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## TENDER SPECIFICATION

TENDER NO.- NDA/Libya/GT-13 & 16/13\_101

FOR

Major Inspection/OH of GAS TURBINE # 13 (V 94.2 Siemens Design) and  
Repair of Gas Turbine # 16 (V 94.2 Siemens Design) & Generator at  
Western Mountain GTPP, Ruwais,Libya

### PART I – TECHNICAL BID



**Bharat Heavy Electricals Limited**

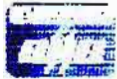
(A Govt. Of India Undertaking)

**Power Sector – Northren Region,**

**Plot No. 25 , Sector - 16A ,**

**Distt. Gautam Budh Nagar, NOIDA – 201 301.INDIA**

A handwritten signature in blue ink, appearing to read 'E. K. Singh', is written over a horizontal line.



ISO 9001-2000, ISO 14001  
and OHSAS 18001 certified  
company  
SubContract and Purchase  
Deptt.

**Bharat Heavy Electricals Limited**  
(A Govt. Of India Undertaking)

**Power Sector – Northern Region,**  
Plot No. 25 , Sector - 16A ,

Distt. Gautam Budh Nagar, NOIDA – 201 301.INDIA

Phone: 0091-0120-2515410 / 2515441 / 2515449

Fax 091-0120-2515438 / 2515467

Email: lnp@bhelsnr.co.in/ssr@bhelsnr.co.in

## **TENDER NO.- NDA/Libya/GT-13 & 16/13\_101**

### **IMPORTANT NOTE**

PURCHASER OF THIS TENDER DOCUMENT IS ADVISED TO CHECK AND ENSURE COMPLETION OF ALL PAGES OF TENDER DOCUMENT AND REPORT ANY DISCREPANCY TIMELY FOR CORRECTIVE ACTION. IF ANY, TO THE ISSUING AUTHORITY BEFORE THE BIDS ARE SUBMITTED. ORIGINAL COPY OF TENDER DOCUMENT COMPLETE IN ALL RESPECTS MUST BE SUBMITTED BACK AS PART OF THE BID WITHOUT WHICH THE SAME IS LIABLE TO BE REJECTED BY BHEL.

THIS TENDER SPECIFICATION ISSUED TO:

M/s-----

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ISO 9001-2000, ISO 14001  
and OHSAS 18001 certified  
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SubContract and Purchase  
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(A Govt. Of India Undertaking)  
**Power Sector – Northern Region,**  
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Email: [lnp@bhelsnr.co.in](mailto:lnp@bhelsnr.co.in)/[ssr@bhelsnr.co.in](mailto:ssr@bhelsnr.co.in)

## DOMESTIC NOTICE INVITING TENDER

LAST DATE OF SALE: 08.01.2014

LAST DATE OPENING: 08.01.2014

NIT NO. / NAME OF WORK

**TENDER NO.- NDA/Libya/GT-13 & 16/13\_101**

Sealed tender are invited from the contractors fulfilling qualifying requirements for

“Major Inspection/OH of GAS TURBINE # 13 (V 94.2 Siemens Design) and Repair of Gas Turbine # 16 (V 94.2 Siemens Design) & Generator at Western Mountain GTPP, Ruwais,Libya”

### NOTE:

1. Purchase Preference will be given to CPSU as per Govt. Guidelines.
2. Please visit our website at [www.bhel.com](http://www.bhel.com) and [www.bhelsnr.co.in](http://www.bhelsnr.co.in) for details of NIT including Qualifying requirement.
3. Tenders Not Accompanied with full Earnest Money Deposit of Rs.100000.00 By pay order or Demand Draft will not be considered. However, tenderers who have already deposited one time EMD of Rs.200000.00 with BHEL-PSNR OR 'One Time EMD' of Rs. 1,00,000/- with RSC, BHEL-PSNR, NOIDA are exempted from depositing EMD with this tender.

  
RSM/NOIDA



ISO 9001/140 DAYS01/27001  
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/E-MAIL  
REF. NDA/LIBYA/GT-13 & 16/13\_101  
DATE: 31/12/2013

**Subject: Major Inspection/OH of GAS TURBINE # 13 (V 94.2 Siemens Design) and Repair of Gas Turbine # 16 (V 94.2 Siemens Design) & Generator at Western Mountain GTPP, Ruwais, Libya**

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](http://www.bhelpsnr.co.in) at Service Tender).
2. Offer should be sent in Separate envelopes for Techno-commercial and Price bids. Offers distinctive identification (Company Name), tender no. NDA/LIBYA/GT-13 & 16/13\_101 dated 31/12/2013 due on 08.01.2014 'Techno-commercial' and 'price bid' should be mentioned clearly on cover of each envelope. In case it is holiday on 08.01.2014 the tenders will be opened on next working day. Offers may also be sent through E-mail at [lnp@bhelpsnr.co.in](mailto:lnp@bhelpsnr.co.in) and Fax on +91-0120-2416525.
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 inclusive of all taxes and duties as applicable in Libya as well as in India.
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 bidders.
5. The offer should reach this office on or before 15:00 on 08.01.2014. The offer will be opened at 15:30 on same day (In case it is holiday on 08.01.2014 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. 1,00,000.00 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).** "EMD" of Rs. 2,00,000/- with SCT-Deptt., PSNR, BHEL-NOIDA may be exempted for the same against this tender.
7. 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 : 0120-2416455 2415464 Fax: 0120-2416527  
e-mail : [ssr@bhelpsnr.co.in](mailto:ssr@bhelpsnr.co.in)  
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 of GT-13 is 60 days and for GT-16 is 45 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. 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.
12. **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 for GT-13 and GT-16 works separately. The bills will be verified by BHEL site engineer and certified by BHEL Resident Engineer for arranging payment. The balance 10% of each unit shall be payable after successful completion of work of the respective unit. Also security deposit shall be deducted separately for GT-13 & GT-16 works. All payments are subject to Income-tax deduction at source as per Central Government laws and compliance to all statutory requirements indicating in the NIT.  
All payments shall be made through E-payment system in Indian Rupees (INR). Contractor has to give Bank name, Branch & Account number alongwith the bills as these shall be incorporated in the system
13. BHEL reserves the right to reject a bidder based on their unsatisfactory past performance at any other project in any centre/region.
14. BHEL is not responsible for tenders/offers lost/delayed in transit/ by post etc. The offers reaching this office after due date and time 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.
15. The selected contractor will have to mobilise for the job **within 07 DAYS** of the issue of the letter of intent/ work order/work instruction from RSC.
16. Offers not received in line with the tender enquiry are liable to be rejected
17. 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.
18. Successful tenderer will have to submit Security deposit as calculated below before start of work :

a)

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

b) ADDITIONAL SECURITY DEPOSIT (SD) HAS TO BE SUBMITTED BY THE SUCCESSFUL BIDDER WITH VALUE AS FOLLOW:

" If the final price of successful bidder is lesser by " more than 20% of BHEL's estimate then only, ' Additional Security Deposit' will be required to be submitted by successful bidder with value as follows:

Additional Security Deposit = 30% of (A-B) will be calculated as below

A = 80% of BHEL estimate

B = the final offered price of successful bidder through RA (In case of RA) OR Sealed paper price bid of successful bidder (in case of paper bid)

This additional SD will have the same validity as that of Security Deposit and shall be revalidated/released in the manner as spelt out for Security Deposit as per relevant clause of GCC.

19. 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.

*Prakash*

**Tender No. : NDA/LIBYA/GT-13 & 16/13\_101 Date: 31/12/2013 Due Date: 08.01.2014**

20. Contractor shall ensure use of only calibrated Inspection, Measuring & Testing equipment confirming traceability to national standards. Valid calibration certificates shall accompany these IMTEs.
21. "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.
22. 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.
23. May see "General & Special conditions of contract (GSCC)- for Services jobs" on web page [www.bhelpsnr.co.in](http://www.bhelpsnr.co.in) at Service Tender.
24. 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.
25. Tentative date for start of work is 20/01/2014. However the date may change based on shutdown given by customer and this shall not entail the party to revise their price or any other condition of their offer. This factor may be kept in view while quoting.
26. Price bid of only those parties shall be opened who qualify in techno-commercial bid and who fulfils the following pre-qualification criteria as per **annexure-D**, documents in support of QR are to be enclosed along with techno-commercial bid :

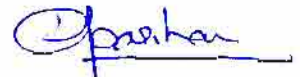
IF DEEMED NECESSARY, CUSTOMER'S APPROVAL SHALL BE TAKEN FOR SHORTLISTING VENDORS BEFORE OPENING OF PRICE BID.

Thanking You.

Encl:

1. Scope of Work-Annexure-A
2. Techno-Commercial Bid- Annexure-B
3. Price Bid- Annexure-C

Yours Truly



For Regional Service Manager



**SCOPE OF WORK (For Subcontractor only) - Completion Period = 60 days**  
**OVERHAULING OF GAS TURBINE # 13 (V 94.2 Siemens Design)**  
**at Western Mountain GPP , Ruwais , Libya**

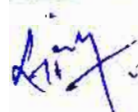
<b>I. GAS TURBINE</b>	<b>% Allotted</b>
1 Mark and remove insulation. Removal of all related C&I equipments from gas turbine assembly in order to facilitate dismantling of turbine.	2.5
2 Open all manholes and check for abnormalities.	
3 Disconnect all relevant fuel oil / gas lines.	
4 Take over/hand over special T&P and shifting these from central store to site and back after use.	
5 Measure turbine/compressor blade clearances in assembled condition. Arrangement of measuring device . Alignment and catenary check during dismantling . Taking all relevant dismantling observations and readings as per direction of engineer in charge.	
6 Remove intermediate shaft cover.	
7 Undo bolts of suction cone and lift off top half.	
8 Undo bolts and open compressor and turbine bearing housings	
9 Decouple turbine / intermediate shaft / generator rotors.	2.00
10 Check alignment of generator and turbine rotors.	
11 Lock the intermediate shaft in position.	
12 Inspect/clean turning gear assembly.	
13 Provide supports under the centre casing and combustion chambers.	2.00
14 Undo bolts of combustion chamber flanges.	
15 Undo combustion chamber from centre casing.	
16 Grind off liners of exhaust casing / turbine bearing.	3.00
17 Remove centre guides of turbine / compressor blade carriers upper halves.	
18 Undo bolts of centre casing / exhaust casing. (involves bolt heating). Bolt heating apparatus to be arranged by the subcontractor.	
19 Undo / remove air blow-off valves / lines.	
20 Lift off centre casing and exhaust casing.	
21 Open K-Ring and lift off top half.	
22 Provide jack bolts for the blade carriers.	
23 Undo the bolts of turbine and compressor blade carriers.	
24 Lift off top halves of turbine/compressor carriers.	
25 Measurement of axial bump and turbine / compressor blade clearances.	
26 Lift off stuffing box, turbine bearing top half.	
27 Lift off oil catchers and bearing top halves at compressor end.	
28 Fix inner casing by clamps / jacks to rotor.	2.00
29 Lift off the Turbine rotor and shift to up-ending device area.	
30 Up-end the rotor from horizontal to vertical position.	
31 Prepare platform. Remove platform after work completion .	
32 Unclamp/relieve rotor-tie rod (record deflection).	2.00
33 Dismantle all rotor discs including inner casing.	
34 Undo/remove all brackets, discs and dismantle inner casing and radiation liners.	1.00
35 Repair and assemble inner casing discs, etc. and replace radiation liners.	
36 Remove blades from turbine discs 1, 2, 3 & 4.	2.00
37 Remove I. and X rings from turbine rotor discs.	
38 Removal of blades from compressor discs 1 to 6 . Assemble new blades in the discs and new blades in the stay vanes . Machining required to be carried out for fitting of blades has to be done by subcontractor.	
39 Removal of IGVs, stationary vanes stage 1 to 6 from diaphragms .Refixing new vanes in diaphragms . Machining required to be carried out for fitting of blades has to be done by subcontractor	

