m) Providing geo textile layer over the laid roof water proof coating followed by a protective concrete screed in slope.
- n) Providing plaster on walls of existing RCC drain at roof top & new brick wall.
- o) Correction of slope by providing screed concrete in existing RCC drain at roof top.
- p) Performing Test for water tightness of laid water proofing treatment.

The firm/organization should have at least one qualified Civil Engineer and his C.V., should be furnished, who will supervise the work execution.

The Bidder shall visit the site and assess the involvement of works under the scope of work. Bidder shall apprise himself fully with existing site conditions to meet the stipulated time frame laid down in the specification. The bidder is expected to get clarified any doubts about the specification etc., before bidding through discussion with the Owner recorded in writing in respect of interpretation of any portion of this documents. No extra claim shall be entertained for any unforeseen reason. Drawings and data provided by the Owner/BHEL in the bid documents is for bidder's information and guidance only.



2) EXECUTION

The contractor shall furnish the job procedure & sequence of work in the beginning and obtain approval from the Engineer in Charge before starting of work. The work shall be executed in a professional approach, adhering to quality & safety requirements & to the entire satisfaction of Engineer in Charge. Sufficient manpower & resources shall be deployed to complete the work in an un-interrupted manner. As the office work is functioning in the PPEI Building, adequate measures shall be undertaken by the contractor to ensure that the day to day office works of BHEL are least affected due to execution of work under this contract. Phase-wise site clearance will be provided to vendor in writing by BHEL Engineer in Charge.

2.1. DEMOLISHING / DISMANTLING

The demolition/ dismantling shall always be well planned before hand and the operations shall be got approved from the Engineer-in-Charge before starting the work. Due care shall be taken to maintain the safety measures prescribed in IS 4130. Necessary temporary enclosures or partitions and necessary scaffolding with suitable double scaffolding and proper cloth covering shall also be provided to ensure the safety of the adjoining work or property before demolishing/ dismantling is taken up and the work shall be carried out in such a way that no damage is caused to the adjoining work or property. Necessary precautions shall be taken to keep noise and dust nuisance to the minimum. All work needs to be done under the direction of Engineer-in-Charge. Helmets, goggles, safety belts etc. should be used whenever required and as directed by the Engineer-in-Charge. The demolition/ dismantling work shall be proceeded with in such a way that it causes the least damage and nuisance to the adjoining building and the public. Dismantling shall be done in a systematic manner. All materials which are likely to be damaged by dropping from a height or by demolishing roofs, masonry etc. shall be carefully removed first. Chisels and cutters may be used carefully as directed. All materials obtained from dismantling or demolition shall be the property of BHEL and stacked/ disposed off as directed by the Engineer-in-Charge. The demolished/ dismantled debris/materials shall be removed manually or otherwise, lowered to the ground (and not thrown) and then properly disposed/ stacked as directed by the Engineer-in-Charge. The contractor shall maintain/disconnect existing services, whether temporary or permanent, where required by the Engineer-in-Charge. Water may be used to reduce dust suppression while demolishing work.

The exposed area of roof slab after demolishing of existing screed concrete is prone to ingress of water due to rain/ water pipe leakage/ over flow of water tank which can severely disrupt the office works in the floor below and can damage the office equipment. So, ample tent/ canopy type materials such as tarpoline, scaffolding pipes and clamps materials etc. shall be arranged at site and skilled manpowers shall be kept at site round the clock to erect tarpoline covering over exposed roof slab in emergency situation of rain down pour. The contractor shall keep provision for this while quoting the rates and no extra shall be paid to the contractor on this account. If the contractor is found not complying with this requirement, the same shall be arranged by BHEL at contractor's risk & cost.



At a time, demolishing in not more than 500 sqm of roof area (subject to review by Engineer in charge as per contractor's resources & weather condition) shall be undertaken. Once the water proofing membrane has been completed in the demolished/ exposed area of roof, clearance shall be obtained by the contractor from the Engineering in Charge to proceed for next area of demolishing of existing concrete screed. This sequence shall continue so on. Bidder to note this sequence of working while quoting the rates and nothing extra shall be payable on this account.

2.2. REPAIR OF PLASTER/ NEW PLASTER WORK

Repair of plaster work includes cutting the patch and preparing the wall surface. Patches of 2.50 square metres and less in area shall be measured under item of 'Repairs to Plaster' under BOQ item. Plastering in patches over 2.5 square metres in area shall be paid for at the rate as applicable to new plaster work on RCC wall/ brick wall under BOQ item.

The work shall be carried out in a manner as specified in CPWD latest specification and the BOQ item of the contract.

2.3. RAIN WATER PIPE & KHURRAWORK

Before taking up the water proofing work, the ancillary items like fillets/haunches, khurras, grooves to tack the water proofing membrane, fixing up of all rain down take pipes should be completed and no such work should be allowed on the area to be treated during the progress of water proofing treatment or even later. Existing Rain water pipes shall be inspected and if found damaged/ defective, the same shall be dismantled and stacked at a location within PPEI Building premises as directed by Engineer In Charge. New / replacement rain water pipes and khurra shall be provided & fixed in a manner as specified in CPWD specification and the BOQ item of the contract.

