


GOVERNMENT OF SINDH
JINNAH POSTGRADUATE MEDICAL CENTRE
KARACHI-75510

TENDER NOTICE

Sealed tenders addressed to the Executive Director, JPMC, Karachi are invited for the "Supply & Installation of 1000 KVA Generating Sets (Two Units) for Jinnah Postgraduate Medical Centre, Karachi" during financial year 2016-17 as per procedure laid down under rules 46 (2) of SPP Rule 2010 (Amended 2013):-

Tender No.	Category of Tenders	Cost of Tender	Value of Tender	Bid Security
1-1/2016-17 M&R- SNE/JPMC	Supply & Installation of 1000 KVA Generating Sets (Two Units) for Jinnah Postgraduate Medical Centre, Karachi.	Rs.2000/=	70 million	2.5% of quoted items

Tender documents (list of items, terms and conditions) can be purchased from Cashier of this Centre against cash payment of Rs. 2000/- from 31-10-2016 to 26-11-2016 during office hours on working days. Tender will be submitted in the Tender Box, placed at Administration Block, JPMC on 28-11-2016 between 9.00 AM to 10.30 AM. The same will be opened on same day at 11.00 AM in the presence of representative of firm. For further details contact phone # 99201300 Ext. 2413, 2403.


(PROF. ANISUDDIN BHATTI)
EXECUTIVE DIRECTOR

Afghan soil used for terrorist acts
 ISLAMABAD (NNI): Foreign Office Spokesperson Nafees Zakaria says the security forces have detected signals of the terrorists' connections in Afghanistan during the attack on Police Training Center in Quetta. Talking to newsmen in Islamabad on Thursday, he said Afghan soil was used for terrorist acts in Pakistan.

The Frontier Post

First national English daily published from Peshawar, Islamabad, Lahore, Quetta & Karachi.

GOVERNMENT OF SINDH
 JINNAH POSTGRADUATE MEDICAL CENTRE
 KARACHI-75510

TENDER NOTICE

Sealed tenders addressed to the Executive Director, JMPC, Karachi are invited for the "Supply & Installation of 1000 KVA Generating Sets (Two Units) for Jinnah Postgraduate Medical Centre, Karachi" during financial year 2016-17 as per procedure laid down under rules 46 (2) of SPP Rule 2010 (Amended 2013):

Tender No.	Category of Tender	Cost of Tender	Value of Tender	Bid Security
1-1/ 2016-17 M&R- SNE/ JMPC	Supply & Installation of 1000 KVA Generating Sets (Two Units) for Jinnah Postgraduate Medical Centre Karachi	Rs. 2000/=	70 million	2.5% of quoted items

Tender documents (list of items, terms and conditions) can be purchased from Cashier of this Centre against cash payment of Rs. 2000/- from 31-10-2016 to 26-11-2016 during office hours on working days. Tender will be submitted in the Tender Box, placed at Administration Block, JMPC on 28-11-2016 between 9:00 AM to 10:30 AM. The same will be opened on same day at 11:00 AM in the presence of representative of firm. For further details contact phone# 99201300 Ext. 2413, 2403.

EXECUTIVE DIRECTOR

NSP/AY-4055/2016

نواز شریف بہانہ بنتے ہیں کہ وہ بیت نبویؐ کے لئے ہیں

نواز شریف نے کہا ہے کہ وہ بیت نبویؐ کے لئے ہیں۔ یہ بات سن کر لوگوں میں بے حد دلچسپی ہو رہی ہے۔ نواز شریف نے کہا ہے کہ وہ بیت نبویؐ کے لئے ہیں۔ یہ بات سن کر لوگوں میں بے حد دلچسپی ہو رہی ہے۔

ہائیکورٹ کے نگرانِ نجی فیصلے شہ کے شراب خانے بند

شہر میں کچھ شراب خانے بند کرنے کے فیصلے کی نگرانی کے لئے ہائیکورٹ کے جج نے ایک ٹیم بھیج دی ہے۔



9

Daily UMMAT Karachi

روزنامہ

کراچی

بیت

حکومت سندھ

حکومت سندھ کا بحریہ معدنی سٹاکس

تاریخ: 73510

SPPRA کے روز 2010 (ترمیم شدہ 2013) کے رول (46(2) کے تحت فراہم کردہ اور بحریہ معدنی کے لئے KVA1000 جز بیٹنگ سیٹ (دو یونٹ) جناح پوسٹ گریڈ میڈیکل سٹاکس کے لئے فراہم کیے گئے۔