*Amir*

*Naren*  
24/2/13

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40	NDT works as below including Supply of DPT (normal and fluorescent). UT and MPI kits with experienced operators - Bearings of turbine, compressor, turning gear and generator, thrust pads, turbine rotor and stator blades of all stages, Tie rod, hollow shafts, blade grooves and hirth coupling area of turbine wheels, hirth coupling area of compressor wheels, I. & X rings, inner casing, weld joints of mixing chambers, manhole inserts, exhaust casing, exhaust liners, metallic expansion joints, flame tube, tile holders, etc. Any other NDT recommended by the fact finders shall also be carried out at no extra cost. Certification of NDT expert and consumables according to acceptable standards of customer has to be done.	5.00
41	Recondition/prepare new turbine/compressor rotor blades.	2.50
42	Recondition/prepare new turbine stator blades.	
43	Install I. and X rings on turbine rotor discs.	3.00
44	Install blades on turbine discs 1, 2, 3 and 4.	
45	Install blades on compressor discs and diaphragm 1, 2, 3, 4, 5 and 6.	
46	Blue matching of Hirth coupling of all the discs and shafts.	4.00
47	Rotor assembly including stretching.	
48	Turn rotor from vertical to horizontal position.	
49	Undo bolts from top dome of both combustion chambers.	3.00
50	Undo / remove dual-fuel oil burners from combustion chambers.	
51	Lift off top domes and flame tubes of both combustion chambers. Carry out required repairs in flame tube body and arrangement of material and tools required for the same.	
52	Lift off premix burner assemblies, diagonal swirlers and burner insert rings.	
53	Take out mixing chambers from combustion chambers.	
54	Remove centre guides of turbine / compressor blade carriers bottom halves.	3.00
55	Lift off lower halves of turbine/ compressor blade carriers. Deblading of stay vanes of all stages from top and bottom half carrier.	
56	Dismantling of compressor diaphragms from blade carriers.	
57	Remove vanes from turbine stages 1 to 4 (both halves) as per requirement.	
58	Remove complete insulation from metallic expansion joints at turbine exhaust. Carry out repairs in the joint.	
59	Remove, inspect and clean ignition electrodes.	6.00
60	Cleaning of fuel gas burners by fine sand blasting.	
61	Reconditioning/replacement of fuel gas / oil burners/premix burners. Arrangement for welding and machining.	
62	Reconditioning of diagonal swirlers and burner insert rings. Arrangement for welding and machining.	
63	Reconditioning/replacement of flame tube dome plates. Arrangement for welding and machining.	
64	Repair/reconditioning of the flame tubes including replacement of tiles, tile holders, tile support rings and rollers, etc. Arrangement for welding and machining.	
65	Repair / re-conditioning / preparation of new (reconditioned) inner casing. Assembly of new/refurbished inner casing. Arrangement for welding and machining.	
66	Repair/ re-conditioning / preparation of new (reconditioned) mixing chambers. Assembly of new / refurbished mixing chambers . Arrangement for welding and machining.	
67	Repair/reconditioning/preparation of new bearings including machining of oil catcher seals along with materials for the same. Arrangement for welding and machining.	
68	Reconditioning/replacement of compressor stator and rotor blades including caulking and fixing. Arrangement for welding and machining.	
69	Install blades on turbine stator.	3.00
70	Install compressor diaphragms in blade carriers after reconditioning.	
71	Insert lower halves of the turbine/ compressor blade carriers.	






72	Insert K-ring bottom half in position.	
73	Install compressor/ turbine bearings and maintain the clearances.Centering of Inner casing by means of piano wire and carrying out suitable corrections in the Gas turbine assembly.	
74	Shift rotor to GT hall.	3.00
75	Lift rotor and insert into position	
76	Make inner casing free from rotor.	
77	Close turbine / compressor bearings for jacking oil operation.	
78	Remove all oil pumps.	
79	Overhaul lube oil / jacking oil / control oil pumps.	
80	Reinstall oil pumps in position.	0.50
81	Measure turbine side blade clearances.	3.00
82	Grind turbine rotor blades and compressor blades to maintain clearances. Grinding equipment along with experienced operators has to be arranged by the subcontractor for this.	
83	Position all lower half blade carriers and insert all lower center guides.	3.00
84	Measure all blade clearances.	
85	Close turbine / compressor blade carriers including heat tightening of bolts .Arrangement of heat tightening device.	
86	Close centre casing and exhaust casing including heat tightening of bolts.	
87	Welding of exhaust casing liners.	
88	Check blade tip clearances of compressor assembly and turbine assembly.	
89	Insert all top centre guides.	
90	Test for passing / leakage and repair fuel gas and fuel oil ball valves as per requirement.	0.50
91	Overhaul secondary air controllers and air shut off gate controllers assemblies.	
92	Assemble combustion chambers.	2.00
93	Install ball valves on combustion chambers after leak checking.	
94	Install combustion chambers.	
95	Check rotor alignment and correct the same.Arrangement of suitable jacks for correction to be done by sub contractor . Alignment correction can be done by making corrections in generator assembly . Arrangement for doing the same to be done by subcontractor.	3.00
96	Coupling of turbine and generator rotors including reaming of coupling holes. Adjustment of coupled runouts. Opening of extension shaft coupling for adjustment of runout. if reqd. Recoupling of extension shaft including reaming / honing of coupling holes and machining of coupling bolts.	
97	Overhaul turning gear device / transmitter unit.	5.00
98	Assembly of turning gear / transmitter units.	
99	Install compressor suction cone.	
100	Overhaul air bleed valves.	
101	Assemble air bleed valves and pipes.	
102	Connect all fuel (gas and oil) lines and other associated lines.	
103	Complete reinsulation work.	
104	Final inspection before closing of all manholes.	
105	Assistance in commissioning of different systems i.e. secondary air controllers, shut off gate controllers. ball valves. etc.	
106	Prepare all bearings for oil flushing by looping / installation of temporary fixtures.	
107	Removal of all T&Ps and other unwanted items from work area.	

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**II. GENERAL**

Provision for following items has to be done in order to facilitate the above job

14

1. Scaffolding material for all purposes and all areas.
  2. Tile fixing machine
  3. Tile fixing tools
  4. Plasma cutting machine and bolt heating device along with heating torches and nozzles for opening of various bolts.
  5. Fixture for fitting of cooling ring
  6. Special gaskets for tie rod nut opening device
  7. Turbine blade grinding machine/fixture. Suitable hydraulic jacks, torque wrench required for dismantling and assembly.
  8. Tractor for shifting of GT rotor from GT hall to place for dismantling and back
  9. Arrangement of all kind gases, electrodes and consumables to be used during overhauling works.
  10. Water gasket, oil gasket, fuel oil/fuel gas line gaskets and gaskets for blow off valve to be arranged.
  11. Provision for testing of fuel gas and fuel oil ball valves
  12. Arrangement for honing of coupling bolts and pins.
  13. Arrangement for reclamation/refurbishment/repair of components for which spares are not available with customer including machining of components.
  14. Arrangement of caulking tool for compressor assembly. All tools required for dismantling of compressor blades from stage 1 to 6 stationary as well as rotating.
  15. Arrangement of adequate number of support bases in order to keep unstacked turbine and rotor discs.
  16. Arrangement of suitable slings and lifting arrangements. Arrangements of surface plates.
  17. Arrangement of sand blasting equipment, consumables and enclosures for various components at site.
  18. Arrangement of anti friction coating on coupling faces of turbine.
  19. In order to take care of machining of various components subcontractor shall arrange a suitable lathe machine, vertical boring machine and surface grinders at site in order to facilitate timely completion of job.
- |    |   |       |
|----|---|-------|
| 1  | Carry out oil flushing and normalise all bearings after oil flushing.   | 10.00 |
| 2  | Assistance in putting machine on Turning gear operation.  |       |
| 3  | Assistance in start-up and synchronisation and balancing of rotor as per requirement.   |       |
| 4  | Combustion chamber inspection after shutdown. Attending to any defects with respect to the scope of work.   |       |
| 5  | Assistance in restarting the machine and base load operation and recording of parameters at base load operation.  |       |
| 6  | Arranging one Personal Computer along with operator, colour printer-cum-fax-cum-copier with black and colour cartridges, other accessories & stationary for the complete period upto commissioning. PC should have at latest Windows with DVD reader/writer, internet provision at no extra cost. | 1.00  |
| 7  | Arrangement of experienced EOT crane and hydra crane operators for the whole duration of the job to cover day and night shifts. Maintenance of all cranes is to be ensured round-the-clock.   | 2.00  |
| 8  | Arrangement of trailer with driver for shifting of turbine rotor from GT hall to ST hall and back to GT hall.   |       |
| 9  | Arrangement of two office attendants at BHEL site office on round the clock basis.  |       |
| 10 | The subcontractor has to deploy one experienced engineer and one experienced supervisor (both ex-BHEL) for supervision of gas turbine work.   | 7.00  |

**Total = 100.00 %**

**III. OPTIONAL WORKS**

- |   |  |                       |
|---|--|-----------------------|
| 1 | Installation of 03 nos silencers including all parts and accessories in GT-13 as per drawing and details enclosed. | 2.5% of Quoted price. |
|---|--|-----------------------|

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## **SPECIAL INSTRUCTIONS/ CONDITIONS FOR SUB-CONTRACTOR**

**Note: Following will form part of scope and have to be strictly adhered to by the party.**

- 1 Replacement of any worn-out or damaged component of machine including all necessary activities required for replace shall be carried out by sub contractor without any additional cost. Repair of defective parts by building up and machining shall form a part of the scope of work. Arrangement and Supervision of overhauling-related repair and other works outside plant premises at various workshops shall also form a part of the scope of work.
- 2 If any of the jobs is not carried out depending on the site conditions, the percentage of that particular portion shall not be verified and balance payment shall be made on pro-rata basis.
- 3 Subcontractor shall ensure use of only calibrated Inspection, Measuring & Testing equipment (i.e. micrometers, slip gauge, dial gauges, telescopic gauges, dial bore gauges, measuring tape, vernier calipers, etc.), confirming to national standards. Valid calibration certificates shall accompany these equipments.
- 4 Transportation of spares from stores to site and scrap from site to scrap yard, including making all necessary arrangements for the same, shall be done by the subcontractor.
- 5 All machining jobs like machining of fins of oil catchers and oil guards, machining of coupling bolts, etc. shall have to be carried out by the sub-contractor at no extra cost. The transportation of the components for machining (to and fro) shall be arranged by the subcontractor at no extra cost.
- 6 The subcontractor shall have to arrange the temporary lighting required for work.
- 7 Arrangement of DPI and MPI kits wherever required, shall be done by the subcontractor. Arrangement of consumables like DA, oxygen and argon gases, welding electrodes (including special electrodes - Nicro 082, UTP 617), etc. shall be done by the subcontractor.
- 8 Normal tools along with consumables such as grinding machines, spanner sets, chain block, chain pulley blocks, turn buckle, eye bolts, wire ropes, nylon rope slings, shackles, rope, taps, drill bit, saw, wrench, screwdrivers, vices & clamps, measuring and checking tools, pliers, hammers, chisels, punches, reamers, protective equipments, waste cotton, markin cloth, polythene sheets to cover the turbine, leukoplast adhesive tape (10 cm wide), anti-seize/anti-rust compounds etc. are to be arranged by sub contractor at no extra cost. This is an indicative list and all tools and plants required for job completion shall be arranged by sub contractor.
- 9 Arc welding equipment including TIG, Oxyacetylene welding equipment, plasma arc cutting unit, Heater for casing joint bolts, rotor blades fitters tools, stator blade fitters tools etc, blade fitters, Super alloy welders, Super alloy fitters, NDT team and insulation team are to be arranged by subcontractor at no additional cost.
- 10 Specialist manpower like foremen, supervisors, turbine fitters, blade fitters, HP welders, experienced sarangs, Super alloy welders and fitters, combustion chamber fitters experienced in tiling, blade grinding machine with experienced operators and experienced crane operators, etc. shall have to be deputed in two independent shifts of 12 hours each to facilitate uninterrupted/round-the-clock working.
- 12 One attendant, one electrician and one security guard to be provided in BHEL site office.
- 13 In case of contradiction between this note and GSCC conditions in this note will only be valid.
- 14 Above mentioned scope of work indicates breakup of activities for the work of "overhauling of unit 13 GT Libya". Any other work not mentioned specifically above and required to be done for completion of works also forms a part of scope of work and no additional compensation shall be provided for the same.

Special conditions of contract for working in Libya :

1. The contractor shall arrange manpower on airport visa/business visa through BHEL/BHEL's partner. Visa cost/fees to be borne by subcontractor. Statutory salary clause ( applicable as per statutory regulation of Libyan laws ) will be applicable. No extra payment will be applicable on this account what so ever.
2. All air-ticket charges are to be born by contractor.

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3. The employees of contractor or persons employed by it as aforesaid shall work under the control & direction of the contractor and shall under no circumstances be considered employees of BHEL or BHEL's partner.
4. No lodging or boarding or any other facility will be provided by BHEL.
5. All HSE/Safety norms to be followed as per BHEL guide lines.
6. Transportation for staff is to be arranged by contractor.
7. All related C&I jobs are in the scope of work of sub contractor.
8. Contractor is to abide by statutory regulations, laws at Libya & India as applicable. The contractor shall be responsible for payment of all taxes as per prevalent laws at Libya and compliance to all local regulations resulting from the execution of this contract. There would be no extra/additional payment on this account.
9. The contractor shall indemnify BHEL from and against all claims, damages and losses arising out of resulting from the works, including professional services by the contractor. These indemnification obligations shall be limited to claims, damages and losses which are attributable to bodily injury, sickness, disease or death or to injury or to destruction of physical property (other than the said works). Such obligations shall also be limited to the extent that such claims, damages, losses are caused in whole or part by a breach of a duty of care, imposed by law on the contractor or anyone directly or indirectly employed by contractor.
10. The contractor shall be responsible for payment of all taxes, duties, fees, levies etc. as per prevalent laws at Libya and compliance to all local regulations. Custom clearances to be coordinated by the contractor. There would be no extra/additional payment on this account.
11. Insurance required for work (of workers, T&P etc.) shall be the responsibility of sub contractor.

