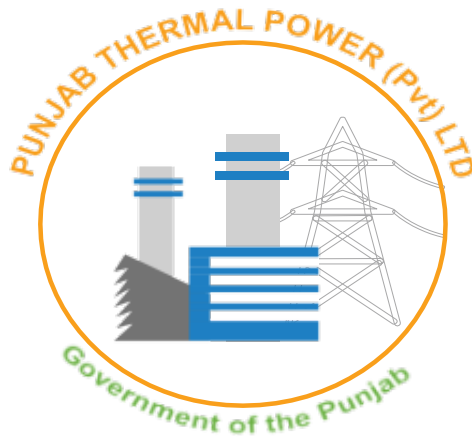


Tender Document

PROCUREMENT OF IT EQUIPMENT



**Punjab Thermal Power (Pvt) Ltd
(PTPL)**

First Floor, 7-C-I, Gulberg-III, Lahore.
Tel: +92-42-35750936-7, Fax: +92-42-35750939



PUNJAB THERMAL POWER (PVT.) LTD.

First Floor, 7-C-1, Gulberg III, Lahore.



BIDDING DOCUMENTS / TORs FOR PROCUREMENT OF “IT EQUIPMENT” FOR PUNJAB THERMAL POWER (PVT.) LIMITED (“PTPL”)

1. Firms/Bidders having active NTN and GST registration; and sufficient authorization, dealership, franchise, etc. of the concern Manufacturer, Company or its authorized Dealer, Distributor etc. working preferably in Lahore are eligible to participate in the bidding process.
2. Bank Draft/ Call Deposit Receipt (CDR) amounting PKR 27000/- as Bid Security in favor of “Punjab Thermal Power (Pvt.) Limited” (PTPL) must be enclosed with the consolidated sealed Bid.
3. Only those persons/ firms can participate which are authorized Distributor/ Dealer or Reseller of Authorized Distributor/Dealer of the items. Bidders are required to attach necessary documentary proof in this regard, otherwise bids will not be entertained.
4. An affidavit by authorized representative on stamp paper that the bidder is never blacklisted by any Government or Semi-Government Department/ Organization.
5. This procurement will be governed by the Punjab Procurement Rules, 2014. The Procurement Procedure shall be **Single Stage Single Envelope** as per Punjab Procurement Rules 2014.
6. Incomplete Bid(s) or received after deadline, in any manner, will not be accepted and over writing, if any, on the Technical or Financial Bids should be certified / verified by the Firms/Bidder.
7. Rates will be accepted on the basis of item wise lowest Bid.
8. Bids will be received till 11-06-2018 @ 11:00 am and will be opened publicly at Head Office of PTPL on the same day @ 11:30 am in the presence of the Bidders or their Representatives who may choose to be present.
9. Lowest Successful Bidder(s) shall be awarded with Purchase Order.
10. Rates quoted in bids must be valid for 45 days from bid submission deadline.
11. Bids should be submitted in Pak Rupees only, inclusive of all taxes.
12. At the time of payment, taxes will be deducted as per applicable laws.
13. The vender will be responsible to supply services, configuration & implementation at his own cost and complete in all respect as per specifications and items required by PTPL.
14. The PTPL reserves the right to reject all bids any time prior to the acceptance of the bids or proposals as provided by the Punjab Procurement Rules, 2014.
15. The scope of work includes the supply of the items, configuration and installation as specified herein below.
16. The items will be provided ex-stock on immediate basis after the award of Purchase Order.
17. Bidders will be under obligation to supply, provide or install the items/ equipment as per the specifications provided herewith.
18. No downward deviation from the specifications provided herewith of items/ equipment will be acceptable.



PUNJAB THERMAL POWER (PVT.) LTD.

First Floor, 7-C-1, Gulberg III, Lahore.