سال 2016-17 کے تحت نامزد کیے گئے اور جیتنے والے کراچی گریڈ میڈیکل سٹاکس اور بیٹنگ سیٹ۔

بیٹنگ نمبر	بیٹنگ کی ٹیکری	بیٹنگ کی قیمتیں	بیٹنگ کی قیمت	ذریعہ
1-11	1000	2000/-	70	2.5% کل رقم کا
2016-17	KVA جز بیٹنگ سیٹ (دو یونٹ) جناح پوسٹ گریڈ میڈیکل سٹاکس کراچی	روپے	بیٹنگ	

بیٹنگ کی دستاویزات (آن لائن کی فراہمی اور شرائط و ضوابط) دفتر پبلک میں پیش کر کے دستاویزات کی قیمتیں 2000/- نقد ادا کر کے مورخہ 31-10-2016 سے 26-11-2016 تک کسی بھی یوم کار میں دفتر کے دوران حاصل کیے جاسکتے ہیں۔ بیٹنگ کی دستاویزات مورخہ 28-11-2016 سے 9.00 am سے 10:30 am کے درمیان JPMC کے ایڈیشنل مینیجر یا ایک سربراہ کے ذریعے پیش کر کے ڈراپ کر کے ڈراپ کرنے ہونگے۔ جن کی کٹائی اسی روز بوقت 11:00 am بجائے گا۔ بیٹنگ کی دستاویزات کی موجودگی میں ہوگی۔ مزید معلومات کیلئے رابطہ کریں فون نمبر: 99201300۔ ٹیکس نمبر: 2403.2413

INF-KRY/405516

(بھرتی اور ملازمت کے لئے)



NOTIFICATION

No.SO(PM&I)2-1/2016-17/PM-01/(JPMC): As many as three (03) Procurement Committees under Rules-7 of Sindh Public Procurement Rules 2010 are hereby constituted comprising the following officers for purchase of various health items details of which are mentioned against each in Jinnah Postgraduate Medical Centre, Karachi during the financial year 2016-17:

1- For Procurement of Machinery & Equipment for Various Department through (SNE) and purchase of Cutting Instruments.

i	Professor Sughra Perveen, Professor of Surgery, JPMC	Chairman
ii	Representative of Health Department, Government of Sindh.	Member
iii.	Representative from Deputy Commissioner (South) Karachi.	Member

2- For Procurement of Machinery & Equipment (Two 1000 KW Generators) through SNE for Jinnah Postgraduate Medical Centre Karachi (C.M. Directives)

i	Professor Tariq Mahmood, Head of Radiology, Cyberknife & Oncology Deptt., JPMC	Chairman
ii	Dr. Bahram Khan Khoso, Assistant Professor of Dermatology, JPMC	Member
iii.	Representative from Health Department, Govt. of Sindh	Member
iv	Representative from Works & Services Department (E&M Division)	Member
V	Representative from Deputy Commissioner (South).	Member

3- For Repair/Maintenance of Machinery & Equipment and purchase of Spare Parts.

i	Professor Nadeem Rizvi, Head of Chest Medicines, JPMC	Chairman
ii	Representative from Health Department, Govt. of Sindh	Member
iii.	Representative from Deputy Commissioner (South), Karachi	Member
	Representative from Industries Department Sindh	Member
	Mr. Muhammad Adeel, Assistant Electronic Engineer JPMC	Member

TORs

- The TORs / Functions / Responsibilities of the Procurement committees in accordance with Rule-8 of SPP Rules 2010 shall be as under:
- Preparing bidding documents;
 - Carrying out technical as well as financial evaluation of the bids;
 - Preparing evaluation report as provided in Rule-45;
 - Making recommendations for the award of contract to the competent authority;
 - Perform any other function ancillary and incidental to the above.

SECRETARY HEALTH



No. SO (M&I) 2-1/2013 (CRC)
GOVERNMENT OF SINDH
HEALTH DEPARTMENT
(PROCUREMENT MONITORING & INSPECTION)
Karachi, Dated: the 28th March, 2013

NOTIFICATION

In supersession of this Department's notification of even number dated: 29th July, 2012 and in pursuance of Rules-31 and 32 of Sindh Public Procurement Rules 2010, the Government of Sindh, Health Department re-constitutes Complaint Redressal Committee (CRC) comprised of the following officers for scrutinizing the complaints of aggrieved bidders against bids invited by Health Institutions / Hospitals / Programmes / Projects in Sindh.