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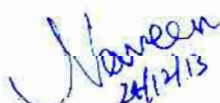
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SCOPE OF WORK (For Subcontractor only) - Completion Period = 45 days

# REPAIR OF GAS TURBINE # 16 (V 94.2 Siemens Design) & GENERATOR AT Western Mountain GTPP, Ruwais, Libya

1.	<u>GAS TURBINE</u>	<u>% Allotted</u>
1	Assistance in recording of operating parameters before shutdown.	5
2	Mark and remove insulation.	
3	Open all manholes and check for abnormalities.	
4	Disconnect all relevant fuel oil / gas lines.	
5	Take over/hand over special T&P and shifting these from store to site and back after use.	
6	Measure turbine/compressor blade clearances in assembled condition. Arrangement of measuring device to be done by sub contractor.	10
7	Remove intermediate shaft cover.	
8	Undo bolts of suction cone and lift off top half.	
9	Undo bolts and open compressor and generator bearing housings	
10	Decouple turbine / intermediate shaft / generator rotors.	
11	Check alignment of generator and turbine rotors.	
12	Lock the intermediate shaft in position.	
13	Inspect/clean turning gear assembly.	
14	Provide supports under the centre casing and combustion chambers.	
15	Undo bolts of combustion chamber flanges.	
16	Undo combustion chamber from centre casing.	5
17	Grind off liners of exhaust casing / turbine bearing.	
18	Remove centre guides of turbine / compressor blade carriers upper halves.	
19	Undo bolts of centre casing / exhaust casing. (involves bolt heating). Bolt heating apparatus to be arranged by the subcontractor.	
20	Undo / remove air blow-off valves / lines.	
21	Lift off centre casing / exhaust casing.	10
22	Open K-Ring and lift off top half.	
23	Provide jack bolts for the blade carriers.	
24	Undo the bolts of turbine/compressor blade carriers.	
25	Lift off top halves of turbine/compressor carriers.	
26	Measurement of axial bump and turbine / compressor blade clearances.	
27	Lift off stuffing box, turbine bearing top half.	
28	Lift off oil catchers and bearing top halves at compressor end.	
29	Fix inner casing by clamps / jacks to rotor.	
30	Lift off the Turbine rotor and shift from position to a vacant position in GT hall.	10
31	Deblading of turbine rotor blades for all stages. Visual Inspection of blades for healthiness checking. All arrangements required for de-blading has to done.	
32	NDT works as below including Supply of DPT (normal and fluorescent), UT and MPI kits with experienced operators - Bearings of turbine, compressor, turning gear, thrust pads, turbine rotor and stator blades of all stages, blade grooves, inner casing, weld joints of mixing chambers, manhole inserts, exhaust casing, exhaust liners, metallic expansion joints, flame tube, tile holders, etc. Any other NDT recommended by the fact finders shall also be carried out at no extra cost. Certification of NDT expert and consumables according to acceptable standards of customer has to be done.	
33	Lift off lower halves of turbine blade carriers. Inspection, repair and de-blading of stay vanes from top and bottom half of turbine Guide blade carrier.	
34	Prepare new turbine rotor blades.	
35	Prepare turbine stator blades.	

  
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36	Install blades on turbine discs 1, 2, 3 and 4 and turbine guide vanes (all stages) in turbine guide blade carrier.	
37	Undo / remove dual-fuel oil burners from combustion chambers.	2
38	Lift off premix burner assemblies, diagonal swirlers and burner insert rings.	
39	Remove centre guides of turbine / compressor blade carriers bottom halves.	
40	Remove, inspect and clean ignition electrodes.	
41	Cleaning of fuel gas burners .	13
42	Cleaning of fuel gas / oil burners/premix burners.	
43	Cleaning of diagonal swirlers and burner insert rings. Assembly of all dismantled components of burner assembly	
44	Repair/reconditioning/preparation of bearings .	5
45	Cleaning of compressor stator and rotor blades .	
46	Install blades on turbine stator.	
47	Insert lower halves of the turbine blade carriers.	
48	Insert K-ring bottom half in position.	5
49	Install compressor/ turbine bearings and maintain the clearances.	
50	Lift rotor and insert into position	
51	Make inner casing free from rotor.	
52	Close turbine / compressor bearings for jacking oil operation.	
53	Measure turbine side blade clearances.	
54	Grind turbine rotor blades to maintain clearances. Grinding equipment along with experienced operators has to be arranged by the subcontractor for this.	
55	Position all lower half blade carriers and insert all lower center guides.	
56	Measure all blade clearances.	
57	Close turbine / compressor blade carriers including heat tightening of bolts.	5
58	Close centre casing and exhaust casing including heat tightening of bolts.	
59	Welding of exhaust casing liners.	
60	Check blade tip clearances.	
61	Insert all top centre guides.	
62	Assemble combustion chambers.	
63	Install combustion chambers.	
64	Check rotor alignment and correct the same. All arrangements for generator stator shifting for the purpose of alignment and shim adjustment have to be done.	
65	Coupling of turbine and generator rotors including reaming of coupling holes. Adjustment of coupled runouts. Opening of extension shaft coupling for adjustment of runout, if reqd. Recoupling of extension shaft including reaming / honing of coupling holes and machining of coupling bolts.	10
66	Assembly of turning gear / transmitter units.	
67	Install compressor suction cone.	
68	Assemble air bleed valves and pipes.	
69	Connect all fuel (gas and oil) lines and other associated lines.	
70	Complete reinsulation work.	
71	Final inspection before closing of all manholes.	
72	Assistance in commissioning of different systems i.e. secondary air controllers, shut off gate controllers, ball valves, etc.	5
73	Prepare all bearings.	
74	Removal of all I&P's and other unwanted items from work area.	
<b>III. GENERAL</b>		


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<p>Provision for following items has to be done in order to facilitate the above job</p> <ol style="list-style-type: none"> <li>1. Scaffolding material for all purposes and all areas.</li> <li>2. Tile fixing machine</li> <li>3. Tile fixing tools</li> <li>4. Plasma cutting machine and bolt heating device along with heating torches and nozzles for opening of various bolts.</li> <li>5. Fixture for fitting of cooling ring</li> <li>6. Turbine blade grinding machine/fixture. Suitable hydraulic jacks, torque wrench required for dismantling and assembly.</li> <li>7. Arrangement of all kind gases, electrodes and consumables to be used during overhauling works.</li> <li>8. Water gasket, oil gasket, fuel oil/fuel gas line gaskets and gaskets for blow off valve to be arranged.</li> <li>9. Provision for testing of fuel gas and fuel oil ball valves</li> <li>10. Arrangement for honing of coupling bolts and pins.</li> <li>11. Arrangement for reclamation/refurbishment/repair of components for which spares are not available with customer including machining of components.</li> <li>12. Arrangement of caulking tool for compressor assembly. All tools required for dismantling of compressor blades from stage 1 to 6 stationary as well as rotating.</li> <li>15. Arrangement of adequate number of support bases in order to keep unstacked turbine and rotor discs.</li> <li>16. Arrangement of suitable slings and lifting arrangements. Arrangements of surface plates.</li> <li>17. Arrangement of sand blasting equipment, consumables and enclosures for various components at site.</li> <li>18. Arrangement of anti friction coating on coupling faces of turbine.</li> <li>19. In order to take care of machining of various components subcontractor shall arrange a suitable lathe machine, vertical boring machine and surface grinders at site in order to facilitate timely completion of job.</li> </ol> <p>Carry out oil flushing and normalise all bearings after oil flushing. Water gasket, oil gasket, fuel oil/fuel gas line gaskets and gaskets for blow off valve to be arranged.</p> <p>Assistance in putting machine on Turning gear operation.</p> <p>Assistance in start-up and synchronisation and balancing of rotor as per requirement.</p> <p>Combustion chamber inspection after shutdown. Attending to any defects with respect to the scope of work.</p>	10
<p>Assistance in restarting the machine and base load operation and recording of parameters at base load operation.</p> <p>Arranging one Personal Computer along with operator, colour printer-cum-fax-cum-copier with black and colour cartridges, other accessories &amp; stationary for the complete period upto commissioning. PC should have at least Windows 2008 with CD reader/writer at no extra cost. Arrangement of internet facility to also be provided.</p> <p>The subcontractor shall arrange one mobile phone for site use during the complete period of the job upto commissioning. All charges for the phone like rental charges, call charges, etc. shall be borne by the subcontractor.</p> <p>Arrangement of experienced FOT crane and hydra crane operators for the whole duration of the job to cover day and night shifts. Maintenance of all cranes is to be ensured round-the-clock. Arrangement for reclamation/repair of components for which spares are not available with customer.</p> <p>The subcontractor has to deploy one experienced engineer and one experienced supervisor (both ex-BHEL) for supervision of gas turbine work.</p>	5
<p style="text-align: right;"><b>Total =</b></p>	100%

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## GENERAL INSTRUCTIONS/ CONDITIONS FOR SUB-CONTRACTOR

**Note: Following will form part of scope and have to be strictly adhered to by the party.**

- 1 Replacement of any worn-out or damaged component of machine including all necessary activities required for replace shall be carried out by sub contractor without any additional cost, however, spares shall be provided. Minor repair of defective parts by building up and machining shall form a part of the scope of work. Arrangement and Supervision of overhauling-related repair and other works outside plant premises at various workshops shall also form a part of the scope of work.
- 2 If any of the jobs is not carried out depending on the site conditions, the percentage of that particular portion shall not be verified and balance payment shall be made on pro-rata basis.
- 3 Subcontractor shall ensure use of only calibrated Inspection, Measuring & Testing equipment (i.e. micrometers, slip gauge, dial gauges, telescopic gauges, dial bore gauges, measuring tape, vernier calipers, etc.), confirming to international standards. Valid calibration certificates shall accompany these equipments.
- 4 Transportation of spares from stores to site and scrap from site to scrap yard, including making all necessary arrangements for the same, shall be done by the subcontractor.
- 5 All machining jobs like machining of fins of oil catchers and oil guards, machining of coupling bolts, etc. shall have to be carried out by the sub-contractor at no extra cost. The transportation of the components for machining (to and fro) shall be arranged by the subcontractor at no extra cost.
- 6 The subcontractor shall have to arrange the temporary lighting required for work.
- 7 Arrangement of DPT and MPI kits wherever required, shall be done by the subcontractor. Arrangement of consumables like DA, oxygen and argon gases, welding electrodes (including special electrodes - Nicro 082, UTP 617), etc. shall be done by the subcontractor.
- 8 Normal tools along with consumables such as grinding machines, spanner sets, chain block, chain pulley blocks, turn buckle, eye bolts, wire ropes, nylon rope slings, shackles, rope, taps, drill bit, saw, wrench, screwdrivers, vices & clamps, measuring and checking tools, pliers, hammers, chisels, punches, reamers, protective equipments, waste cotton, markin cloth, polythene sheets to cover the turbine, leukoplast adhesive tape (10 cm wide), anti-seize/anti-rust compounds etc. are to be arranged by sub contractor at no extra cost.
- 9 Arc welding equipment including TIG, Oxyacetylene welding equipment, plasma arc cutting unit, Heater for casing joint bolts, rotor blades fitters tools, stator blade fitters tools etc, blade fitters, Super alloy welders, Super alloy fitters, NDT team and insulation team are to be arranged by subcontractor at no additional cost.
- 10 Specialist manpower like foremen, supervisors, turbine fitters, blade fitters, HIP welders, experienced sarangs, Super alloy welders and fitters, combustion chamber fitters experienced in tiling, blade grinding machine with experienced operators and experienced crane operators, etc. shall have to be deputed in independent shifts to facilitate uninterrupted/round-the-clock working.
- 12 One attendant, one electrician and one security guard to be provided in BHEL site office.
- 13 In case of contradiction between this note and GSCC conditions in this note will only be valid.

Special conditions of contract for working in Libya :

1. The contractor shall arrange manpower on airport visa/business visa through BHEL/BHEL's partner. Visa cost/fees to be borne by subcontractor. Statutory salary clause ( applicable as per statutory regulation of Libyan laws ) will be applicable. No extra payment will be applicable on this account what so ever.
2. All air-ticket charges are to be born by contractor.
3. The employees of contractor or persons employed by it as aforesaid shall work under the control & direction of of the contractor and shall under no circumstances be considered employees of BHEL or BHEL's partner.
4. No lodging or boarding or any other facility will be provided by BHEL.
5. All HSE/Safety norms to be followed as per BHEL guide lines.
6. Transportation for staff is to be arranged by contractor.
7. All related C&I jobs are in the scope of work of sub contractor.

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8. Contractor is to abide by statutory regulations, laws at Libya & India as applicable. The contractor shall be responsible for payment of all taxes as per prevalent laws at Libya and compliance to all local regulations resulting from the execution of this contract. There would be no extra/additional payment on this account.
9. The contractor shall indemnify BHEL from and against all claims, damages and losses arising out of resulting from the works, including professional services by the contractor. These indemnification obligations shall be limited to claims, damages and losses which are attributable to bodily injury, sickness, disease or death or to injury or to destruction of physical property (other than the said works). Such obligations shall also be limited to the extent that such claims, damages, losses are caused in whole or part by a breach of a duty of care, imposed by law on the contractor or anyone directly or indirectly employed by contractor.
10. The contractor shall be responsible for payment of all taxes, duties, fees, levies etc. as per prevalent laws at Libya and compliance to all local regulations. Custom clearances to be coordinated by the contractor. There would be no extra/additional payment on this account.
11. Insurance required for work (of workers, T&P etc.) shall be the responsibility of sub contractor.