2.4. PREPARATION OF EXISTING ROOF SLAB TOP SURFACE

The surface to receive water proofing membrane should be cleaned, dried, free of sharp protrusions and surface defects such as cracks, voids and protrusions. Cracks or crevices if any on concrete surface shall be cut to 'V' section, cleaned and filled up flush with appropriate chemical/ polymer modified mortar. Junctions between the roof and vertical faces of parapet walls, columns etc. shall be cased by running triangular fillets 5.0 x 5.0 cm size, in cement mortar 1:3 mixed with SBR based additive product. At the drain mouths, the fillets shall be suitably cut back and rounded off for easy application of water proofing treatment and easy flow of water. Horizontal groove of 25 X25mm on the parapet wall minimum above 200 mm from roof slab shall be made for termination of water proofing membrane and shall be subsequently caulked with suitable polymer modified mortar after termination of water proofing membrane.

2.5. EXPANSION JOINT WORK

Existing expansion joint treatment in the roof slab shall be opened up and gap shall be cleaned. Thereafter, joint shall be prepared by making corner edges of joint, priming with polysulphide primer, filling of expansion joint with PU backer rod of appropriate size followed by polysulphide sealant filling using a positive pressure adequate to properly fill and seal the joint. The sealant shall be tooled with light pressure to spread the sealant against backing material. Subsequently, the expansion joint shall be covered with EPDM



membrane of 1.2 mm thickness of 250mm wide and edges of EPDM membrane in contact with roof slab shall be sealed properly with epoxy sealant.

To ensure further protection against ingress of rain water into expansion joint in roof slab, brick walls shall be raised on both sides of joint and a RCC canopy cover shall be provided. In order to ensure sliding joint between canopy & brick wall, a separation strip of PVC minimum 3mm thickness and minimum width 230 mm shall be provided between one brick wall & canopy cover and joint shall be sealed with polysulphide sealant. The external side of brick wall and canopy shall be plastered.

Expansion joint work should be completed first before commencing of application of water proofing membrane in adjoining areas.

2.6. ELASTOMERIC MEMBRANE WATER PROOFING TREATMENT

a) Material

The material shall consist of high solid content Polyurethane based cold liquid applied coatings as per ASTM C836-898 comprising of urethane pre-polymers extended with flexible material, which cure by reaction with atmospheric moisture to give a continuous film which is rubbery and elastic or any other equivalent material permitted as per ASTM and approved by the Engineer. The material shall consist of high solid coating designed to give a high-build film. The material shall not be diluted. The coating shall have physical feature like high viscosity, 90% solids, high resistance to impact, abrasion and cracking, superior tensile strength, application limit of 700C minimum, 300% elongation and forming a perfectly smooth permanently flexible seamless membrane which should have good adhesion to roof substrates (RCC, tiles, brick, and metals), having a minimum life of 10 years. It should also be resistant to acid (mild concentrated), alkalies and have a very low water absorption rate (0.5%) max. at ambient temp. after 7 days.

The pack shall not be older than 9 months after the date of manufacture and packing.

b) Primer coat

Priming is not normally required on good quality concrete substrates. However, absorbent surfaces such as porous concrete will require primer coat. If required as per manufacturer recommendation, it shall consist of polyurethane (P.U.) or any other equivalent material. Primer coat shall be a special blend of moisture curing urethane pre-polymers in solvent. A single coat of this primer shall be applied by brush over the prepared bed as an adhesion coat of an application rate of minimum 6 sq.m per litre.

The primer shall be allowed to dry for minimum of 2hrs. time before the successive finishing coats of P.U. liquid membrane are applied.

c) Finishing coats

The finishing coats shall consist of two successive liquid coatings of high solids content urethane pre-polymers or equivalent material to form an elastomeric membrane.

The overall dry film thickness shall be 1.5mm with minimum consumption rate of 1.5 Kg/sqm of total water proofing material including primer if applied.

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Each coat shall be allowed to dry for minimum 12 hours before applying the next coat. The surface should be dry and smooth before application.

The coating shall be continued up the parapets/walls for a minimum of 200mm over the finished roof surface. It shall be continued into rain water pipes by atleast 100mm.

The final coat of P.U. liquid when tacky shall be sprinkled with the sand.

2.7. PROTECTIVE SCREED CONCRETE

To protect liquid applied elastomeric water proofing membrane, a cement concrete screed mix 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 12.5 mm nominal size) with integral water proofing compound in as per IS: 2645 shall be laid in slope not less than 1:100 having minimum 25 mm thickness at the lowest point of the slope. A Geotextile layer 120 gsm shall be spread over the laid water proofing coating before application of protective concrete screed. The aggregate shall be mixed dry and minimum quantity of water shall be added to make the mix workable. The mix shall be laid to proper grade, fully consolidated and surface shall be smooth and even. A groove of 6mm x10mm at top of screed surface at spacing not more than 1.5m bothways shall be made and filled with an approved quality elastomeric compound sealant.

3) ACCEPTANCE CRITERIA AND GUARANTEE

The surface level shall be such as to allow quick draining of rains without leaving any pool anywhere.

For water proofing membrane laid, total DFT of the laid water proofing membrane laid shall be checked. There shall not be any bubble formation on water proofing membrane laid. Water tightness test should be conducted for the minimum flooding period of 24 hours. No dampness should be observed within an hour after the test duration.