01	Secretary Health Department, Sindh	Chairman
02	Additional Secretary (PM&I), Health Department, Sindh	Member
03	Professor Khalida Soomro, Professor of Cardiology, Dow University of Health Sciences / Civil-Hospital, Karachi.	Member
04	Dr. Syed Khalid Hussain, Procurement Executive, N.I.C.V.D., Karachi.	Member
05	Representative from Accountant General Sindh, Karachi	Member

TORs

- To scrutinize the complaints from the aggrieved bidders and decide the same strictly in accordance with SPP Rules 2010.

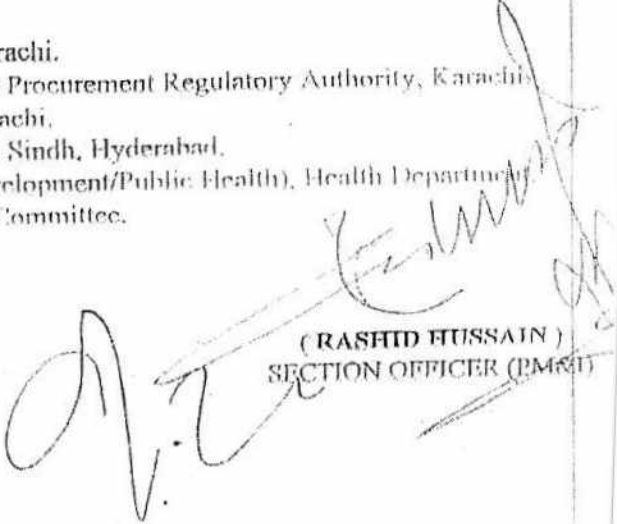
IFTIKHAR ALI SHALWAN
SECRETARY HEALTH

No. S.O.(PM&I) 2-1/2011(CRC)

Karachi, dated, the 28th March, 2013

C.C to:

1. The P.S. to Chief Secretary Sindh, Karachi.
2. The Managing Director, Sindh Public Procurement Regulatory Authority, Karachi.
3. The Executive Director, NICVD, Karachi.
4. The Director General Health Services Sindh, Hyderabad.
5. The Additional Secretary (Admin/Development/Public Health), Health Department.
6. The Chairman & all members of the Committee.
7. The P.S. to Secretary Health Sindh.


(RASHID HUSSAIN)
SECTION OFFICER (PM&I)


GOVERNMENT OF SINDH
JINNAH POSTGRADUATE MEDICAL CENTRE
KARACHI



Tender for Supply and Installation of
1000 KVA Generating Sets (Two Units) for
Jinnah Postgraduate Medical Centre Karachi.

Tender No. F.1-1/2016-17-(M&R-SNE)/JPMC


Due on: 28-11-2016


(Sajjad Ahmed Abro)
Assistant Commissioner Saddar
District South Karachi


DR. BAHRAM KHAN
MBBS, D.D.S., M.Sc. Derm. (UK)
Assistant Professor
Department of Dermatology
Jinnah Postgraduate Medical Centre
Karachi


PROF. DR. TARIQ MEHMOOD
F.R.C.S., F.M.R.D., F.C.P.S.
Head of Department of Radiology,
Cybernetics Institute, Radiosurgery Oncology
Jinnah Postgraduate Medical Centre, Karachi


Assistant Engineer
Provincial Electrical Sub-station Karachi


Deputy Director (JPGMC)
Health Department
Government of Sindh

GOVERNMENT OF SINDH
JINNAH POSTGRADUATE MEDICAL CENTRE
KARACHI-75510

TENDER DOCUMENT

TENDER NO.F.1-1/2016-17-(M&R-SNE)/JPMC

TENDER FOR SUPPLY AND INSTALLATION OF 1000 KVA GENERATING SETS
(TWO UNITS) FOR JINNAH POSTGRADUATE MEDICAL CENTRE KARACHI
FOR THE YEAR 2016-17