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**TECHNNO-COMMERCIALBID FOR :**

Tender No.: NDA/LIBYA/GT-13 &amp; 16/13\_101 dated 31/12/2013

Sub: Major Inspection/OH of GAS TURBINE # 13 (V 94.2 Siemens Design) and Repair of Gas Turbine # 16 (V 94.2 Siemens Design) &amp; Generator at Western Mountain GTPP, Ruwais,Libya

NAME & ADDRESS	
PAN NO.	
Provident Fund No. (if available)	
OFFER NO	
EMD	
VALIDITY OF OFFER	6 Months
COMPLETION PERIOD	60 DAYS FOR GT-13 & 45 DAYS FOR GT-16
MOBILISATION PERIOD	07 DAYS
GUARANTEE PERIOD	12 Months

**Following are enclosed/ certified/accepted as part of Technical bid:**

1. Signed copy of NIT along with scope of work. Technical bid (annex. B) and Price bid (annex. C) are enclosed.
2. 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.
3. 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.
4. 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
5. All documents as required in "DOCUMENTS TO BE ATTACHED WITH BILLS" given in web page [www.bhelpsnr.co.in](http://www.bhelpsnr.co.in) "Service Tender" of BHEL PSNR shall be submitted along with bills.
6. 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.
7. 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.
8. 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.
9. 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](http://www.bhelpsnr.co.in) of BHEL PSNR are accepted.

Sign of contractor: \_\_\_\_\_

Date: \_\_\_\_\_ Seal

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NOT FOR PUBLICATION

TENDERER'S COPY  
ORIGINAL COPY

## TENDER SPECIFICATION

TENDER NO.- NDA/Libya/GT-13 & 16/13\_101

FOR

Major Inspection/OH of GAS TURBINE # 13 (V 94.2 Siemens Design) and Repair of Gas Turbine # 16 (V 94.2 Siemens Design) & Generator at Western Mountain GTPP, Ruwais,Libya

### PART II – PRICE BID



**Bharat Heavy Electricals Limited**

(A Govt. Of India Undertaking)

**Power Sector – Northren Region,**

**Plot No. 25 , Sector - 16A ,**

**Distt. Gautam Budh Nagar, NOIDA – 201 301.INDIA**



ISO 9001-2000, ISO 14001  
and OHSAS 18001 certified  
company  
SubContract and Purchase  
Deptt.

**Bharat Heavy Electricals Limited**  
(A Govt. Of India Undertaking)  
**Power Sector – Northern Region,**  
Plot No. 25 , Sector - 16A ,  
Distt. Gautam Budh Nagar, NOIDA – 201 301.INDIA  
Phone: 0091-0120-2515410 / 2416455 / 2515449  
Fax 091-0120-2416525 / 2416527  
Email: [ssr@bhelsnr.co.in](mailto:ssr@bhelsnr.co.in)/[rkt@bhelsnr.co.in](mailto:rkt@bhelsnr.co.in)

**TENDER NO.- NDA/Libya/GT-13 & 16/13\_101**

**IMPORTANT NOTE**

PURCHASER OF THIS TENDER DOCUMENT IS ADVISED TO CHECK AND ENSURE COMPLETION OF ALL PAGES OF TENDER DOCUMENT AND REPORT ANY DISCREPANCY TIMELY FOR CORRECTIVE ACTION. IF ANY, TO THE ISSUING AUTHORITY BEFORE THE BIDS ARE SUBMITTED. ORIGINAL COPY OF TENDER DOCUMENT COMPLETE IN ALL RESPECTS MUST BE SUBMITTED BACK AS PART OF THE BID WITHOUT WHICH THE SAME IS LIABLE TO BE REJECTED BY BHEL.

THIS TENDER SPECIFICATION ISSUED TO:

M/s-----

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ISO 9001-2000, ISO 14001  
and OHSAS 18001 certified  
company  
SubContract and Purchase  
Deptt.

**Bharat Heavy Electricals Limited**  
(A Govt. Of India Undertaking)  
**Power Sector – Northern Region,**  
Plot No. 25 , Sector - 16A ,  
Distt. Gautam Budh Nagar, NOIDA – 201 301.INDIA  
Phone: 0091-0120-2515410 / 2416455 / 2515449  
Fax 091-0120-2416525 / 2416527  
Email: [lnp@bhelpsnr.co.in](mailto:lnp@bhelpsnr.co.in)/[ssr@bhelpsnr.co.in](mailto:ssr@bhelpsnr.co.in)

## DOMESTIC NOTICE INVITING TENDER

LAST DATE OF SALE: 08.01.2014

LAST DATE OPENING: 08.01.2014

NIT NO. / NAME OF WORK

**TENDER NO.- NDA/Libya/GT-13 & 16/13\_101**

Sealed tender are invited from the contractors fulfilling qualifying requirements for

Major Inspection/OH of GAS TURBINE # 13 (V 94.2 Siemens Design) and Repair of Gas Turbine # 16 (V 94.2 Siemens Design) & Generator at Western Mountain GTPP, Ruwais, Libya

### NOTE:

1. Purchase Preference will be given to CPSU as per Govt. Guidelines.
2. Please visit our website at [www.bhel.com](http://www.bhel.com) and [www.bhelpsnr.co.in](http://www.bhelpsnr.co.in) for details of NIT including Qualifying requirement.
3. Tenders Not Accompanied with full Earnest Money Deposit of Rs.1,00,000.00 By pay order or Demand Draft will not be considered. However, tenderers who have already deposited one time EMD of Rs.200000.00 with BHEL-PSNR OR ' One Time 'EMD' of Rs. 1,00,000/- with RSC. BHEL-PSNR, NOIDA are exempted from depositing EMD with this tender.



ISO 9001-2000, ISO 14001  
and OHSAS 18001 certified  
company  
SubContract and Purchase  
Deptt.

**Bharat Heavy Electricals Limited**  
(A Govt. Of India Undertaking)  
**Power Sector – Northern Region,**  
**Plot No. 25 , Sector - 16A ,**  
**Distt. Gautam Budh Nagar, NOIDA – 201 301.INDIA**  
**Phone: 0091-0120-2515410 / 2416455 / 2515449**  
**Fax 091-0120-2416525 / 2416527**  
**Email: lnp@bhelsnr.co.in/ssr@bhelsnr.co.in**

## **PROCEDURE FOR SUBMISSION OF SEALED TENDERS:**

The tenderers must submit their tenders as required in **two parts** in separate sealed covers **prominently super scribed as Part-I Technical bid and Part-II, Price bid** (also indicating on each of the cover tender specification no. date and time as mentioned in tender notice

### **TECHNICAL BID (COVER-I)**

Except **Price bid Part-II**, complete set of tender document consisting of General conditions of Contract, "Technical specifications & Special terms and conditions" (Part-I) issued by BHEL shall be enclosed in **Part-I Technical Bid only**. All schedules, date sheets and details called for in the specification shall be submitted along with Technical bid. All details/Data/Schedules including offer letter duly signed and stamped are to be **submitted in duplicate**.

### **PRICE BID (COVER-II)**

Tenderers may please note that Price bid is to be submitted only in original copy of Tender i.e. Price bid (Part-II) issued by BHEL and no duplicate copy of same is required.

These Two separate covers i.e. cover-I & II shall together be enclosed in a **Third envelope (Cover-III)** and this sealed cover shall be superscribed with Tender specification No., due date, time and submitted to officer inviting as indicated in tender notice on or before due date as indicated.



**PRICE BID FOR :**

Tender No.: NDA/LIBYA/GT-13 &amp; 16/13\_101 dated 31/12/2013

Sub: Major Inspection/OH of GAS TURBINE # 13 (V 94.2 Siemens Design) and Repair of Gas Turbine # 16 (V 94.2 Siemens Design) &amp; Generator at Western Mountain GTPP, Ruwais, Libya

NAME & ADDRESS	
OFFER NO.	
OFFER DATE	

Rates are quoted as below and are inclusive of all taxes & duties as applicable in India as well as in Libya. TDS as applicable shall be deducted as per law in force at the time of payment.

1	Lumpsum (LS) price for the entire scope of work as per Annexure-A	(Amount In Figure) Rs : (Amount in words)Rupees:
a)	Lumpsum (LS) price for SOW of work for GT-13 =	65 % of Total value at SL NO-1
b)	Lumpsum (LS) price for SOW of work for GT-16 =	35 % of Total value at SL NO-1
2	Extra work rate on per man-hour basis (inclusive of supervision, T&P, consumables and all other costs)	Rs. 60 ONLY
3	<u>Optional Work:</u> Installation of 03 nos silencers including all parts and accessories as per drawing and details enclosed	2.5 % of price at S. no. 1 (a) above

Note:- L1 bidders shall be evaluated on total price at S.L No-1 of above.

Sign of contractor: \_\_\_\_\_

Date: \_\_\_\_\_

Seal

**Qualifying requirements (QR)**

Tender No.: NDA/Libya/GT-13 &amp; 16/13\_101 dated 31.12.2013

**Subject: Qualifying requirements (QR) for work of "Major Inspection of GAS TURBINE # 13 (V 94.2 Siemens Design) and Repair of Gas Turbine # 16 (V 94.2 Siemens Design) & Generator at Western Mountain GTPP, Ruwais, Libya."**

SL NO.	PRE QUALIFICATION CRITERIA	Bidders claim in respect of fulfilling the PQR Criteria	
		Name and Description of qualifying criteria	Page no of supporting document
A	Submission of Integrity Pact duly signed (if applicable)	Not Applicable	
B	Assessment of Capacity of Bidder to execute the work	Not Applicable	
C	Technical	Applicable	
(i)	Bidder who wish to participate should have executed, during last Seven years, as on the date of opening of Technical Bid, works of similar nature covered in this tender in Power plant/industrial unit as per the following: (a) One single work of similar nature valuing Euro 3,80,407, USD 5,18,314, INR 3,18,40,000, LD 6,30,120 or above. "OR" (b) Two works of similar nature valuing each of Euro 2,37,753, USD 3,23,946, INR 1,99,00,000, LD 3,93,825 or above. "OR" (c) Three works of similar nature valuing each of Euro 1,90,203 USD 2,59,156 INR 1,59,20,000, LD 3,15,060 or above.		
(ii)	Should be a Registered company in LIBYA Note: 1. Bidder shall submit documents for above. 2. In case bidder is not registered in Libya, they shall submit an affidavit that they will get them registered in Libya for carrying out works in Libya within 30 days of issue of LOI. Bidder should have completed at least one overseas job in past.		
D	Financial	Applicable	
1.1	<b>TURNOVER</b> Tenderers should have an average annual turnover minimum of Euro 1,42,652, USD 1,94,368, INR 1,19,40,000, LD 2,36,295 of last three		
1.2	<b>Financial Years</b> (2010-2011, 2011-2012, 2012-13). Bidders shall		
1.3	submit audited annual accounts (balance sheets and profit & loss account) in support of this.		
	Net worth: Net worth of the bidders based on the latest audited accounts as furnished for D 1.1 above should be positive. Profit: Bidder must have earned cash profit in any one of three financial years as applicable in the last three years defined in D 1.1 above based on latest audited accounts. (Relevant documents, meeting above requirements at C & D, shall be submitted by bidders.)		
E	Approval of Customer (if applicable)	Not Applicable	
F	Consortium criteria (if applicable)	Not Applicable	

*2/2013*  
31/12/13



Explanatory Notes for QR 'C'

1. For QR C(i) C(ii) & C(iii) above the word 'Executed' means the bidder should have achieved the criteria specified in the QR, even if the total contract has not been completed or closed.
2. For QR C (i) (a), (b) and (c), value of work is to be updated as per the PVC formula of GCC with indices for 'All India Avg. Consumer Price index for industrial workers' (i.e. 'K' in this case shall be 80%) with base month as date of execution (completion of contract/work) and indexed up to two months prior to bid opening month. This condition will be applicable only for the completed jobs and not for the jobs in progress, as on date of technical bid opening.
3. If the Qualifying work is executed in the last seven years period, as specified above, even if it has been started earlier, the same will also be considered meeting the qualifying requirements.
4. For QR, QR C (i) (a), (b) and (c) Similar Nature Means:

One GTG or STG job of one unit of 60 MW or higher

OR

One Boiler\*\* (with Rotating machinery) of one unit of 190 MW or higher, under direct order of BHEL subject to

a) Experience of GTG of atleast 30 MW OR b) Consortium arrangement with an agency who has experience of GTG of 30 MW or above.

5. Relevant documents, meeting above requirements at C and D shall be submitted by bidders.
6. Bidder to submit Audited Balance Sheet and Profit and Loss Account for the respective years as given above along with all annexure.
7. Against C (ii), the bidder shall also submit document in English or English translation, duly authenticated certificate. This shall be applicable in case the original document is not in English.