The contractor shall give a unilateral guarantee from the specified agency for the roof waterproofing treatment work. The guarantee shall be for materials and workmanship as under:

For Elastomeric Membrane: 10 (ten) years

The mode of execution of the guarantee shall be such, which shall be acceptable to the Owner.

4) CODES AND STANDARDS

The specification herein provided is intended for the general description of the work, quality and workmanship. The specification is not, however, intended to cover the minutest details and the work shall be executed according to the spirit of the specification and in the absence thereof according to the relevant latest Indian Standard Codes & CPWD specification unless specifically mentioned in the specification. All materials whether to be incorporated in the work or used temporarily for the construction shall conform to the relevant IS Specifications/ ASTM standards unless-stated otherwise and be of best approved quality.



5) RATES AND MEASUREMENT

a) Rates

Rates shall include for the cost of all material, royalty and carriages, equipment, tools & plant and labour, as detailed in the specification unless any portion is specifically excluded in the "BOQ Items".

No extra shall be paid for making approaches, finishing around opening, sleeves, pipes etc.

No separate payments shall be made for cleaning of surface, treating of cracks, cement slurry application wherever required and surface preparation.

b) Measurement

Units for measurements shall be as mentioned in BOQ items. Dimensions shall be measured correct to 0.001 m and the calculated area/ volume shall be calculated in sqm. correct to two places of decimal.

No deduction shall be made and no extra shall be paid for openings upto 0.4 sqm.

6) Variation in quantity/item:

The quantities mentioned in the schedule of quantities are based on estimate and are meant to be indicating the extent of work and to provide a uniform basis of tendering and any variation shall not vitiate the contract.

The contractor shall be bound to carry out the work in accordance to the instructions given to him in writing by engineer in charge or his representative on behalf of company.

BHEL reserves the right to cancel any item of work / alter the work included in the contract / part closure of contract.

General Terms & Conditions

[A] Terms and Conditions:

1. **DELIVERY:** The bidder should start the services within 7 days from the date of work order. . On delay penalty will be levied as per penalty clause.
2. Bidder are requested to go through the scope of services, visit the BHEL's work premises etc. and get fully acquainted with the scope of services required and get their doubts clarified regarding the above job before submitting the offer.
3. Bidder must note that any false information / data or any suppression of facts will disqualify them even at a later stage also. The Bidder will have to deploy trained and efficient work force for the work.
4. The Bidder may be rejected on account of unsatisfactory part performance in the execution of an earlier contract if noticed during technical evaluation.
5. The successful Bidder will be responsible for the quality of the job / services and will immediately rectify the deficiency pointed out in the work performed.
6. If at any time during the period of contract, it is observed by BHEL or its authorized representative that the work being performed are not to the satisfaction or any terms of the contract are violated and Bidder does not respond for improvement of the same; in such situation BHEL reserves the right to terminate the contract and may recover the undone cost from his bill or may forfeit the Security Deposit in part or full as the case may be.
7. Successful bidder shall take all precautions to ensure that no damage happens to any structure of the office building.
8. BHEL will have no liability whatsoever concerning the persons deployed by the contractor for the purpose. The contractor shall keep BHEL indemnified against all losses or damages or liability arising out of or imposed in the course of employment of persons by the contractor.
9. The contractor will be solely responsible for any unlawful act of their workforce while on duty. In case of theft or loss of BHEL's property takes place due to the negligence or carelessness of workforce, the contractor will be responsible and shall make good of the same.
10. In case of any dispute, the decision taken by BHEL Management will be final and binding on the contractor.
11. In case, while on duty and during the course of engagement in work premises of the Company under this contract, if any of the Contractor's workforce meet (s) with any injury / indisposition due to accident or other natural calamities, the Contractor shall ensure that immediate and adequate medical aid viz., first -aid and subsequent treatment facilities are provided to the person(s) concerned free of cost without fail. In addition, the Contractor shall also be liable for meeting with statutory liabilities like ESI etc. in respect to his workers.
12. Contractor will have full responsibility of proper up keep, maintenance of the equipments etc. handed over to them by the company.
13. Contractor has to take all the responsibility of his employees working inside the company office premises. All the payment related issues of labour (minimum wages fixed by govt., PF, ESI etc.) has to be taken care by the contractor itself and the contractor have to follow the rules pertaining to labour law of govt. of India. BHEL will not be liable to pay any type of compensation if any accident of fatal injury etc. happens to contractor's employee. The contractor shall only be liable for the same.
14. The contractor has to provide all day to day spares without any extra cost.
15. No labour below the age of fourteen or who is not an Indian National shall be employed on the work.
16. Any discrepancy in the bid, if found the same shall be to advantage to BHEL and will be considered for evaluation accordingly.



