



**AMC of IT Equipment and onsite manpower support for BHEL-PEM, Noida**

Ref No. : PE-LPE/129-02

Date: 23-10-2013

**CORRIGENDA/ADDENDA - 02**

**TENDER ENQUIRY NO. : PE-LPE/129 DATED 05/10/2013**

**Sub:- Changes in Technical Specification**

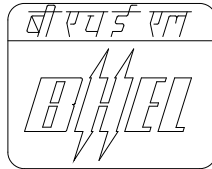
1. SAS HDD 146 GB is to be read as SAN HDD 146 GB in S.No. 1 of clause 3.0.
2. AMC required date is to be read as 01/07/2014 instead of 28/01/2014 in S.No. 3 of clause number 5.0.

Modified Technical Specification (Annexure – 1) is annexed.

With Regards  
For & on behalf of BHEL

  
Ravi Kant  
Engineer - IT

# **BHARAT HEAVY ELECTRICALS LIMITED**



## **SCOPE & TECHNICAL SPECIFICATIONS FOR**

**“AMC of IT Equipment and onsite  
manpower support for BHEL-PEM, Noida”**

**SPECIFICATION NUMBER: PE888S-1304 REV.02**

**PROJECT ENGINEERING MANAGEMENT DIVISION  
PPEI BUILDING, HRDI & ESI COMPLEX  
PLOT NO. 25, SECTOR 16A  
NOIDA – 201 301 ( U.P. )**

**SCOPE & TECHNICAL SPECIFICATIONS FOR “AMC of IT Equipment  
and onsite manpower support for BHEL-PEM, Noida”  
SPECIFICATION NUMBER : PE888S-1203 REV. 00**

## **1.0 SCOPE**

The scope of vendor includes:-

- a) Providing comprehensive maintenance services for the servers, SANs, Autoloaders, printers, switches and A0 size plotter. Maintenance service shall cover services, repairs and replacements necessary to keep the equipment in good working order on reasonable use of the equipment. Periodic maintenance, wherever required, should be carried out to keep the equipment in good working conditions.
- b) Back to back HP support for SANs and Autoloaders.
- c) Posting of one qualified resident engineer at BHEL-PEM.
- d) Maintenance of sufficient spares at BHEL-PEM.
- e) Running the equipment at the uptime of 98% per month.
- f) Cannibalization of desktops.

## **2.0 SUPPORT**

### **2.1 On-Site Engineer:**

- a) The vendor shall post one qualified, trained and certified engineers from 1/07/2014 till the expiry of contract with proven experience of at least 4 years on maintenance of IT items. The resident engineer posted shall be at least a 3 years diploma holder in electronics/computers/hardware and shall have sufficient experience to provide support for desktop, servers, SANs, Autoloaders, printers and switches. Onsite engineer should be Microsoft certified server engineer.
- b) The bio data of personnel that would be deployed onsite shall be submitted to BHEL for review and acceptance. This shall be done even when any changes will be made in the deployment. In case the performance of any of the deployed personnel is not found to be satisfactory by BHEL, replacement shall be provided by the vendor within 3 weeks.
- c) Onsite engineer should be deployed for atleast 6 months. In case, onsite engineer is changed before 6 months, payment for shortfall period shall not be made for onsite engineer. One month prior notice should be given before changing onsite engineer. In case of changing, a new support engineer shall be made available atleast 10 days prior to changing the existing support engineer. Full knowledge transfer shall be done by the existing support engineer to the new support engineer during the 10 days.

- d) The engineer shall be dedicatedly available at PEM normally from 8.30 AM to 6.00 PM on BHEL working days (Sunday and second and last Saturdays are holidays). Pro-rata deduction shall be made for deficit in onsite engineer's availability.
- e) The engineers shall also provide software (drivers etc) and diagnostic support for IT items (like desktops etc.) other than those for which AMC is being sought.
- f) Call logging (managing Fault Tickets), call escalation, tracking and closure shall be the responsibility of the engineers.
- g) The engineer is also required to coordinate with facility management team for all technical work and liable to work on holidays and Saturday/Sunday (if services are required under emergency) also. No additional amount for working on holidays or late sitting shall be paid.
- h) The scope of responsibility of the engineers, apart from Hardware maintenance, repair, and replacement of faulty parts shall include but is not limited to the clause number 2.2, 2.3 and 2.4.

## **2.2 Desktop Support Services**

- a) Install / Support / Maintain / Troubleshoot various system hardware.
- b) Problem diagnosis and cannibalization to ensure the availability of hardware from the list given in serial number 5 (row number 16 to 20).
- c) Installation, reconfiguration, reinstallation and upgrade of Windows operating environment as well as standard office productivity suites like Microsoft Office using software provided by BHEL.
- d) Service will also cover loading, rectifying problems, reloading etc of Operating systems and User software like MS Office, Anti-virus, Adobe acrobat, Intranet / Internet browsing etc, in use in BHEL or as required by user and provided by BHEL.
- e) Service for installing add-ons & upgrades to the equipment as and when ordered separately.
- f) In case of any machine getting shifted from one user to other, the data transfer, dismantling and assembling of machine will be done under service.
- g) To configure the printer and resolving all printing problems of users.

## 2.3 Printer/Server Support Services

- a) Printer configuration and installation / upgrade of printer drivers, FAX server, Adobe Print Driver on user PC.
- b) Management of Printer software and hardware maintenance of printers.
- c) Ensuring proper connectivity of Servers with Network and user systems.
- d) Resolving configuration errors, server crashes and software corruption.
- e) Installation, reconfiguration, reinstallation and upgrade of Server Operating Systems Linux / Windows 2008 etc. Software shall be provided by BHEL.
- f) Support after office hours and on holidays, whenever required and as per scope.