  
L. N. Harihar  
(RSM/ Noida)

commodity will be re adjusted accordingly.

- 2.17.4 Payment/recovery due to variation in index shall be determined on the basis of the following notional formula without any initial absorption, in respect of the identified components viz LABOUR, HIGH SPEED DIESEL OIL, WELDING ROD, CEMENT, STEEL, MATERIALS

$$P = K \times R \times \frac{(X_N - X_0)}{X_0}$$

Where

P = Amount to be paid/recovered due to variation in the Index for Labour, High Speed Diesel Oil, Welding Rod, Cement, Steel and Materials

K = Percentage component applicable for Labour, High Speed Diesel Oil, Welding Rod, Cement, Steel and Materials

R = Value of work done for the billing month (Excluding Taxes and Duties if payable extra)

XN = Revised Index No for Labour, High Speed Diesel Oil, Welding Rod, Cement, Steel and Materials for the billing month under consideration

Xo = Index no for Labour, High Speed Diesel Oil, Welding Rod, Cement, Steel and Materials as on the Base date.

- 2.17.5 Base date shall be calendar month of the latest date of submission of Tender.

- 2.17.6 PVC shall not be payable for the ORC amount, Supplementary/Additional Items, Extra works.

- 2.17.7 The contractor shall furnish necessary monthly bulletins for the necessary indices from the relevant websites along with his Bills.

- 2.17.8 The contractor will be required to raise the bills for price variation payments on a monthly basis along with the running bills irrespective of the fact whether any increase/decrease in the index for relevant categories has taken place or not. In case there is delay in publication of bulletins (final figure), the provisional values as published can be considered for payments and arrears shall be paid/recovered on getting the final values.

- 2.17.9 PVC shall be applicable for the entire original contract period plus the extended period. However the Total Quantum of Price Variation amount payable/recoverable shall be regulated as follows:

- i) For the portion of backlog attributable to the contractor, the PVC will be based on the average of the indices for the period of the original contract period.
- ii) For the period of Force Majeure, the PVC will be limited to the indices applicable at the beginning of the force majeure period.
- iii) For the portion of backlog attributable to BHEL, the PVC will be as per the indices applicable for the respective months
- iv) The total amount of PVC shall not exceed 20% of the cumulatively executed contract value. Executed contract value for this purpose is exclusive of PVC, ORC, Supplementary/Additional Items and Extra works.

## 2.18 INSURANCE

- 2.18.1 BHEL/their customer shall arrange for insuring the materials/properties of BHEL/customer covering the risks during transit, storage, erection and commissioning.

- 2.18.2 It is the sole responsibility of the contractor to insure his materials, equipments, workmen, etc. against accidents and injury while at work and to pay compensation, if any, to workmen as per Workmen's compensation Act. The work will be carried out in a protected area and all the rules





ISO 9001-2000, ISO 14001  
and OHSAS 18001 certified  
company  
SubContract and Purchase  
Deptt.

**Bharat Heavy Electricals Limited**  
(A Govt. Of India Undertaking)  
Power Sector – Northern Region,  
Plot No. 25 , Sector - 16A ,  
Distt. Gautam Budh Nagar, NOIDA – 201 301.INDIA  
Phone: 0091-0120-2515410 / 2416455 / 2515449  
Fax 091-0120-2416525 / 2416527  
Email: [lnp@bhelsnr.co.in](mailto:lnp@bhelsnr.co.in)/[ssr@bhelsnr.co.in](mailto:ssr@bhelsnr.co.in)

## DOMESTIC NOTICE INVITING TENDER

LAST DATE OF SALE: 08.01.2014

LAST DATE OPENING: 08.01.2014

NIT NO. / NAME OF WORK

**TENDER NO.- NDA/Libya/GT-13 & 16/13\_101**

Sealed tender are invited from the contractors fulfilling qualifying requirements for :

**“Major Inspection/OH of GAS TURBINE # 13 (V 94.2 Siemens Design) and Repair of Gas Turbine # 16 (V 94.2 Siemens Design) & Generator at Western Mountain GTPP, Ruwais,Libya”**

### NOTE:

1. Purchase Preference will be given to CPSU as per Govt. Guidelines.
2. Please visit our website at [www.bhel.com](http://www.bhel.com) and [www.bhelpsnr.co.in](http://www.bhelpsnr.co.in) for details of NIT including Qualifying requirement.
3. Tenders Not Accompanied with full Earnest Money Deposit of Rs.100000.00 By pay order or Demand Draft will not be considered. However, tenderers who have already deposited one time EMD of Rs.200000.00 with BHEL-PSNR OR ' One Time 'EMD' of Rs. 1,00,000/- with RSC, BHEL-PSNR, NOIDA are exempted from depositing EMD with this tender.

  
RSM/NOIDA

**SECTION-I**  
**INSTRUCTION TO TENDERERS**

1	<b>GENERAL INSTRUCTIONS TO TENDERERS</b>
1.1	<b>Submission of Tender.</b>
1.1.1a	The tender shall be sent in sealed cover after super scribing. <b>TENDER NO. TENDER DATE &amp; DUE DATE as per NIT</b>
1.1.1a	The tender specification as a whole, duly furnishing following details and signed shall be sent in sealed cover.
1.1.1.1	Earnest Money Deposit.
1.1.1.2	Income Tax & Sales Tax return with acknowledgement
1.1.1.3	Detailed organization chart for manpower resources available with the tenderer and to be employed for the present jobs.
1.1.1.4	Time to be taken for commencement and completion of work.
1.1.1.5	A list of experience as mentioned in the tender document.
1.1.1.6	The details of the present job being handled.
1.1.1.7	Certificate from the bank to establish financial capability of the tenderer.
1.1.1.8	Attested copies of partnership deed, Power of attorney and tenders specifications duly signed as mentioned in the tender documents.
1.1.1.9	Price schedule and other relevant information.
1.1.1.10	PF code allotted by RPFC. Note: For more details other clause/ clauses, mentioned elsewhere may also be referred
1.1.2	The tender shall be addressed to:  <b>REGIONAL SERVICE MANAGER BHARAT HEAVY ELECTRICALS LIMITED POWER SECTOR- NORTHERN REGION (SERVICES) HRDI &amp; PSNR Complex Plot No. 25, Sector- 16A, Noida- 201301 (U.P)</b>  Email: <a href="mailto:lnp@bhelpsnr.co.in">lnp@bhelpsnr.co.in</a> Ph - 0120-2416455 (direct) FAX - 0120-2516327
1.1.3	Tenders submitted by post shall be sent 'REGISTERED POST, ACKNOWLEDGEMENT DUE' and shall be posted with the due allowance for any postal delay. The tenders received after the due date and time of opening are liable to be rejected. Offers received by fax may not be considered unless confirmed in writing by a detailed offer.
1.1.4	Tenders shall be opened by the authorized officer of BHEL at his office at the time and date as specified in the tender notice in the presence of such of those tenderers or their authorized representative who may be present.

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1.1.5	The tenderer shall closely peruse all the clauses, specifications and drawings indicated in the Tender Documents before quoting. Should the tenderer have any doubt about the meaning of any portion of the Tender Specifications or find discrepancies or omission in the Drawings or the tender documents issued are incomplete or shall require clarification on any of the technical aspect, scope of work etc., he shall at once contact the authority inviting the tender for clarification before the submission of the tender.
1.1.6	Before tendering, the tenderer is advised to inspect the site of work and the environments and be well acquainted with the actual working and other prevalent conditions, facilities available, position of material and labour. No claim will be entertained later of the ground of lack of knowledge.
1.1.7	Tenderer must fill up all the schedules and furnish all the required information as per the instructions given in various section of the tender specification. Each and every page of the Tender Specifications must be signed and submitted along with the offers by the tenderer in token of complete acceptance thereof. The information furnished shall be complete by itself.
1.1.8	The tenderer shall quote the rates in English language & international numerals. The rate shall be in whole rupees. These rates shall be entered in figures as well as in words. For the purpose of the tender the metric system of units shall be used.
1.1.9	All entries in tender shall either be typed or be in ink. Erasures and overwriting are not permitted and may render such tender liable to summary rejection. All cancellation and insertions shall be duly attested by the tenderer.
1.1.10	Tenderer's offers and remarks and any deviation, shall be with reference to sections and clause numbers given in the tender schedule.
1.2	<u>Qualifications of Tenderers :</u>  Only tenderers who have previous experience in the work of this nature and description detailed in this tender specification are "expected to quote for this work duly detailing their experience along with the offer. Offers from the tenderers who do not have proven and established experience in the field are not likely to be considered.
1.3	<u>Data to be enclosed :</u>  Full information shall be given by the tenderer in respect of following. Non-submission of this information may lead to rejection of the offer/ tender.
1.3.1	<u>Financial Status:</u>  A certificate from the Scheduled Bank to prove his financial capacity/ capability to undertake the work or solvency certificate from the concerned Government authority.
1.3.2	<u>Income Tax/ Sales Tax Certificate:</u>  A certificate of income tax/sales tax verification from the appropriate authority in the forms prescribed there of duly indicating annual turnover.

	These certificates shall be valid for one year from the date of issue of for the period prescribed there in for all tenders submitted during the period.
1.3.3	<u>Previous Experience:</u>  A statement giving particulars duly supported by documentary evidence of the various services rendered for each similar work by the tenderer indicating the particulars and the value of each work. The site location and the duration and date of completion and also a list of site location and particulars and value of various services that are under progress.
1.3.4	<u>Organization Chart:</u>  The organization pattern that is totally available with him and that will be employed by the tenderer for this work duly indicating the number of supervisors, their qualification and experience in the line, the number of skilled and unskilled persons etc
1.3.5	An attested copy of the Power of Attorney, in case the tender is signed by an individual other than the sole Proprietor, shall also be attached.
1.3.6	In case of an individual :
1.3.7	His full name, address and place and nature of business. In case of Partnership firms :
1.3.8	The name of all the partners and their addresses. A copy of the Partnership Deed Instrument of Partnership duly certified by the Notary Public shall be enclosed. In case of companies:
1.3.9	Date and place of registration including date of component certificate in case of public companies (certified copies of Memorandum and articles of association are also to be furnished)
1.3.10	Nature of business carried on by the company and the provision of the Memorandum relating thereof.
1.3.11	Name and particulars including addresses of all the directors and their previous experience.
1.3.12	A list of tools and tackles that the tenderer is having and those that will be used on this job.
1.4	In addition to the above, the particulars required in various annexures.
1.4	<b><u>EARNEST MONEY DEPOSIT</u></b>
1.4.1	Every tender must be accompanied by the prescribed amount of EMD.
1.4.1.2	Pay Order/ Demand Draft should be payable at Noida/ New Delhi duly pledged in favour of Bharat Heavy Electricals Limited.
1.4.1.1	CASH: The amount should be remitted by the party to the Cashier of Bharat Heavy Electricals Limited, PSNR (Services), Noida and cash receipt issued by him enclosed along with the tender.
NOTE:	<b><u>One time EMD</u></b>  Contractors, who are maintaining one time EMD of ₹1,00,000/- with either of our Regional Service Centers at Delhi, Chandigarh or Varanasi, should Mention in their offers, details of such one time EMD. Therefore, such



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1.4.2	Tenders received without Earnest money in full in the manner prescribed above are liable to be rejected.
1.4.3	The Earnest Money Deposit of the successful tenderer will be retained. However, the same may be released as soon as the Security Deposit mentioned under clause 1.8 is furnished.
1.4.4	In case of unsuccessful tenderers, the Earnest Money will be refunded to them within a reasonable time after finalization of the tender/placement of work order.
1.4.5	BHEL reserves the right to forfeit Earnest Money Deposit in case the successful tenderer, <ul style="list-style-type: none"> <li>a) Fails to start the work as may be indicated in the letter of intent.</li> <li>b) After opening of tender, revokes his tender within the stipulated period or alters his earlier quoted rates/conditions.</li> </ul>
1.4.6	No interest shall be payable by BHEL on Earnest Money.
1.5	Authorization & Attestation:
1.5.1	Tender shall be signed by persons duly authorized/ empowered to do so. Certified copies of such authority the relevant documents shall be submitted along with the tenders.
1.6	Validity of Offer:
1.7	Execution of Contract
1.8	The successful Tenderer's responsibility under this contract commences from the date of issue of the letter intent by Bharat Heavy Electricals Limited.
1.8.1	Upon acceptance of tender, the successful tenderer before start of work must deposit the required amount towards security deposit.
1.8.2	The total amount of security deposit shall be as follows.
1.8.3	<ul style="list-style-type: none"> <li>a) In the case of Upto Rs 10 Lakhs 10% on the quote value</li> <li>b) In the case of work costing Rs. 10 Lakhs upto Rs.50 Lakhs</li> <li>c) In the case of work costing more than Rs. 50 lakhs</li> </ul>
	<ul style="list-style-type: none"> <li>a) Cash (as permissible under Income Tax Act)</li> <li>b) Pay Order, Demand Draft in favour of BHEL.</li> <li>c) Local cheques of schedule banks, subject to realization.</li> </ul>



- d) Securities available from post offices such as National Saving Certificates, Kisan Vikas Patras etc. (certificates should be held in the name of contractor furnishing the security and duly pledged in favour of BHEL and discharged on the back
- e) Bank Guarantee from the Companies Act subject to maximum of 50% of the total security deposit value. The balance 50% has to be remitted either by cash or in the other form of security. The Bank Guarantee format should have the approval of BHEL.
- f) Fixed Deposit Receipt issued by Schedule Banks/ Public Financial institutions as defined in the companies Act. The FDR should be in the name of the contractor, AIC BHEL, duly Discharged on the back
- g) Security deposit shall not carry any interest.
- h) In case of small value contracts not exceeding Rs. 10.0 Lakhs and all SAS jobs, work can be started before security deposit is collected. However payment shall be released after recovery of 50% security deposit from first RA bill.