DUE ON 28-11-2016

COST OF TENDER	Rs. 2000/= (Rupees Two Thousand Only) non refundable
TENDER SELLING DATE	From 31-10-2016 To 26-11-2016
TENDER SUBMISSION PLACE	COMMITTEE ROOM ADMINISTRATION BLOCK, JPMC, KARACHI
TENDER SUBMISSION DATE	28-11-2016
TENDER SUBMISSION TIME	09:00 AM to 10.30 AM
TENDER OPENING PLACE	COMMITTEE ROOM ADMINISTRATION BLOCK, JPMC, KARACHI
TENDER OPENING DATE	28-11-2016
TENDER OPENING TIME	11:00 AM


*Note : No tender will be accepted after closing the Tender box,
What so ever reason may be.*


(Sajjad Ahmed Abro)
Assistant Commissioner Saeeddar
District South Karachi


DR. BAHRAM KHAN
MBBS, D.S.M. So. Darl (UK)
Assistant Professor
Department of Orthodontics
Jinnah Postgraduate Medical Centre
Karachi.


PROF. DR. TARIQ MAHMOOD
MBBS, D.S.M. So. Darl (UK), FCPS
Assistant Professor
Department of Pathology
Jinnah Postgraduate Medical Centre, Karachi




Health Department
Government of Sindh

NO.F.1-1/2016-17-(M&R-SNE)/JPMC
GOVERNMENT OF SINDH
JINNAH POSTGRADUATE MEDICAL CENTRE
KARACHI-75510

Tender for Supply and Installation of 1000 KVA Generating sets (Two Units) for
Jinnah Postgraduate Medical Centre Karachi.

TERMS AND CONDITIONS / INSTRUCTIONS TO BIDDERS

- 1) Single Stage - Two Envelopes procedure as per SINDH PPRA-2010 Rule 46(2) will be followed (single stage two envelopes procedure) i.e. **TECHNICAL** and **FINANCIAL PROPOSAL** will be placed in separate sealed envelopes and marked accordingly These two envelop should be placed in one envelop addressed to the Executive Director, JPMC, Karachi with Tender number and inserted in the tender box on scheduled date and time.
- 2) The Bidder shall prepare bid containing "**FINANCIAL PROPOSAL**" and "**TECHNICAL PROPOSAL**" in bold and legible letter to avoid confusion. The financial and technical bids, each consisting of the documents listed above.

In Technical Proposal the bidder must provide the original Data sheet and Technical brochure, Income Tax, Sales Tax, Sole Agency certificate and other documents; otherwise the bid will not accepted.

In Financial Proposal, the bidder should provide bid security / earnest money at the rate of 2.5% of the quoted value. Financial Proposal should contain quoted rate and original bid security.

- 3) The purchaser will initially open only the envelopes marked "**Technical Proposal**" in the presence of Bidders or their representatives who chose to be present at the time of bid opening date, time and place specified in the tender documents. The Bidder or their representative who are present shall sign the attendance sheet. The envelope marked "**Financial Proposal**" shall be retained in the custody of purchaser without being opened till the completion of the Technical Evaluation.
- 4) Bids shall remain valid for 90 days from the date of opening. A bid valid for a shorter period shall be rejected as being non-responsive.
- 5) The bidders shall quote their prices inclusive of all duties /taxes/Octroi transportation etc, and all other expenses on free delivery to Consignee's end in local currency.

Price should be quoted in clear manner including of Figures & words both, failing which the offer will be ignored.

The bid prepared by the Bidder shall comprise the following documents:

- (a) Bid Form & Price Schedules duly completed by the Bidder.
- The Bidder shall furnish a bid security @ 2.5% of the quoted value in the form of Pay Order / Bank Draft in the financial proposal.
- The original catalogue must accompany with offer.

(Sanjida Ahmed Ahy) 7
Assistant Commissioner Sindh
District South Karachi


DR. BAHRAM KHAN
MBBS, DDS, M.Sc. Derm (UK)
Assistant Professor
Department of Dermatology
Jinnah Postgraduate Medical Centre
Karachi.