19. An authorized representative PTPL will inspect the equipment within one week of supply. Any discrepancies found during inspection must be removed within 03 working days by the supplier/ vender.
20. Payment will be made after the clearance by the PTPL's representative to verify conformance of the item(s) with the specifications provided herein.
21. 10% payment will be held as Performance Guarantee for warranty claim of the equipment(s) / item(s), depending upon the item(s), till the lapse of warranty period.
22. Successful bidder shall satisfy the warranty claim within mentioned time for all components, including replacement of whole unit.
23. In case of International Warranties, the local authorized dealer should mention their services and warranty setup, detail of qualified engineers, etc.
24. All the accessories including Cables, Adapters, stands etc. must be included in the Price, no additional charges will be paid.
25. Warranty/License period will be commenced from the date of acceptance or installation of the relevant equipment(s) or license(s) to the Procurement Agency.
26. Technical Evaluation carried out by the Evaluation Committee formulated by Procuring Agency, shall be final.
27. Manufacturer / Contractor will be liable for the availability of spare parts and accessories for the system during warranty period and onwards.
28. Software and Hardware upgradation of the equipment should be carried out, without any additional cost for software upgradation, as available during warranty period as recommended by the manufacturer.
29. Successful Bidder will be allowed a maximum of 48 hours downtime for all components in warranty claim including replacement of whole unit, where necessary and applicable.
30. The Bidder / Successful Bidder shall have all necessary government licenses, permits, NOC, etc. as required under the applicable laws and keep PTPL indemnified against the consequences for any such non-conformity or non-compliance. In case of any loss or damage caused to PTPL, shall be redressed or made correct against the costs of the Supplier/ Contractor.
31. In case, Bidder is a company or Partnership Firm, the Bid should be submitted by Authorized Representative along with Letter of Authorization on Letterhead of such Company or Firm in this regard.



PUNJAB THERMAL POWER (PVT.) LTD.

First Floor, 7-C-1, Gulberg III, Lahore.



BIDDING DOCUMENTS / TORS FOR PROCUREMENT OF "I.T. EQUIPMENT" FOR PUNJAB THERMAL POWER (PVT.) LIMITED ("PTPL")

Bid Documents Price: _____ Rs.500/-
(Nonrefundable)

Receipt No: _____

Dated: _____

Opening Date: _____

CDR No. _____

Name of Firm: _____

Address: _____

Phone No: _____ N.T.N No. _____

G.S.T Registration No: _____

Sr. No.	Description of Item	Quantity	Rate Per Unit	Total Amount (Pak Rupees)
1	UPS	01 Nos.		
2	FAX	01 Nos.		
3	Server	01 Nos.		
4	Wireless Access Point	02 Nos.		
5	Color Printer	01 Nos.		
6	Firewall	01 Nos.		
7	Telephone Exchange	01 Nos.		
8	Telephone Sets	20 Nos.		

Note:

- Rates given in the Bid must be inclusive of all government taxes.
- Rates must be given on this Performa otherwise Bid will not be entertained.
- No Bid shall be entertained without Bid Security amounting PKR 27000/- in shape of CDR/ Bank Draft.

**Company Secretary
Punjab Thermal Power (Pvt.) Limited**

1. UPS (Quantity: 01 Unit)

Minimum specifications are given below:

Item	Description of Requirement
6kVA	Online UPS
Power Capacity	6000 W / 6000 VA
Nominal Output Voltage	220/230/240 VAC
Output Frequency Range (sync mode)	60 Hz or 50 Hz +/- 0.1 Hz
Topology and output waveform	Double Conversion Online; Sine Wave
Output Connections	Terminal block
Input	
Nominal Input Voltage	220/230/240 VAC
Input Frequency	40 - 70 Hz
Input Voltage Range	Input Voltage Range
Input Connection	Terminal Block
Batteries	
Battery Type	12 V / 7 Ah x 16
Typical Recharge Time	4 Hours to recover to 90% capacity
Runtime Estimates at full and half load, min	
Half Load Runtime (min)	10
Full Load Runtime (min)	3.5
Communication and Management	
DB-9 RS-232	Supports Windows 2000/2003/XP/Vista/2008/7/8, Linux, Unix, and MAC
Intelligent Slot	Mini slot
Control Panel and Audible Alarms	Multi-function LCD Status and Control Console
Emergency Power off (EPO)	Yes
Surge Protection and Filtering	
Surge Energy Rating (Joules)	600 J
Regulatory	CE
Warranty	3 years

2. FAX (Quantity: 01 Unit)

Minimum specifications are given below:

Item	Description of Requirement
FAX	Automatic Paper Cutter
	Caller ID*1 Ready
	Out-of Paper Reception*2
	Directory Dialing
	Sequential broadcasting (20 Locations)
	Navigator Key for Easy Operation
	64-Level Halftone with Digital Image Processing
	Automatic Document feeder (10 pages)
	Copier function
	Resolution: standard/fine/super fine/photo
	Friendly Fax Reception
	Delayed transmission
	Polling function
	2-line LCD for name & number display
	Timed flash memory
	One-touch tone switching
	Monitor speaker for on-hook dialing
Pause control	
Electronic volume control	
External telephone jack	