Acceptance of security deposit against Sl. No. d, e and f above will be subject to hypothecation or endorsement on the document in favour of BHEL. However, BHEL will not be liable or responsible in any manner for the collection of interest or renewal of documents or in any other matter connected therewith.

Also additional security deposit as per NIT.

- 1.8.4 If the value of the 'work done at any time exceeds the acceptance agreement value, the Security Deposit shall be correspondingly enhanced and the extra Security Deposit shall be immediately deposited by the contractor or recovered from payments due to him.
- 1.8.5 Failure to deposit the security within the stipulated time, may lead to forfeiture of Earnest Money and cancellation of the award of work.
- 1.8.6 The Security Deposits should cover upto the period of warranty also.
- 1.8.7 If any part of Security Deposit of the contractor is held in the form of approved securities it shall be kept transferred in the name of Bharat Heavy Electricals Limited PS-NR (Services), Noida in such a manner that BHEL shall not be responsible for any depreciation in the value of the security during the currency of the contract.
- 1.8.8 BHEL reserves the rights to forfeit Security Deposit in addition to other claims and penalties in the event of the contractor's failure to fulfill any of the contractual obligations or in the event of termination of Contract as per terms and conditions of contract.
- 1.8.9 **Return of Security Deposit:**  
If the contractor duly performs and completes the contract in all respect to the entire satisfaction of BHEL and presents an absolute "No demand certificate" in the prescribed forms and returns properties belonging to BHEL handed over lent or hired by him for carrying out the said works the security deposit will be released to the contractor after deducting all cost or other expenses or other amounts that are to be paid by BHEL under this or other contracts entered into with the contractor only after the satisfactory completion of guarantee period as per clause 2.13.
- 1.8.10 No interest shall be payable by BHEL on Earnest Money/ Security Deposit or any money due to the contractor by BHEL.

1.9	<b>Rejection of tender and other conditions:</b>
1.9.1	The acceptance of the tender will rest with BHEL which does not bind itself to accept the lowest tender or any tender and reserves to itself full rights for the following without assigning any reasons whatsoever. a) To reject any or all of the tender b) To split up the work amongst two or more tenderers c) To award the work in part d) Either of the contingencies stated in (b) & (c) to modify the time for completion suitably e) To modify the scope of work after mutual agreement.
1.9.2	Conditional and un-witnessed tenders: Tenders containing absurd or unworkable rates and amounts and tender a which are incomplete and otherwise considered defective and tenders not in accordance with the tender conditions, specifications etc. are liable to be rejected.
1.9.3	If a tenderer expires after his submission of eh tender or after the acceptance of his tender. BHEL may cancel such tender at their discretion unless the firm retains its character.
1.9.4	BHEL will not be bond by any Power of attorney granted by the tenderer or changes in the compositions of the firm made subsequent to the execution of the contract. They may however recognize such Power of Attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the Contractor concerned.
1.9.5	If the tenderer deliberately gives wrong information in his tender. BHEL reserves the right to reject such tender at any stage or to cancel the contract, if awarded and forfeit the Earnest Money Security Deposit.
1.9.6	Canvassing in any form in connection with the tenders is strictly prohibited and the tenders submitted by the Contractor who resorts canvassing are liable to rejection.
1.9.7	Should a tenderer or contractor or in the case of a firm or company of contractors one or more if its partner / Shareholders/ Directions have a relation or relations employed in the capacity of an officer of BHEL, the authority inviting tender shall be informed of the fact along with the offer, failing which, BHEL may at its sole discretion, reject the tender or cancel the contract and forfeit the Earnest money , Security Deposit.
1.9.8	The successful tenderer should not be sub- contract the part of complete work detailed in this tender specification / undertaken by him without written permission of BHEL. The tenderer is solely responsible to BHEL for the work awarded to him. Any deviation in this regard will entail termination of such contract by BHEL at their risk and responsibility of the tenderer.
1.9.9	The successful tenderer shall inform/ keep BHEL informed if he has already undertaken any work / is likely to be awarded any job with the same customer with whom BHEL is entering into contract.






## SECTION-II

### GENERAL TERMS & CONDITIONS OF THE CONTRACT

2.1	<b>Definitions:</b> The following terms and expressions shall have the meaning hereby assigned to them except where the context otherwise requires.
2.1.1	'BHEL' (or B.H.E.L. Ltd) shall mean Bharat- Heavy Electrical Limited a company incorporated under Indian companies Act 1956, having its Registered office at BHEL HOUSE, SIRI FORT, and NEW DELHI. Power Sector - Northern Region (Services), Noida or its Administrative Offices or its Site Engineer or other employees authorized to deal with any matters with which these persons are concerned on its behalf.
2.1.2	"General Manager/ DGM/ IN-CHARGE" shall mean the officer in Administrative charge of BHEL. PS-NR (services) Noida or their other regional office.
2.1.3	"ENGINEER" OR "ENGINEER IN CHARGE" shall mean Engineer deputed by BHEL. The term "SITE ENGINEER" "SITE INCHARGE" "RESIDENT ENGINEER" and "RESIDENT MANAGER" of BHEL at the site as well as the officers in-charge at Noida office.
2.1.4	"SITE" shall mean the place or places at which the plants/ equipments are to be overhauled and services are to be performed as per the specification of this contract.
2.1.5	"CLIENTS OF BHEL" or "CUSTOMER" shall mean the project authorities to whom BHEL is supplying the equipments/ Service.
2.1.6	"CONTRACTOR" shall mean the individual, firm or Company who enters into this Contract with BHEL and shall include their executors, administrators, successors and permitted assigns.
2.1.7	"CONTRACT" or "CONTRACT DOCUMENT" shall mean and include the agreement or work order the accepted appendices of rates. Schedule of quantities, if any and general conditions of contract, the special conditions of contract, instructions to the tenderers, the drawings, the specifications, the special specification, if any, the tender documents are the Letter of Intent/ Accepting Letter issued by BHEL. Any conditions or terms stipulated by the contractor in the tender documents or supporting letters shall not form part of the contract unless specifically accepted in writing by BHEL & incorporated in the agreement.
2.1.8	"GENERAL CONDITIONS OF CONTRACT" shall mean the instructions to tenderers and general conditions of contract pertaining to the work detailed.
2.1.9	"TENDER SPECIFICATION" shall mean the specific conditions, technical specification, appendices, site information and drawing" pertaining to the work for which the tenders are required to submit their offer. Also this will include the specification covered under specifications detailed in NIT of client of BHEL for overhauling, erection, testing and commissioning of plant. Individual specification No. will be assigned to each tender



	specifications.
2.1.10	"TENDER DOCUMENTS" shall mean the general conditions of contract (2.1.8) tender specification (2.1.9)
2.1.11	"LETTER OF INTENT" shall mean the intimation by a letter to the tenderer that tender has been accepted in accordance with provisions contained in that letter. The responsibility of the contractor commences from the date of issue this letter and all the terms & conditions of contract are applicable from the date.
2.1.12	"COMPLETION TIME" shall mean the period by date specified in the acceptance of tender for handing over the overhauled equipment/ plant which are found acceptable by the Engineer being of required standard and conforming to the specification of contract.
2.1.13	"PLANT" shall mean and connote the entire assembly of the plant and equipment covered by the contract.
2.1.14	"EQUIPMENT" shall mean all equipments, machineries, materials, structural, electrical and other components of the plant covered by the contract.
2.1.15	"TEST" shall mean and include such test or tests to be carried out on the part of contractor as are prescribed in the contract or consider necessary by BHEL, in order to ascertained the quality, workman ship, performance, and efficiency of the contract work or part thereof
2.1.16	"APPROVED", "DIRECTED" or "INSTRUCTED" shall mean approved directed or instructed by BHEL.
2.1.17	"WORK OF CONTRACT WORK" shall mean and include supply of all categories of labour, specified consumable, tools & tackles required for complete and satisfactory site transportation, handling, stacking, storing, overhauling, erecting, testing and commissioning of the equipment to he entire satisfaction of BHEL.
2.1.18	"SINGULAR AND PLURAL ETC" words carrying singular number shall also include plural and vice versa, where the context so requires, words importing the masculine gender shall be taken to include the feminine gender and words importing persons shall include any company or association or body of individuals, whether incorporated or not.
2.1.19	"HEADING". The headings in these general conditions are solely for the purpose of facilitating reference and shall not be deemed to be part there or of the contract.
2.1.20	"MONTH" shall mean calendar month.
2.1.21	"WRITING" shall include any manuscript, type written or printed statement under the signature of deal as the case may be.
2.2	Law governing the contract and court Jurisdiction: The contract shall be governed by the law for the time being in force in the Republic of India



2.2.	<p><u>Law governing the contract and court Jurisdiction:</u></p> <p>The contract shall be governed by the law for the time being in force in The Republic of India. The Civil Court, having ordinary original civil jurisdiction in Delhi shall alone have exclusive jurisdiction in regard to all claim in respect of this contract.</p>
2.3	<p><u>Issue of Notice:</u></p> <p>The contractor shall furnish to the BHEL Engineer the name, designation and address of his authorized agent and all complaints, notices, communications and reference shall be deemed to have been duly given to the Contractor if delivered to the contractor his authorized agent or left at or posted to the address either of the contractor or of his representation and shall be deemed to have been so given in the case of posting on the day on which they would have reached such address in the ordinary course of post or on which they were so delivered of / or left.</p>
2.4	<p><u>Use of Land:</u></p> <p>No land belonging to BHEL or their customer under temporary possession of BHEL shall be occupied by the contractor without the t written permission of BHEL.</p>
2.5	<u>Commencement of work:</u>
2.5.1	The contractor shall commence the works within the time indicated in the letter of intent from BHEL and shall proceed with due expedition without delay.
2.5.2	If the successful tenderer fails to start the work within the stipulated time, BHEL, at its sole discretion will have the right to cancel the contract. His Earnest Money and / or Security Deposit with BHEL will stand forfeited without any further reference to him, prejudice to any and all of BHEL's other rights and remedies in this regard.
2.5.3	All the works shall be carried out under the direction and to the satisfaction of BHEL.
2.5.4	The erected/ overhauled plant or work performed under the contract shall be taken over when it has been completed in all respects and/ or satisfactory put into operation at site.
2.6	<u>Mode of payment and measurement of the work competed:</u>
2.6.1	All payment due to <u>the contractor shall be paid only by " Account payee cheques" or through ECS ( Electronic Clearance).</u>
2.6.2	The contractor shall submit his bill to site In-charge of BHEL for every payment After verification measurement shall be certified by the BHEL Engineer
2.6.3	Lump sum omission will be entered for deduction. Measurement shall be restricted to that for which it is required to ascertain the financial