## 2.4 SAN and Autoloader support services

- a) Logging case with HP and follow up till closure.

## 3.0 Availability of Spares:

The following items shall be made available as spares as per the items list (Annexure-I) at BHEL-PEM, Noida location.

S.No.	Name of Item	Spare quantities to be maintained
1	SAN HDD 146 GB	4
2	HBA card	2
3	Motherboard (4 way server)	1
4	Motherboard (2 way server)	1
5	RAM (2 GB)	4

## 4.0 Stand-by Equipment

- a) In case, the equipment failure cannot be rectified through repair / replacement of defective parts, bidder will provide a stand-by equipment to minimize work disruption on account of hardware failure.
- b) If standby is provided for the equipment, then the original equipment should be repaired and reconfigured within 15 days. If the equipment is not getting repaired for prolonged period, BHEL reserves the right to get it repaired from an outside party at the risk and cost of bidder.

**5.0 Detail of Hardware for which AMC is required**

S.No.	Item	Specification, make and model	Quantity	Serial Number for back to back HP support	AMC required from	AMC required upto
1.	Server - 2 Way Rack	HP DL 380 G5	5	NA	28/01/2014	27/01/2016
2	Server 4-way Rack	HP DL 580 G4	9	NA	28/01/2014	27/01/2016
3	Server 4-way rack	HP DL 580 G4	11	NA	01/07/2014	27/01/2016
4	SAN Storage	HP EVA 4100	1	SGH821X13D	28/01/2014	27/01/2016
5	SAN Storage	HP EVA 4100	5	SGH821X13C SGH821X13A SGH823XDKH SGH821X139 SGH821X13B	01/07/2014	27/01/2016
6	Laserjet Printer - A4 Color	HP Color Laser Jet 4700dn	4	NA	28/01/2014	27/01/2016
7	Laserjet Printer - A3 Mono	HP Laser Jet 9040dn	8	NA	28/01/2014	27/01/2016
8	Laserjet Printer - A4 Color Low End	HP Color Laser Jet CP3505n A- 4	9	NA	28/01/2014	27/01/2016
9	Laserjet Printer - A4 Color Low End	HP Color Laser Jet CP3505n A- 4	1	NA	01/07/2014	27/01/2016
10	Ultrium Auto Loader	HP 1/8 Ultrium Autoloader	2	MXA808107W MXA819104Z	28/01/2014	27/01/2016
11	Ultrium Auto Loader	HP 1/8 Ultrium Autoloader	1	MXA808107W	01/07/2014	27/01/2016
12	Switch	CISCO Catalyst 3560 24 10/100/1000T	6	NA	28/01/2014	27/01/2016
13	Switch	CISCO Catalyst 2960 24 10/ 100 + 2 1000BT LAN	46	NA	28/01/2014	27/01/2016
14	Switch	CISCO Catalyst 2960 24 10/ 100 + 2 1000BT LAN	29	NA	01/07/2014	27/01/2016
15	A0 Plot-scan- copy (MFS)	KIP 5000	2	NA	28/01/2014	27/01/2016
16	Notebook - General	HP 6710b	47	NA		
17	Notebook - Lightweight	HP 2510p	10	NA		
18	PC - General with TFT	HP DC 7800	335	NA		

	monitor and 2GB RAM				Cannibalization
19	Graphic Workstation - P4 with 4GB RAM and Nvidia Quadro FX3500 card	HP XW 4600	68	NA	
20	Graphic Workstation - Xeon	HP XW 8600	10	NA	

## 6.0 DOWNTIME CALCULATIONS

Vendor shall be responsible for running the equipment at the uptime of 98% per month. The deduction for downtime shall be calculated for the uptime below 98% of each equipment.

Service window for equipment is as follows:

S.No.	Item	Service window
1	Servers, SAN, Switches and Autoloaders	24 X 7
2	Printers and Plotter	8.5 hours per working day

The downtime will be calculated on hourly basis per month on 24 hours x 7 days basis for servers, SAN, switches and Autoloaders. The downtime calculation shall be based on 8.5 hours per working day for printers and Plotter.

The deduction for downtime shall be as follows

S.No	Downtime	Deduction factor (D)
1	0 to 2 %	Zero
2	2 to 5 %	1.00
3	Beyond 5 % without standby	AMC Charges + Rs.1000 per day Note: Total deduction shall be limited to maximum monthly AMC charges of all the items put together as per contract for that month.
4	On site Engineers Absence	Rs.1000 per absence per engineer

**Working calculation for deduction**

Let downtime in a month = A hours

Downtime percentage

A) Server, SAN switches and autoloaders =  $A \times 100 / (24 \times 30) = B$

B) Printers =  $A \times 100 / (8.5 \times 30) = B$

Deduction factor according to the table above = D

Monthly Maintenance charge = quarterly maintenance charge / 3

= M Rupees

Amount of deduction =  $M \times B \times D / 100$  Rupees

If the services of the vendor are not found satisfactory then after giving sufficient notice (3 notices), BHEL reserves the right to terminate the contract and forfeiture of the Bank Guarantee / Security Deposit.

**7.0 HP SUPPORT**

Successful bidder will have to submit documentary evidence for back to back HP support for SAN and Autoloader before the start of contract.