3. Server (Quantity: 01 Unit)

Minimum specifications are given below:

Items / Description of Requirement	
Server	Type: Tower / 2U Rack Mounted Preferred
	6 Core Intel Xeon Scalable Processor (Base Freq 1.7GHz, 8M Cache)
	2x 1TB 512n Hot-plug Hard Drive (Must support total 8 Hard Drives)
	2x 16GB Memory RDIMM, 2666MT/s, Dual Rank
	RAID Controller: <ul style="list-style-type: none"> • Must Support RAID Level 0, 1, 5, 10, 50 • Data Transfer Rate: 12Gbps per port • Hard drives support: SATA, SAS, NL-SAS
	2x 1GbE or above Network ports
	495W or above Hot-plug, Redundant Power Supply
	Must include all required power cables
	3 Year onsite warranty support

4. Wireless Access Point (Quantity: 02 Unit)

Minimum specifications are given below:

Item	Description of Requirement
Dual Radio 802.11ac Access Point	Supports 867 / 1.3 Mbps and up will be preferred in the 5GHz band
Built-in Bluetooth Low-Energy (BLE) Radio	<ul style="list-style-type: none"> Enables Location-Based Services with BLE-enabled Mobile devices receiving signals from multiple Beacons at the same time Enables management of a network of Beacons
Advanced Cellular Coexistence (ACC)	<ul style="list-style-type: none"> Minimizes interference from 3G/4G cellular networks, distributed antenna systems and commercial small cell/femtocell equipment.
Quality of service for app visibility and control	<ul style="list-style-type: none"> Supports priority handling and policy enforcement for unified communication apps, including Microsoft Skype for Business with encrypted videoconferencing, voice, chat and desktop sharing
RF Management	<ul style="list-style-type: none"> Adaptive Radio Management (ARM) technology automatically assigns channel and power settings, provides airtime fairness, and ensures that APs stay clear of all sources of RF interference to deliver reliable, high-performance WLANs The APs can be configured to provide part-time or dedicated air monitoring for wireless intrusion protection, VPN tunnels to extend remote locations to corporate resources, and wireless mesh connections where Ethernet drops are not available.
Intelligent app visibility and control	<ul style="list-style-type: none"> AppRF technology leverages deep packet inspection to classify and block, prioritize or limit bandwidth for over 2,500 enterprise apps or groups of apps
Security	<ul style="list-style-type: none"> Integrated wireless intrusion protection offers threat protection and mitigation, and eliminates the need for separate RF sensors and security appliances IP reputation and security services identify, classify, and block malicious files, URLs and IPs, providing comprehensive protection against advanced online threats Integrated Trusted Platform Module (TPM) for secure storage of credentials and keys
WI-FI RADIO SPECIFICATIONS	AP type: Indoor, dual radio, 5GHz 802.11ac 2x2 MIMO and 2.4GHz 802.11n 2x2 MIMO Software-configurable dual radio supports 5 GHz (Radio 0) and 2.4 GHz (Radio 1)