17. Manpower deployed by contractor should be well behaved, have positive attitude and should be properly dressed. Rude and discourteous behaviour should be invite penalty and may also lead to cancellation of his entry.
18. Contractor will not be allowed to sublet the contract to other parties.
19. Contractor will be permitted to work only during the working hours. However, removal of waste from the premises to be done only after the office hours (i.e. after 6.00 p.m).
20. **SAFETY RULES:**
 - a) The Contractor must inspect the area of work to decide the safety precautions necessary for executing this contract.
 - b) Whenever people work at height more than six feet, platform shall be provided or the workers shall wear safety belt to avoid fall from the height.
 - c) Wherever any area declared dangerous, the workers shall not be allowed to work till a written clearance is obtained from appropriate authorities.
 - d) No material of any kind shall be dropped or allowed to be dropped from any height.
 - e) Defective ladders shall not be used at all.
 - f) Inflammable materials shall not be stored near places where the sparks are likely to occur.
 - g) The necessary safety equipment such as gloves, safety belt, helmet, safety boot etc. must be issued to the workmen and strictly to be used while carryout the work. If Personal Protection Equipment not provided by the contractor, BHEL shall provide the required PPEs on chargeable basis, depending upon the stock availability.
 - h) If the contractor's workmen found violating the safety precautions, punitive action will be taken and or a penalty of Rs 500/- will be imposed and deducted from the contractor bill for each violation.
 - i) The working area shall be kept clean and free from all obstructions.
 - j) All safety precautions are to be taken by the contractor at his cost.

These safety measures shall be deemed to form an integral part of the Work Order/ Agreement.

[B] Completion period:

The total time fixed for completion of all the works is 60 days including holidays from the date of start of work. On delay, penalty will be levied as per penalty clause.

[C] Payment terms:

BHEL under any circumstance will not entertain the request for payment against material at site or any sort of advance payment. However, payment of running bills could be considered depending on the progress of actual work done subject to verification of measurements etc . by BHEL Engineers. The running bills to be claimed only at every 30% of actual work completed.

The invoice shall be submitted in triplicate in conformation with the measurement books, along with specified documents to HR-GAX Department of BHEL/PS-PEM, PPEI Building, NOIDA and the payment will generally be made within 30 days after receipt of bill correct in all respects, measurements and verification by BHEL engineers for satisfactory completion of the work. Payment will be made through e-payment (through electronic fund transfer (EFT) / RTGS) only after deducting taxes (like Work contract tax, TDS, sale taxes, service taxes, etc.). **Details of your bank account for the same shall be submitted by you.** Also, no interest shall be paid due to delay in making the payment. Service Tax should be shown separately in the rates quoted. The same will be paid / remitted in accordance with the provisions of Reverse Tax Mechanism of Service Tax as applicable.

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[D] Penalty clause:

- a) It is clearly understood among the parties to the contract that time is the essence of the contract. Therefore, the delivery of the works specified in the Order should be made within the stipulated delivery period. Where work is done after the stipulated period, BHEL shall be under no obligation to accept the works. However, if accepted, penalty at the rate of 0.5% per week of delay or part thereof shall be levied on the value of works delayed limited to 10% (excluding taxes) of the total contract value, without prejudice to any other relief or compensation due to BHEL under any other condition of the contract.
- b) Penalty @ Rs.500/- per instance shall be levied in case of misbehave of contractor or its labours.
- c) If contractor fails to deliver the required work within specified time or with required quality, BHEL has the right to do the part or complete work from another contractor on risk and expense of the contractor. The contractor would be liable to compensate the BHEL for any loss which BHEL may sustain by reason of such risk purchase. The same shall be deducted from the contractor's bill/security deposit plus a penalty of Rs.5000/- shall also be charged in addition to clause (a).
- d) If during the contract, any BHEL item/property gets damaged at contractor's end, its cost shall be recovered from the running bill of the contractor plus a penalty of Rs.1000/- for each item shall also be levied.
- e) A delay penalty of Rs 1000 per day will be charged for delay in start of work.



PRICE BID FORMAT

Annexure-'I'

BHARAT HEAVY ELECTRICALS LIMITED
PS-PEM, PPEI, HRDI & ESI COMPLEX,
PLOT NO. - 25, FILM CITY, SECTOR – 16A NOIDA (U.P.) – 201301
TENDER Ref. No. : - **Dated: - / /**

Sub.: - Repair and Waterproofing Treatment of PPEI building roof BHEL, Plot no.25, Sector-16A, Noida.