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	liability of BHEL under this contract.
2.6.4	Work which is to be measured in detail shall be measured as per standard procedure without reference to any local procedures exception where it is otherwise stated in the tender documents. The measurement shall be taken jointly by persons duly authorized on the part of BHEL and the contractor.
2.6.5	If, at any time due to any reason whatsoever, it becomes necessary to re-measure, the contractor shall without extra charges, provide all the assistance with appliances and other things necessary for measurement.
2.6.7	The measurement and the bill prepared shall be signed and dated by both the contracting parties.
2.6.8	The contractor will be intimated in writing by the Site Engineer, the proposed date of measurement if the Contractor's representative fails to participate in the joint measurement, the BHEL Engineer shall have the power to proceed by himself to take measurement in which case the measurement shall be accepted by the contractor as final.
2.6.9	Passing of measurement as per bills does not amount to acceptance of completion of the work mentioned. Any left out work has to be completed if pointed out at a later date by BHEL.
2.7	<u>Rights of BHEL:</u>  BHEL reserves the following rights in respect of this contract without entitling the contractor for an compensation:
2.7.1	To get the work done through other agency at the risk and cost of the contractor in the event of contractor's poor progress, or inability to progress the work for completion as stipulated in the contract, poor quality of work etc. and to recover compensation for such losses from the contractor including BHEL's supervision charges and overheads from security deposit other dues.
2.7.2	To withdraw any portion of work and / or to restrict/ alter the quantum of work as indicated in the contract during the Progress of work and get it done through other agency and or by departmental labour to suit BHEL's commitment to its customer or in case BHEL decides to advance the date of completion due to other emergency reasons BHEL's obligation to its customer.
2.7.3	To terminate the contract after 15 days written notice and forfeit security deposit and recover the loss sustained in getting the balance work done through other agencies in addition to liquidated damages in the event:
2.7.3.1	Contractor's continued poor progress brought to his notice from time to time
2.7.3.2	Withdrawal from or abandonment of the work before completion of the work.
2.7.3.3	Corrupt act of contractor.
2.7.3.4	Insolvency of the contractor and in case of a company a winding up



	proceeding is initiated or winding up order has been made by a court.
2.7.3.5	Persistent disregard to the written instructions of BHEL under the contract.
2.7.3.6	Assignment, transfer, sub-letting of the contract without BHEL's written permission.
2.7.3.7	Non-fulfillment of any contractual obligations. Any delay in works for reasons not attributable to the contractor will have to be compensated by either increasing manpower and resources or by working extra hours and more than one shift without any extra cost.
2.7.4	To recover any money due from the contractor, from any money due to the contractor under this contract or any other contract or from the security deposit.
2.7.5	To claim compensation for losses sustained including BHEL's supervision charges and overheads on termination of contract and to impose penalty for delay in completion of the work.
2.7.6	To terminate the contract or to restrict the quantum of work and pay for the portion of work executed in case BHEL's contracts with their customers are terminated for an reason.
2.7.7	To effect recovery from the amounts due to the contractor under this or any other contract etc. in any other form, the money, BHEL is forced to pay to anybody, due to contractor's failure to fulfill nay of his obligations.
2.7.8	While every endeavor will be made by BHEL they cannot guarantee uninterrupted work due to conditions beyond their control. Contractor will not be entitled to any compensation / extra payment on this account.
2.7.9	In the event of any dispute of any nature, the decision of BHEL shall be final and binding on the contractor.
2.8	<b><u>Responsibilities of the Contractor:</u></b> The following are the responsibilities of the contractor in respect of observation of local laws, employment of personnel. Payment of taxes an execution of job etc.
2.8.1	As far as possible, unskilled workers shall be engaged from the local area in which the work in being executed.
2.8.2	The contractor at all times during the continuance of the contract, shall, in all his dealing with local labour for the time being employed or in connection with the work, have due regard to all local festivals and religions and other customs.
2.8.3	The contractor shall duly comply with all state and central Laws. statutory rules, Regulations etc, including but not limited to : The payment of wages act, minimum wages act, workmen compensation act, industrial dispute act, employees provident fund act and various schemes framed there after. Employee state insurance scheme contract labour (regulation & abolition) act 1970 and other Act, rules & regulations for labour as may be enacted by the government during the tenure of the contract and having force or jurisdiction at site. The contractor shall give to the local governing body, Police and other relevant authorities all such notices as may be required by law

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2.8.4	The contractor shall pay all taxes, fees, license charges duties, tools, royalty, commission or charges which may be leviable on account of his operations in executing the contract, in case, BHEL makes such payment, shall have the right to recover the same from the contractor either from his bills or otherwise as deemed fit.
2.8.5	The contractor shall be responsible for provision of welfare, health and sanitary arrangements (particularly described in contractor Labor (regulation & abolition Act) safety precautions etc. as may be required for safe and satisfactory execution of the contract.
2.8.6	The contractor shall fulfill all his obligations in respect of accommodation including proper medical facilities for the personal employed by him.
2.8.7	The contractor shall be responsible for the proper behavior at site and observance of all regulations by the staff employed by him.
2.8.8	The contractor shall ensure that no damage is caused to any person/property or other parties working at site, if any such damage is caused it is the responsibility of the contractor to make good the losses or compensate for the same.
2.8.9	All the properties / equipments/ components of BHEL / their client loaned to the contractor, with or without deposit in connection with the contract shall remain the properties of BHEL / their client. The contractor shall use such properties for the purpose of executions of this contract. All such properties / equipments shall be deemed, to be in good condition when received by the contractor unless he notifies within 48 hours to the contrary. The contractor shall return them in good condition as and when required by BHEL / their client. In case of non-return, loss, damages, repairs etc. the cost there of, as may be fixed by the site Engineer, will be recovered from the contractor.
2.8.10	It is not obligatory on the part of BHEL to supply any tools and tackles or other materials other than those specifically agreed to do so by BHEL. However, depending upon the availability / possibility, BHEL's customer's handling equipment and other plants may be made available to the contractor on payment of the hire charges free of charges as fixed, subject to the condition laid down by BHEL customer from time to time. Unless paid in advance, such hire charges, if applicable shall be recovered from contractor's bill security deposit in ONE installment.
2.8.11	The contractor shall not be entitled to claim any compensation due to changes in design which results in reduction in quantum of work.
2.8.12	The contractor shall fully indemnify BHEL against all claims of whatsoever nature arising during the course of work under the contract.
2.8.13	In case the contractor is required to undertake any major work outside the scope of this contract, the rates payable shall be decided by BHEL.
2.8.14	The contractor shall keep the area of work clean and shall remove debris



etc. while executing day-to-day work. Upon completion of work the contractor shall remove from the vicinity of work all scrap, packing materials, rubbish, unused and other materials and deposit them in places to be specified by the BHEL engineer. The contractor will also demolish all the hutments, sheds offices, constructed and used by him and shall clean the debris. In the event of his failure to do so the same will be arranged to remove by BHEL. The expense there of will be recovered from contractor by any lawful means available with BHEL.

2.8.15 The contractor shall arrange and coordinate his work in such a manner as to cause no inconvenience to other agencies working in the area.

2.8.16 All safety rules and codes applied by the client / BHEL at site shall be observed by the contractor without exception. The contractor shall be responsible for the safety of the equipment / material and work to be performed by him and shall maintain all light, fencing guards, signs etc. or other protection necessary for the purpose. Contractor shall also take such additional precautions as may be indicated from the time to time by the Engineer with a view to prevent pilferage, accidents, fire hazards and due precautions shall be taken against fire hazards and atmospheric condition. Suitable number of clerical staff, watch and wards, store keepers to take care of the equipment, materials and construction tools and tackles shall be posted at site by the contractor till completion of the work under this contract.

The contractor shall arrange for such safety device as are necessary for such type of work and carryout the requisite tests of handling equipment, lifting tools, tackles etc. as per prescribed standards and practices.

All guide lines as mentioned in "SALARY CODE" –Service mentioned in Services tender page in [www.bhelpsnr.co.in](http://www.bhelpsnr.co.in) will form part of this tender and hence contract.

#### **HELMETS**

Following colors of Helmets are to be worn by various category of personnel of the contractor. In case of violation, found during inspection of fine of Rs 500/- per inspection can be imposed by BHEL.

S.No.	Category	Color of Helmet
1.	Sub-contractor officers	Light Blue
2.	Sub-contractor Safety personnel	Green
3.	Sub-contractor Electrician	Orange
4.	Sub-contractor- Supervisors	Dark / blue
5.	Sub-contractor Workers	Yellow

It should confirm to **IS-2925-1984**

2.8.17 The contractor will be directly responsible for payment of wages to his workmen. The payment to the workmen should be made in the presence



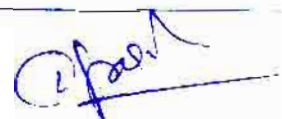
	<p>of a representative of BHEL (as per contract labour / regulation &amp; abolition act). A pay / wage roll sheet giving all the payments given to workers and duly signed by the contractor's representative should furnish to BHEL site office for record purpose.</p> <p>Payment date, time and place will be informed by the contractor to the Resident Manager / Engineer of BHEL immediately on commencement of work.</p>
2.8.18	The intent of specification is to provide services according to most modern and proven techniques and codes. The omission of specific reference to any method requirement of material necessary for the, proper and efficient performance of work shall not relieve the contractor of the responsibility of providing such facilities to complete the work.
2.8.19	In case of any clause of the work for which there is no such specification as laid down in the contract, such work shall be carried, out in accordance with the instructions and requirements of the BHEL Engineer.
2.8.20	No levy or payment or change made or imposed shall be impeached by reason or any clerical error or by reason of any mistake in the amount levied or demanded or charged.
2.8.21	The detailed drawings, specifications, instruction manual, if any available with the BHEL Engineer form part of tender specification. These documents will be made available for reference only to the contractor during execution of work.
2.8.22	Should any error or ambiguity be discovered in the specification, the contractor shall forthwith bring the same to the notice BHEL before commencement of work? BHEL's interpretation in such cases shall be final and binding on the contractor.
2.8.23	No idle labour charges will be admissible in the event of any stoppage caused in the work resulting in contractor's labour being rendered idle due to any cause or reason whatsoever.
2.8.24	Unless stipulated in the contract/order, No over run charges shall be paid in the event of the completion period being extended for any reason whatsoever.
2.8.25	It is possible that some repair/rectification, modification may be needed on the equipment to be overhauled /work to be performed under the specification, for reasons not attributable to the contractor. All such repair / rectification/ modification work with the available facilities at site shall be carried out by the contractor free of cost and no extra charges shall be paid to the contractor.



2.8.26	The quality and progress of work will be regularly reviewed. The schedule and progress of work will be the obligation/responsibility of the contractor to achieve the desired quality and progress of work by suitably reinforcing their labour force and / or by working extra hours or in more than one shift without any extra cost. Workmen found unsuitable for the work will be replace immediately by the contractor on being informed by BHEL
2.8.27	During the overhauling work under the contract it is very essential that proper and adequate inspection should be made constantly to maintain the quality of workmanship so that any deviation from design dimension does not exceed permissible limit. The proper functioning of the unit. While in operation depends to a great extent on the above factors. The fact that effective supervision and inspection at the execution stage is less costly that down time of running unit even for a short period need not be over emphasized. For the details regarding alignment and permissible dimensional deviations in the subassemblies, BHEL Engineer may be consulted.
2.8.28	The contractor shall furnish weekly labour report showing name classification. The number of employees engaged in various categories of work data wise and a progress report of work as required by BHEL Engineer. The contractor shall also furnish weekly report of overtime work performed by his workers by name, indicating overtime hours of each worker date-wise
2.8.29	The contractor shall execute the work in the most substantial and workman-like manner in stipulated time. Accuracy of work and timely execution are the essence of this contract. The contractor shall be responsible to ensure that the assembly and workmanship confirm to the dimensions and clearances given in the drawings and / or as per instructions of BHEL Engineers.
2.8.30	The contractor shall take all reasonable care to protect materials and work till such time the plant / equipment has been taken over fencing and lighting shall have to be provided by the contractor as a safety measure against accident and damage of property of BHEL/ their client. Suitable caution notices shall be displayed where access to any part may be deemed to be unsafe and hazardous.
2.8.31	It will be the responsibility of the contractor to ensure safe lifting of the equipment taking due precautions to avoid any accidents and damage to other equipments and personnel.
2.9	Consequences of cancellation:  Whenever BHEL exercises its authority to terminate the contract/withdraw a portion of work under the clause 2.7 they may complete the work by any means at the contractor's risk and expense provided that in the event of



	the cost of completion (as certified by the site Engineer which is final and conclusive) being less than the contract cost, the advantage shall accrue to BHEL and if the cost of completion exceeds the money due to the contractor under the contract the contractor either shall pay the excess amount ordered by BHEL or the same shall be recovered from the contractor by any other means. This will be in addition to the forfeiture of security deposit and recovery of liquidated damages as per relevant clauses.
2.9.1	In case BHEL completes the work under the provision of this condition, the cost of such completion to the contract or under this condition, shall consist of materials purchase and / or labour, provided by BHEL will an addition of such percentage to cover supervision and establishment charges as may be decided by BHEL.
2.10	<b>Insurance:</b>
2.10.1	BHEL / their customer shall arrange for insuring the materials / properties of BHEL / Customer covering the risks during transit, storage, overhauling, erection and commissioning.
2.10.2	It is the sole responsibility of the contractor to ensure his workmen against accident and injury while at work as required by relevant rules and to pay compensation, if any, to workmen as per Workmen's compensation Act. Contractor shall ensure his staff against accidents. The work will be carried out in protected area and as per the rules and regulations of the client / BHEL, in the area of project which are in force from time to time, will have to be followed by the contractor.
2.10.3	If due to negligence and / or non-observance of safety and other precautions, any accident / injury occurs to any other personal public, the Contractor shall have to pay necessary compensation and other / expenses, if so decided by the appropriate authorities.
2.10.4	If due to contractor's carelessness, negligence or non-observance of safety precautions damage to BHEL's / customer's property and personnel should occur, and if BHEL / Customer is unable to recover, in full, cost from the Insurance company the balance will be recovered from the Contractor.
2.11	<b>Strikes &amp; Lockouts:</b> The contractor will be fully responsible for all the disputes and other issues connected with his labour. In the event of contractor's labour resorting to lockout and if the strike or lockout declared is not settled within a period of one week BHEL shall have the right to get the work executed employing its own labour or through any other agencies or both and the cost so incurred by BHEL, shall be deducted from the contractor's bills as per clause 2.7. For all purposes whatsoever that employees of the contractor shall not be deemed to be in the employment of BHEL.