	<p>5GHz: Two spatial stream Single User (SU) MIMO for up to 867 Mbps wireless data rate to individual 2x2 VHT80 client devices</p> <p>2.4GHz: Two spatial stream Single User (SU) MIMO for up to 400 Mbps wireless data rate to individual 2x2 VHT40 client devices (300 Mbps for HT40 802.11n client devices)</p> <p>Support for up to 256 associated client devices per radio, and up to 16 BSSIDs per radio</p> <p>Supported frequency bands (country-specific restrictions apply):</p> <ul style="list-style-type: none"> • 2.400 to 2.4835 GHz • 5.150 to 5.250 GHz • 5.250 to 5.350 GHz • 5.470 to 5.725 GHz • 5.725 to 5.850 GHz <p>Available channels: Dependent on configured regulatory domain</p> <p>Dynamic frequency selection (DFS) optimizes the use of available RF spectrum</p> <p>Supported radio technologies:</p> <ul style="list-style-type: none"> • 802.11b: Direct-sequence spread-spectrum (DSSS) • 802.11a/g/n/ac: Orthogonal frequency-division multiplexing (OFDM) <p>Supported modulation types:</p> <ul style="list-style-type: none"> • 802.11b: BPSK, QPSK, CCK • 802.11a/g/n/ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM <p>Transmit power: Configurable in increments of 0.5 dBm</p> <p>Maximum (conducted) transmit power (limited by local regulatory requirements):</p> <ul style="list-style-type: none"> • 2.4GHz band: +18 dBm per chain, +21 dBm aggregate (2x2) • 5GHz band: +18 dBm per chain, +21 dBm aggregate (2x2) • Note: conducted transmit power levels exclude antenna gain. <p>For total (EIRP) transmit power, add antenna gain</p> <p>Advanced Cellular Coexistence (ACC) minimizes interference from cellular networks</p> <p>Maximum ratio combining (MRC) for improved receiver performance</p> <p>Cyclic delay/shift diversity (CDD/CSD) for improved downlink RF performance</p> <p>Short guard interval for 20 MHz, 40 MHz and 80 MHz channels</p> <p>Space-time block coding (STBC) for increased range and improved reception</p> <p>Low-density parity check (LDPC) for high-efficiency error correction and increased throughput</p> <p>Transmit beam-forming (TxBF) for increased signal reliability and range</p> <p>Supported data rates (Mbps):</p> <ul style="list-style-type: none"> • 802.11b: 1, 2, 5.5, 11 • 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 • 802.11n: 6.5 to 300 (MCS0 to MCS15) • 802.11ac: 6.5 to 867 (MCS0 to MCS9, NSS = 1 to 2 for VHT20/40/80) <p>802.11n high-throughput (HT) support: HT 20/40</p> <p>802.11ac very high throughput (VHT) support: VHT 20/40/80</p>
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	802.11n/ac packet aggregation: A-MPDU, A-MSDU
WI-FI ANTENNAS	<p>Two integrated dual-band down tilt omni-directional antennas for 2x2 MIMO with peak antenna gain of 3.4dBi in 2.4GHz and 6.6dBi in 5GHz. Built-in antennas are optimized for horizontal ceiling mounted orientation of the AP. The down tilt angle for maximum gain is roughly 30 degrees.</p> <ul style="list-style-type: none"> Combining the patterns of each of the antennas of the MIMO radios, the peak gain of the effective per-antenna pattern is 2.2dBi in 2.4GHz and 4.5dBi in 5GHz.
POWER SOURCES AND CONSUMPTION	<p>The AP supports direct DC power and Power over Ethernet (PoE) When both power sources are available, DC power takes priority over PoE</p> <p>Power sources are sold separately</p> <p>Direct DC source: 412Vdc nominal, +/- 5%</p> <ul style="list-style-type: none"> Interface accepts 2.1/5.5-mm center-positive circular plug with 9.5-mm length <p>Power over Ethernet (PoE): 48 Vdc (nominal) 802.3af/802.3at compliant source</p> <ul style="list-style-type: none"> Unrestricted functionality with 802.3af PoE <p>Maximum (worst-case) power consumption: 12.3W (PoE) or 10.1W (DC)</p> <p>Maximum (worst-case) power consumption in idle mode: 5.3W (PoE) or 4.4W (DC)</p>
MOUNTING	<p>The AP ships with two (white) mounting clips to attach to a 9/16-inch or 15/16-inch flat T-bar drop-tile ceiling</p> <p>Several optional mount kits are available to attach the AP to a variety of surfaces; see the Ordering Information section for details</p> <ul style="list-style-type: none"> Instant mode / (controller-managed)
MECHANICAL	<p>Dimensions/weight (unit, excluding mount accessories):</p> <ul style="list-style-type: none"> 150mm x 150mm x 40mm 380g <p>Dimensions/weight (shipping):</p> <ul style="list-style-type: none"> 190mm x 180mm x 70mm 590g
ENVIRONMENTAL	<p>Operating:</p> <ul style="list-style-type: none"> Temperature: 0° C to +50° C (+32° F to +122° F) Humidity: 5% to 93% non-condensing <p>Storage and transportation:</p> <ul style="list-style-type: none"> Temperature: -40° C to +70° C (-40° F to +158° F)
RELIABILITY	MTBF: 753,457hrs (86yrs) at +25C operating temperature
CERTIFICATIONS	<p>CB Scheme Safety, UL2043 plenum rating Wi-Fi Alliance (WFA) certified 802.11a/b/g/n/ac</p>

WARRANTY	lifetime warranty / As per Principle
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5. Color Printer (Quantity: 01 Unit)