S. N.	Description	Unit	Qty.	Rate	Amount
Roof Treatment works: Roof treatment works including all labour, material (unless otherwise specified in BOQ/contract specification), equipment, transportation, handling, curing, sampling, testing etc at all level as per specification, drawings and as directed by engineer - in - charge for the following:					
1	Demolishing of screed concrete and plaster existing at roof top of BHEL-PPEI building and disposal of demolished debris within BHEL-PPEI office boundary wall limit so as to completely expose the existing RCC roof slab. (Measurement shall be of the plan area of demolishing of existing screed concrete over the roof.)	sqm	3000		
2	Repairing of plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq. meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish within BHEL-PPEI office boundary wall limit. Plaster mortar shall not be inferior than cement mortar 1:5.	sqm	160		
3	Providing and applying Liquid applied single component polyurethane based elastomeric water proofing membrane for roof treatment as per ASTM C-836, C-898 with one coat of polyurethane or any other equivalent material based primer (if required as per manufacturer recommendations with an application rate of minimum 6 sq.m per litre) and two successive liquid coatings of high solids content urethane pre-polymers or equivalent material based finish coats as per relevant ASTM standards to form an elastomeric membrane with overall dry film thickness 1.5mm with minimum consumption rate of 1.5 Kg/ sqm of total water proofing material including primer if applied. The item includes preparation of surface, cleaning of existing roof surface from all dirt & loose aggregates, scrapping, sanding, light surface grinding, raking of joints, treatment of cracks or crevices if any on concrete surface with appropriate chemical/ polymer modified mortar, making of 25 X25mm groove on the parapet wall above 300 mm from roof slab for termination of water proofing system and caulking with suitable polymer modified mortar, making a coving of 50mm x 50mm at the junction of roof & parapet/column projections wherever required with cement mortar(1:3) mixed with SBR based additive product, including test reports, performance guarantee of ten years etc. all complete.	sqm	3150		
4	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 12.5 mm nominal size) over P.V.C. sheet 1mx1mx400micron, finished with 12mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement rounding the edge sand making and finishing the outlet complete.	Nos	13		
5	Providing and laying 120 gsm Geotextile layer over the laid water proofing coating before application of protective concrete screed.	sqm	3150		
6	Providing and Laying cement concrete screed in the required gradient for roof drainage. The average thickness of screed 80 to 90 mm with minimum thickness of 40mm at the end in the ratio of 1:2:4 mix (1 cement : 2 coarse sand : 4 stone aggregate 12.5 mm nominal size). The item includes mixing of integral water proofing compound in screed concrete as per IS: 2645, making groove of 6mm x10mm at top of screed surface at spacing not more than 1.5m both ways and filling the groove with an approved quality elastomeric compound sealant, making fillet /concrete gola of same concrete in suitable size at the junction of roof & parapet/column projections etc. all complete. Concrete quantity of screed & fillet/ gola shall be measured for payment.	Cum	275		

Sign & Seal of Bidder



PRICE BID FORMAT

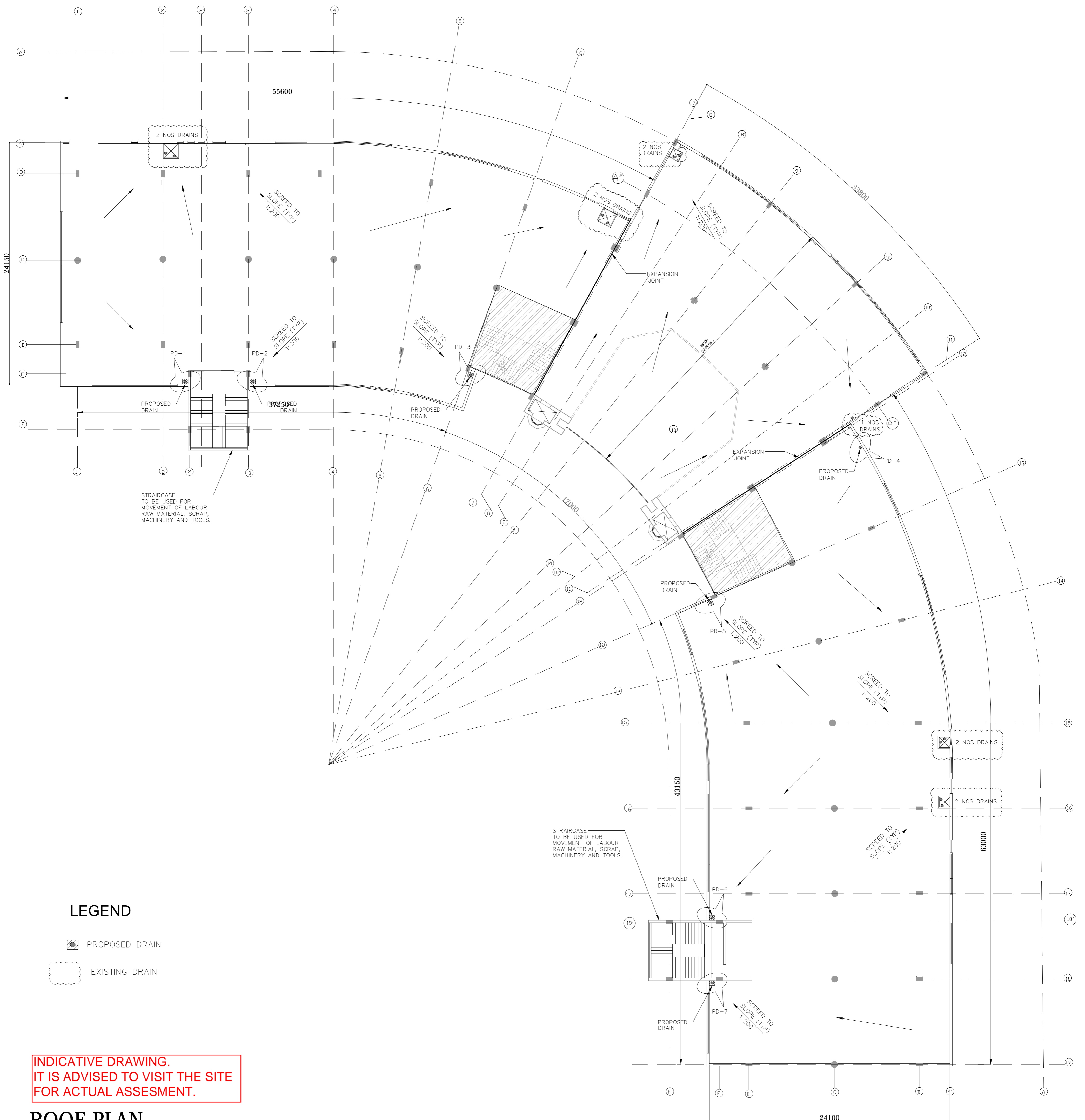
S. N.	Description	Unit	Qty.	Rate	Amount
7	Providing and fixing on wall face unplasticised Rigid PVC Rainwater down take pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.(i) Single socketed pipes of 160 mm diameter.	RM	100		
8	Dismantling of existing Rain water pipes & stacking the same within BHEL-PPEI office boundary wall limit including dismantling of existing shaft masonry/ hood for facilitating removal of damaged rain water pipes.	RM	40		
9	"Providing treatment at existing expansion joint in roof. Expansion joint treatment includes preparation of surface by opening up of joint, removal of old treatment, making corner edges of joint, priming with polysulphide primer, filling of expansion joint with PU backer rod followed by polysulphide sealant filling. The prepared surface should be of 50x25mm groove size for polysulphide sealant filling. The expansion joint to be covered with EPDM membrane of 1.2 mm thickness of 250mm wide and sealing with epoxy sealant all complete as per direction of Engineer in-charge."	RM	50		
10	Providing 12mm thick plaster in cement mortar 1:5 on existing roof drain RCC walls/ new brick wall to a smooth finish including curing etc all complete.	sqm	650		
11	Providing brick work in cement mortar 1:6 (1 cement : 6 coarse sand) over roof slab along expansion joints in slab in thickness 230mm including raking out joints, curing, etc complete (excluding plastering and painting) using burnt clay bricks of class designation 7.5 of nominal dimension.	CUM	12		
12	Providing RCC of grade M20 (1 part cement, 1.5 part sand, 3 parts of 12.5/20 mm graded aggregate by volume) for canopy over expansion joint at roof slab, curing, shuttering etc. all complete.	CUM	3.5		
13	Providing, straightening, cutting, bending, placing in position for canopy over expansion joint in roof slab, binding of steel reinforcements of TMT steel of grade Fe-415 conforming to IS:1786 all complete .	Kg	150		
14	Providing expansion joint sealing strip of PVC minimum 3mm thickness and minimum width 230 mm with necessary sealing of joint by poly sulphide sealant all complete.	RM	50		
Total Amount Rs.					
CST/VAT on				% @	%
Service Tax on				% @	%
Grand total amount Rs.					