2.12	<b><u>Force Majeure:</u></b>
2.12.1	<p>The following shall amount to force majeure:</p> <p>Acts of God. Acts of any Government, War sabotage, riots, civil commotion, police action, revolution, flood, fire, cyclones, earth-quake and epidemic and other similar causes over which the contractor has no control.</p>
2.12.2	<p>If the contractor suffers delay in the due execution of the contractual obligations due to delays caused by force Majeure as defined above, the agreed time of completion of the job covered by this contract or the obligations of the Contractor shall be extended by a period of time equal to the period of delay provided that on the occurrence of any such contingency the contractor immediately reports to BHEL in writing the cause of delay. The contractor shall not, however, be eligible for any compensation.</p>
2.13	<p><b><u>Performance Guarantee:</u></b></p> <p>The contractor shall guarantee against defects attributable to faulty workmanship or procedure adopted in the overhaul for items covered in the contract for a period as given in the tender document from the 1 date of re-commissioning of the set after the capital overhaul. The guarantee shall cover all defects notified during this period and shall have to be attended to free of cost immediately or at the time our clients are able to given shut down of the set for the required period, when necessary. In case of failure of contractor to attend to the defects, as and when required, in time. BHEL shall arrange to attend the defects and the charges shall be levied to contractor's account and shall be recoverable from the security deposit/ progress payments</p>
2.14	<p><b><u>Arbitration:</u></b></p> <p>All disputes or differences between the parties to the contract arising out or in relation to the contract, other than those for which the decision of the Engineer or of any other person is by the contract expressed to be final and conclusive, shall after written notice by either party to the contract to other party be referred to sole arbitration of General Manager of BHEL or his nominee, the arbitration shall be conducted in accordance with the provisions of the <b>INDIAN ARBITRATION AND CONCILIATION ACT 1996 OR REVISION THEREOF</b>&gt; The arbitrator shall give reasons for the award.</p> <p>The parties to the contract understand and agree that it will be no objection that the said General Manager or the person nominated by him as arbitrator, had earlier in his official capacity to deal directly or indirectly</p>





with the matters to which the contract relates or that in the course of his official duties had expressed views on all or any of the matters in dispute of difference. The award of the arbitrator shall be final and binding on the parties to this contract.

In the event of the arbitrator dying, neglecting or refusing to act or resigning or being unable to act for any reason. It shall be lawful for the said GM, or his successor, as the case may be, either to act himself as the Arbitrator or to appoint another in place of the outgoing arbitrator in the manner aforesaid.

The arbitrator may from time to time, with consent of both the parties to the contract, enlarge the time for making the award.

Work under the contract shall be continued during the arbitration.

The venue of arbitration shall be the place form where the contract / work order is issued or such other place as the arbitrator at his discretion may determine.



## SECTION-III

### SPECIAL CONDITIONS OF CONTRACT

3.1	<p><u>Quantum of work</u></p> <p>The scope of work given in the tender specification is only approximate and is liable to variation and alterations at the discretion of BHEL Resident Engineer. No compensation on this account shall be payable to the contractor unless specifically recommended by Resident Engineer as the variation forming major additions to the original scope of work. All repair/ rectification work arising out of normal wear and tear, seizure of parts etc. have to be done by the scope of work of the contract.</p>
3.1.1	<p>The scope of work details out the major activities only. However as per the general maintenance requirement and site condition, certain relation activities may be carried out by the contractor without any extra cost.</p>
3.1.2	
3.2	<p><u>Commencement and completion work:</u></p> <p>The starting time and completion time is the essence of the tender. As the time bound program is firmly committed to customer the starting time and completion time should be strictly adhered to. It will not be possible to grant extension in completion time except in extra ordinary circumstances which will be decided entirely at the discretion of BHEL Resident Engineer. Work should normally be carried out in two shifts and sometimes also in three shifts in consultation with the BHEL Resident Engineer.</p>
3.2.1	<p>A detailed program of the various activities covered under this contract with specific time periods to fall in the overall frame work of the above dates should be prepared and got approved by BHEL Resident Engineer. The progress against this program shall be reviewed with BEL Resident Engineer at the end of each day and critical areas identified and suitable steps taken in time.</p> <p>If during the review, at any stage of overhauling, BHEL Resident Engineer feels that the delays are not likely to be made up, BHEL reserve the right to take corrective steps as considered necessary by BHEL Resident Engineer to complete work in schedule time and debit the cost incurred there on to the contractor. This does not however absolve the contract of own efforts in I consultation with BHEL Resident Engineer. Every endeavor will be made to see that work proceeds uninterruptedly.</p>
3.2.2	<p>The tenderers should indicate the time required for starting the work once the letter of intent is issued along with the time required for completion.</p> <p>The work may have to commence immediately after opening of the tenders. Hence, preference may be given to those tenders who can commence the work earlier, and also ensure early completion.</p>

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	<p>The tenderers should indicate the time required for starting the work once the letter of intent is issued along with the time required for completion. The work may have to commence immediately after opening of the tenders. Hence, preference may be given to those tenders who can commence the work earlier, and also ensure early completion.</p>
3.2.3	<p>The contractor shall ensure completion of the job in all respects within the days from the date of commencement of work as given in contract.</p>
3.3	<p><b><u>Penalty for delay :</u></b></p>
3.3.1	<p>If not mentioned otherwise in the notice inviting tender, in the event of failure to complete the work in given time, an amount equal to 1/2 % of the contract value per day subject to maximum of 10 % of the contract value will be levied as penalty, in case the balance work IS allowed to be completed by the contractor beyond the scheduled time of completion, which is at the discretion of BHEL. In case of delays on contractor's part, at any stage during the scheduled period or after, BHEL shall have the option of ensuring completion of the job by any other means at its disposal and the charges on this account shall be levied on the contractor. These shall be adjusted against contractor's bills or security deposit.</p>
3.4	<p><b><u>Terms of payments</u></b></p>
3.4.1	<p>As mentioned otherwise in the notice inviting tender, payment will be made in total 90 % against three progressive bills of 30 % each submitted by the contractor in quadruplicated mentioning the allotted and percentages of the activities.</p> <p>On the basis of completed measurement of work done, the bills will be verified by BHEL Site Engineer and certified by BHEL Resident Engineer to arrange payment. Balance 10 % shall be payable after successful completion of job.</p> <p>All payments are subject to income tax deduction at the applicable rates of the bill amount at source or as per Central Government Laws; No request for advance payment will be entertained by BHEL.</p> <p>BHEL reserves the right to withhold payment in case terms and conditions as per contract are not fulfilled by the contractor.</p>
3.5	<p><b><u>Inspection and completion or work:</u></b></p>
3.5.1	<p>The work being carried out by contractor will be supervised and inspected by our site engineers under the overall supervision of BHEL Resident Engineer.</p>
3.5.2	<p>The work will be deemed as completed when it is finally accepted by BHEL Resident Engineer and job completion certificate is issued. No extra payment will be made for any rework carried out by the contractor to rectify any defective work.</p>
3.5.2	<p>The contractor shall not be entitled for labour idling charges under any</p>

	circumstances.
3.6	<b>Tools, Tackles, Test Equipments and Consumables:</b>
3.6.1	Unless otherwise mentioned in the notice inviting tender, all tools and tackles and consumables required for day to day work like gases, gas cutting sets with accessories, AC/ DC welding sets, TIG welding kits, welding cables, electrodes etc. all necessary power connection to equipment, all temporary electrical connection boards, required for the work shall be arranged by the contractor at his own cost.. However in case of emergency, BHEL may supply certain items, if available, to contractor at actual cost plus handling charges; These will be deducted from contractor's running bills, T&P shall be regularly tested by the contractor to ensure that the same is available in fit condition for use. Testing equipment for conducting various tests, during the progress of overhauling/ commissioning shall have to be provided by the contractor. Spare parts going into permanent installation shall only be provided by BHEL.
3.7	<b>Accommodation for site staff and store space:</b>
	Contractor has to arrange for the stores and office at site and its maintenance. Space for the same shall be made available as per the availability at site. The contractor shall be responsible to provide all necessary facilities, like residential accommodation with sanitary facilities transport, electricity, water medical, bonus etc. as required under various labour laws and statutory rules and regulations framed there under to the personnel employed by him. BHEL assumes no liability in this regards.
3.8	<b>Responsibilities of the contractor</b>
3.8.1	<b>Supervisory staff and labour:</b> The contractor shall employ, specially skilled labour, supervisors and engineers thoroughly conversant with particular type of work to ensure quality work. BHEL reserves the right to insist on removal of any employees of the contractor at any time if they find him unsuitable and the contractor should forthwith remove him and provide a suitable substitute.
3.8.2	<b>Planning and Execution:</b> Contractor shall submit a job planning in form of a Bar Chart or PERT chart. A list of manpower category -wise, indicating individual's responsibility job/ activities - wise, shall have to be submitted. Daily program of job shall be displayed on a board near work site one day in advanced. A daily progress report along with Manpower utilized has to be submitted and backlog of the work, if any, shall be covered up in consultation with BHEL Resident Engineer.
3.8.3	<b>Safety and Accident Coverage</b> Contractor shall ensure safety of all his employees at site of work. All employees shall be covered by insurance (workman compensation) against accident, failing which proper action will be taken against the contractor. Contractor shall also ensure proper safety of the equipments under



	overhauling by deputing personnel to guard the equipments round the clock. Open oil spaces, steam space shall be covered properly against ingress of foreign material while working.
3.8.4	<p><u>House keeping and preservation:</u></p> <p>Work floor/ area shall be cleaned every day and be kept absolutely clean. A regular cleaning gang may be engaged for the purpose.</p> <p>All dismantled components of the equipments under overhauling should be tag marked and be stored properly according to type of components, namely all loose / small parts shall be kept in boxes bearing and matching components, shall kept on wooden planks. A list of such components shall be maintained to identify/locate, be preserved properly against probable damages. No floor shall be damaged by the contractor while working and necessary steps shall be taken, in case any such damages take place.</p>
3.8.5	<p><u>Tools stores consumables:</u></p> <p>Tools &amp; tackles other than special tools and tackles supplied along with the equipment, shall be arranged and stored properly by the contractor. A register must be maintained and updated regularly.</p> <p>All consumables, other than those going permanently into the equipments, shall be stored by the contractor for daily use. Regular check shall be made at end of each day's work and exhausted consumables shall be replenished immediately.</p> <p>The contractor's store may be visited by BHEL engineers without notice to contractor for verification.</p>
3.8.6	<p>The contractor shall make all necessary arrangement to receive spares from BHEL/ customer's stores, and when required. The unused and scrap materials shall be returned to BHEL/ Customer's stores on completion of the work.</p> <p>A detailed account shall be submitted by the contractor to this effect at the end of the work certifying no dues remained against them duly signed by Resident. Engineer BHEL / Customer.</p>
3.9	<u>General</u>
3.9.1	Standard printed conditions if enclosed with the offer by the tenders will not considered but only if stated in main body of the offer will be considered for acceptance.
3.9.2	It will be responsibility of the contractor to carry out trial run of all the equipments overhauled and confirm the satisfactory operation of equipment. The contractor's personnel shall be present at the time of final commissioning and attend to any defects that shall occur during this time at no extra cost to BHEL.
4.0	<b>Information Security Of PSNR</b>
4.0.1	The contractor shall ensure that the drawing, documents used during execution of contract are kept strictly confidential. The contractor shall ensure that the information confidentiality integrity and availability are maintained as per business equipments The information shall not under

	any circumstances, be used in any form with any other agency or for any purpose other than that for which it is intended.
4.1	<b>Social Accountability</b>
4.1.1	PSNR is committed to follow the social accountability in line with SA 8000. The contractor shall duly follow the same during the tenure of execution of the contract.
4.1.2	The Contractor shall not employ any employee less than 15 years of age in pursuant to ILO convention. If any child labour were found to have been engaged, the contractor shall be levied with expenses of bearing his education expenditure which will include stipend to substantiate appropriate education or employ any other member of family enabling to bear the child education expenditure.
4.1.3	The contractor shall not engage Forced/ Bonded Labour and shall abide by abolition of Bonded labour system (Abolition) Act, 1976
4.1.4	The contractor shall maintain Health & Safety requirement as stipulated in the contract and contract labour (Regulation & Abolition) Act, 1970
4.1.5	The contractor shall abide UN convention w.r.t Human Rights and shall be liable for Discrimination / Corporal punishment for failure in meeting with relevant requirements.
4.1.6	The contractor shall abide the requirement of Contract labour (Regulation & Abolition) Act 1970 for working hours.
4.1.7	The Contractor shall abide by the Statutory requirement of Minimum Wages Act 1948 payment of Wages Act 1936.
5.0	<b>Past Performance</b>
	BHEL reserve the right to reject a bidder based on their unsatisfactory past performance at any other project.
6.0	<b>TAX &amp; DUTIES</b>
6.1	<b>Rates are quoted as below and are inclusive of all taxes &amp; duties as applicable in India as well as in Libya. TDS as applicable shall be deducted as per law in force at the time of payment.</b>