Minimum specifications are given below:

Item	Description of Requirement
Print speed black/color	45 pages per minute or above
First page out (ready)	Maximum 9.0 sec or less
Resolution Minimum	1200 x 1200 dpi or above
Duplex printing	Automatic (standard)
Duty cycle	Minimum 120,000 pages or above
Processor speed	Minimum 800 MHz or above
Display	4.3" (10.9 cm) resistive touchscreen WQVGA (480 x 272 resolution) with Home button
USB Printing	Front-facing USB printing
Interfaces	2 Hi-Speed USB 2.0 Host; 1 Hi-Speed USB 2.0 Device; 1 Gigabit Ethernet 10/100/1000T network; 2 Internal USB Host
Memory	Minimum 1.5 GB or above
Network capabilities	Ethernet embedded print server which supports: 10Base-T, 100Base-Tx, 1000Base-T; 802.3az (EEE) support on Fast Ethernet and Gig Links; IPsec; 802.11b/g/n wireless networking
Paper handling Input	500-sheet input tray, 100-sheet multi-purpose tray, automatic two-sided printing
Paper handling output	Minimum output bin capacity (sheets) i.e. 500 sheets or above,
Media Size	Multipurpose tray: A4; A5; A6; B5 (JIS); B6 (JIS); 16K; postcard; Dpostcard; envelopes (C5, B5, C6, DL, ISO); 500-sheet input trays: A4; A5; B5 (JIS); 16K
Media Types	Multipurpose tray: 3 x 5 to 8.5 x 14 in; 500-sheet input trays: 5.83 x 8.27 to 8.5 x 14 in; optional Postcard Media Insert Tray (must be installed in tray 2): 4 x 6 in
Consumables Included	4 x toner cartridge (Black, Cyan, Magenta, Yellow) Replacement cartridges minimum print outs; Page yield (black and white) 13,500 pages, (color) 15,000 pages
Warranty	Warranty includes 1-Year Parts, 1-Year Labor, 1-Year Onsite support with next business day response.

6. Firewall (Quantity: 01 Unit)

Minimum specifications are given below:

Item	Description of Requirement
Firewall	7 x RJ45 10/100/1000 Ports or above
	02 x Fixed GE RJ45 WAN Ports or above
	1 GE RJ45 DMZ Port or above

Firewall Throughput (1518 / 512 / 64 byte UDP packets) i.e. 3 Gbps or above
Concurrent Sessions (TCP) i.e. 1.3 Million or above
New Session/sec i.e. 30,000 or above
Firewall Throughput (Packets Per Second) i.e. 4.5 Mbps or above
Firewall Policies i.e. 5,000 or above
IPsec VPN Throughput (512 byte packets) i.e. 2 Gbps or above
SSL-VPN Throughput i.e. 150 Mbps or above
IPS Throughput i.e. 1400 Mbps or above
Application Control Throughput i.e. 550 Mbps or above
Threat Protection / Antivirus Throughput i.e. 180 Mbps or above
NGFW Throughput i.e. 250 Mbps or above
User Licenses i.e. Unlimited
Fully managed with CLI and GUI
Operating Temperature i.e. 32–104°F (0–40°C)
Warranty one year or above
1-year Support Bundle must be included AV, antispam, web filtering etc. (Bundle Certificate from manufacturer in the name of end user)

7. Telephone Exchange (Quantity: 01 Unit)

Minimum specifications are given below:

Item	Description of Requirement
Telephone Exchange & Installations	8 Trunk Lines With 48 Extensions & 4 Digital Ports
	Built in CLi Function
	Conference Calling
	Hold Music Change Etc
	Call Forwarding
	Call Park, DND Function
	Codes Creating
	Call Pick Up from Any Extension
	Warranty: - - - Ten Months International
	Operator Master Set / 24 programmable buttons
	Installations
	Exchange Deployment, Installation & Programming 50 Patch Cables with Connector PDP Box Pairs with Strips. Battery Bank with Attachment Cable Points Pairing, Punching and Tagging for Voice Box.

8. Telephone Sets (Quantity: 20 Units)

Minimum specifications are given below:

Item	Description of Requirement
Telephone Sets	Ringer control Hi-Lo-Off
	Electronic handset volume control (6 step)
	Last-number redial
	Switchable tone/pulse settings
	Flash Button
	Desk Use & Wall Mountable
	Black Color Preferred
	CLI will be Preferred