(Total amount is Rupees


.....only.)
* Evaluation will be done on the Grand total amount quoted by the bidder.

Note: All Applicable statutory deduction shall be made from contractor's bill.

Sign & Seal of Bidder



LEGEND

-  PROPOSED DRAIN
-  EXISTING DRAIN

INDICATIVE DRAWING.
IT IS ADVISED TO VISIT THE SITE
FOR ACTUAL ASSESMENT.

ROOF PLAN
DATE : 19/09/2016

COMMERCIAL TERMS AND CONDITIONS
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1. BID SUBMISSION

Bids shall be submitted latest by **02:00 P.M.** on or before the due date in two parts as follows:

PART-1: TECHNO-COMMERCIAL BID

This part shall contain the following:

- a) Technical Specification & other scope of work
- b) Commercial terms and conditions & General terms and conditions
- c) Unpriced copy of the price bid format (Annexure-I) with all amounts/figures/ percentages wherever quoted in the price bid being replaced with the word 'Quoted' or 'Q'.
- d) Supporting document/ information to be submitted against each point of 'PQR' and Documents to be enclosed with bid as per checklist Annex-VII.

This part shall be submitted in duplicate in two separate Sealed Covers with bidder's distinctive Seal super scribed with correct Enquiry No., Item of supply, due date of opening and '**part-1 : techno-commercial bid**'.

Complete tender in all respects duly signed & stamped on each and every page by the authorized signatory of the bidder as a token of acceptance of all the terms and conditions of tender.

PART -2: PRICE BID (strictly as per price bid format-Annexure I)

This part shall contain Prices only and should not contain any technical details and/or Commercial Terms & Conditions. Any technical details and/or Commercial Terms & Conditions, if found in this part shall be ignored as the same are supposed to be contained in PART-I only as indicated above.

This part shall be submitted in a separate Sealed Cover with bidder's distinctive Seal super scribed with correct Enquiry No., Item of supply, due date of opening and '**part -2: price bid**'.

Tenders and all correspondence thereof, shall be addressed to the undersigned by name & designation and sent at the following address:

Kind Attn: Sh N C Sharma / Sr. Engineer (MM) & Sh I P Singh / Sr. Mgr. (CMM)
Tender Room,
M/s Bharat Heavy Electricals Ltd.
Project Engineering Management,
Power Project Engineering Institute,
HRD & ESI Complex,
Plot No 25, Sector-16 A, Noida-201301 (U.P.)
Phone no. 0120-4213591, 4368749
E-mail: ncsharma@bhelpem.co.in; INDRA@bhelpem.co.in



(Signature & Seal of Bidder)

2. BID OPENING

PART- I (Techno-Commercial Bids) will be opened at 03:00 P.M. on the due date in the presence of bidders who may like to be present. Date and time of opening of Part - II (Price Bids) shall be communicated separately.

3. The bid shall remain valid for a period of 180 days from the date of opening of offers. No revision of prices shall be entertained after bids have been opened. Bidder shall not be entitled during this period to revoke or vary the content of bid or any terms thereof. In case of any unsolicited variation subsequent to bid opening, the bid shall be treated as "Rejected".
4. Prices shall remain firm without any variation till completion of contract. Once the contract is awarded, the quoted rate shall remain firm for the entire contract period & will not vary on any account whatsoever be the reason.
5. **Evaluation:** will be done on the Grand total cost (all inclusive) to BHEL quoted by the bidder.
6. **EMD:** Each Tenderer have to submit an EMD of Rs.135000/- (Rupees One lakh thirty five thousand only) for the above job / services in the form of Pay Order or Demand Draft only in favour of BHEL, with the techno-commercial (Part-I) bid.
7. **Security Deposit:** The contractor shall have to deposit an amount @ 5% of contract value as "Security deposit" to BHEL before the start of work in the form of Pay order / Demand Draft / Local Cheque / Bank guarantee in BHEL's format from scheduled banks / Fixed Deposit Receipt issued by Scheduled Banks/ Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL) / Securities available from Indian Post offices such as National Savings Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security and duly endorsed/ hypothecated/ pledged, as applicable, in favour of BHEL).
EMD of the successful tendered shall be converted and adjusted towards the required amount of security deposit. 50% of the required Security Deposit, including the EMD, shall be deposited before start of the work. Balance of the Security Deposit can be collected by deducting 10% of the gross amount progressively from each of the running bills of the Contractor till the total amount of the required Security Deposit is collected.
8. BHEL shall be under no obligation to accept the lowest or any other bid and shall have the right to accept or reject any bid in part or in full without assigning any reason whatsoever. BHEL also reserves the right to reject any or all quotations without assigning any reason whatsoever. Quotation of the parties which have been black-listed / debarred / banned by PSUs / kept on hold by any office of Delhi-based Divisions of BHEL during the last three years will be rejected.
9. Late tenders will be rejected.
10. **RISK PURCHASE:** Purchaser will have the option to terminate the contract and purchase from elsewhere (the best and the nearest available substitute thereof) at the risk and cost of the Vendor, either the whole or part of the goods/services which the contractor has failed to deliver services or as not able to give quality services as stipulated in the contract. The contractor would be liable to compensate the Purchaser for any loss which the Purchaser may sustain by reason of such risk purchase, in addition to Liquidated Damages (Penalty Clause) at the rate as mentioned in technical specification.



(Signature & Seal of Bidder)

11. PRICE DISCREPENCY:

- a) If, in the price structure quoted for the required goods/services/works, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price the quantity), the unit price shall prevail and the total price will be corrected accordingly, unless in the opinion of the purchaser there is an obvious misplacement of the decimal point in the unit price., in which case the total price as quoted shall govern and the unit price will be corrected accordingly.
- b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- c) If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in the words is related to an arithmetic error, in which case the amount in figures shall prevail subject of (a) and (b) above.
- d) If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date up to which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the purchaser, the bid is liable to be ignored.
- e) Taxes and duties if not specified clearly as extra shall be considered as include in the basis price and, therefore, shall not be reimbursed separately.

12. TAX DEDUCTION AT SOURCE:

Tax shall be deducted at source from the running bills as per applicable Income Tax Rules and other statutory requirements.

13. DEVIATION: The Contractor must comply with the tender specification and all terms and conditions of contract. No deviation shall normally be entertained. Deviation if any, should be given as per the format attached at Annexure-III by mentioning the related/affected clause number etc.

GENERAL TERMS AND CONDITIONS

14. ARBITRATION

In the event of any dispute or difference arising out of the execution of the Order/Contract or the respective rights and liabilities of the parties or in relation to interpretation of any provision between BHEL & Service Provider in any manner touching upon the Order/Contract, such dispute or difference shall (except as to any matters, the decision of which is specifically provided for therein) be referred to the arbitration of the person appointed by the competent authority of BHEL.

Subject to as aforesaid, the provisions of Arbitration and Conciliation Act, 1996 (India) or statutory modifications or re-enactments thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceedings under this clause. The venue of arbitration shall be at Noida.

15. LAWS GOVERNING THE CONTRACT

The Order/Contract shall be executed and governed by the laws of India and the courts of India alone shall have jurisdiction in respect of any matter arising under or in connection with the Order/Contract. Extant regulations of Govt. of India will be applicable. Law of land will supersede any condition given in tender enquiry, in case of any contradiction.

16. RESOLUTION OF DISPUTES

- The purchaser and the supplier shall make every effort to resolve any disagreement or dispute, arising between them under or in connection with the contract, amicably by direct negotiation.
- Dispute if any, arising out of or in respect of the contract(s) to which these conditions are applicable, is subject to the jurisdiction of the Delhi courts only.



(Signature & Seal of Bidder)


17. STATUTORY VARIATION:

- i) If the rates for taxes and duties in respect of the quoted materials and/ or services assumed by the Seller/ Contractor are less than the tariff prevailing at the time of tendering, Seller/ Contractor will be responsible for such under quotations. However, if the rates assumed are higher than the correct rates prevailing at the time of tendering, the difference will be to the credit of the Purchaser.
- ii) Statutory Variations in Service Tax on services rendered by vendor himself on the rates prevailing at the time of delivery/ completion in comparison to the date of offer, will be to the account of the Purchaser. No other variations such as on customs duty, exchange rate, minimum wages, prices of controlled commodities, any other input etc. shall be payable by the Purchaser.
- iii) Notwithstanding the above, where the actual completion of the supply occurs beyond the period stipulated in the Order/ Contract or any extension thereof, variations referred to above, will be limited to the rates prevailing on the dates of such agreed completion periods only. For variations after the agreed completion periods, the Seller/ Contractor alone shall bear the impact for the upward revisions and for downward revisions; purchaser shall be given the benefit of reduction in taxes/duties. This will be without prejudice to the levy of penalty for delay in delivery/completion schedule.
- iv) Any new tax structure (like Goods & Services Tax) as and when implemented by the Government shall become applicable in addition to or in lieu of existing tax structure.

18. The Bidder along with its associate/ collaborators/ sub-contractors/ sub-vendor/ consultants/ service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL web site <http://www.bhel.com> and shall immediately bring to the notice of BHEL Management about any fraud as soon as it comes to their notice.

NOTE:

It is presumed that the bidder has accepted all the instructions, Terms and conditions and Technical Specifications covered in this Tender Enquiry, unless the deviations are specifically indicated in the bid on a separate sheet.

-----X-----


(Signature & Seal of Bidder)

No Deviation Certificate

(To be submitted along with Part-1 Bid)

Notwithstanding anything mentioned in our bid, we hereby accept all the terms and conditions of the above tender. We confirm that the offer submitted by is confirming to all the terms and conditions mentioned in the tender document. We hereby undertake and confirm that we have understood the scope of services properly and shall carry out the job as mentioned in this tender.

Or

We hereby accept all terms and conditions of the above tender except the following:

- 1.
- 2.
- 3.
- 4.



(Signature & Seal of Bidder)

DECLARATION CERTIFICATE

I / We do hereby declare that there is no case with the Police/Court/Regulatory authorities against the proprietor/firm/partner. Also I/We have not been suspended / delisted / blacklisted by any other Govt. Ministry / Department/Public Sector Undertaking/ Autonomous Body/Financial institution/Court. We also certify that neither our firm nor any of our partners are involved in any scam or disciplinary proceedings settled or pending adjudication.



DETAILS OF BIDDER

S. No.	Description	Details
1	Name of the Party	
2	Address of the party	
3	Contact Person's Name	
4	Cell No. of Contact Person	
5	Land Line No.	
6	FAX No.	
7	E-mail ID of the Party	
8	PAN No.	
9	ESI Registration No.	
10	Service TAX No.	



(Signature & Seal of Bidder)

FINANCIAL DETAILS

TURN OVER (F.Y.) (In Rs. Lakhs)	2015-2016	2014-15	2013-14

INCOME TAX RETURN (F.Y.)	2015-2016	2014-15	2013-14

EXPERIENCE	No. of Work	Value	Customer's Name

EMD DETAILS	DD/ PO No.	Date	Amount (Rs.)

WORK EXPERIENCE

SIMILAR WORKS	Nature of Works	No. of Works	Value	Customer's Name

(Signature & Seal of Bidder)

Check List

SUMMARY OF COMPLAINE TO REQUIREMENT OF TENDER

S. No.	Required Document	If Submitted, then Tick (√)
1	Required amount of EMD	
2	Copies of the Audited Balance sheet and Profit & Loss account statements of last three financial years i.e. FY: 2013-14, 2014-15 & 2015-16 (AY: 2014-15, 2015- 16 & 2016-17) duly certified by CA.	
3	Acknowledgement of IT return of last three financial years i.e. FY: 2013-14, 2014-15 & 2015-16 (AY: 2014-15, 2015- 16 & 2016-17).	
4	Details of work experience, satisfactory work performance certificates	
5	Duly signed and stamped complete set of tender documents for technical bid	
6	Bidder's details	
7	Financial details / Work Experience	
8	Work orders / Completion certificates	
9	Signed and Stamped Un- priced bid format (The bidder has to write "Quoted" in places where he has quoted in Price Bid)	
10	Copy of PAN No. registration certificate	
11	Copy of ESI registration certificate	
12	Copy of VAT/Sales Tax & Service Tax registration certificate	
13	NO DEVIATION CERTIFICATE as per Annexure -III duly signed and stamped	
14	Declaration Certificate as per Annexure -IV	
15	Duly filled and signed Annexure - V regarding information of the tenderers	
16	Quoted PRICE BID (Annex-I) duly signed and stamped along with tender enquiry.	
17	The bidder shall submit the Bank details along with a cancelled cheque for NEFT/RTGS details	



(Signature & Seal of Bidder)