3
PROF. Dr. TARIQ MAHMOOD
MPPS, D.D.O., FCS
Head Department of Dermatology,
Cyberknife Centre, Radiotherapy Oncology
Jinnah Postgraduate Medical Centre, Karachi


Assistant Engineer
Provincial Electrical Sub Division No. VIII
Karachi

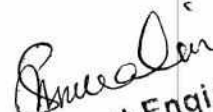
- (d) Sole Agency/ Authorized Dealer Certificate from the manufacturer must be provided by the bidder.
 - (e) The service manual with circuit diagram will be provided (for equipment)
 - (f) A certificate from the manufacturer that the offered machine / equipment being used in the country of origin.
 - (g) A detail data sheet having description of the essential technical and performance characteristics of the offered equipment.
 - (h) The original tender purchase receipt.
 - (i) Bidders shall purchase separate tender document and furnish purchase receipts for alternate offer, in case they want to submit alternate offer. Any item's bid with alternate offers without separate purchase receipt (Original) is supposed to be rejected.
 - (j) The bidder shall furnish copy of valid Professional Tax (Excise & Taxation) Certificate/Income Tax Certificate/GST Registration Certificate.
 - (k) Bidder shall submit guarantee letter that the supplied Machinery / Equipment is the original / brand new product / latest model, none of the part is replaced, old or refurbished.
 - (l) Bidder must enclose a list of users in Sindh / Pakistan of the quoted items. Bidder must submit the proof for the availability of workshop & trained engineers qualified persons for the machines at Sindh for after sale service.
 - (m) Bidder must enclose sealed Bank letter of financial capacity of firm addressed to the Executive Director JPMC, Karachi in financial proposal.
- 8) The prices quoted by the Bidder shall be fixed during the performance of the contract and not subject to variation on any account. A bid submitted with an adjustable price or conditional will be treated as non-responsive and rejected.
 - 9) Initially the bid evaluation will be performed after that Technical Specification will be evaluated by Technical Committee on the basis of the data sheet and the literature provided / submitted by the firm. Financial bids of technical qualified firms will be opened.
 - 10) All pages of the bid shall be signed & duly stamped by the person or persons signing the bid accept for un-amended printed literature and duly stamped.
 - 11) The bid shall contain no alterations, omissions, or additions, unless such corrections are initialed by the person or persons signing the bid.
 - 12) Bids shall be submitted either by the manufacturer or its sole agent, if submitted by the manufacturer itself then bid of authorized sole agent will be rejected. No sublet will be allowed.

Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price, which is obtained by multiplying the unit price and quantity, or between subtotals and the total price, the unit or subtotal price shall prevail, and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail. If the Bidder does not accept the correction of errors, its bid will be rejected.


(Sajjad Ahmed)
 Assistant Commissioner
 District South Karachi



DR. BAHRAM KHAN
 MBBS, D.S. (S), Sr. Lecturer (P&S)
 Assistant Professor
 Department of Pathology
 Jinnah Postgraduate Medical Centre
 Karachi.


PROF. DR. TARIQ
 MBBS, D.S. (S), D.P.S.
 Sr. Lecturer (P&S)
 Department of Pathology
 Jinnah Postgraduate Medical Centre
 Karachi.



Assistant Engineer
 Provincial Electrical Sub-Division No. VIII
 Karachi

- 14) For Purchase on C&F/CFR (Cost and freight) basis, JPMC will issue Contract/Purchase Order. The vendor will carry out all works regarding the import of equipment i.e. from opening of L/C to delivery and installation of equipment. JPMC Administration will provide help as and when required.
- 15) The Vender has to open Letter of Credit in the name of Executive Director, JPMC, Karachi and also mentioned JPMC FTN No. in L/C for item(s) as per purchase order. A copy of all documents should be submitted to JPMC time to time. ^{only} JPMC should be the consignee of the equipment.
- 16) JPMC Administration will assist the vendor in clearing the consignment; JPMC will provide Undertaking and other letters for the exemption of the payment of Sale Tax, Customs charges, Income Tax and other taxes applicable on such import.
- 17) All the (applicable) Government taxes (Income Tax / Stamp Duty) of the value of the contract amount will be deducted from the bills of the Contractors / Suppliers.
- 18) The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of contract under the relevant provisions of SPP Rules 2010 (Amended 2013), without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the Purchaser's action.
- 19) Prior to the expiration of the period of bid validity, the Purchaser will notify the successful Bidder through Advance acceptance. This will constitute the formation of the contract. Within seven (07) days after receipt of the Advance acceptance, the successful Bidder shall furnish the performance security @ 10% of the contracted amount in the form of Pay Order / Bank Draft / Bank Guarantee and will sign the contract agreement.
- 20) Bid validity can be extended as per SPP Rule 2010 (Amended 2013).
- 21) Sole / Authorized Dealer or Agent once nominated by the manufacturer will be for the whole contract period and manufacturer cannot change during the year in any case. In exceptional cases the tendering authority may approve changes.
- 22) The supplier should submit the bill/Invoice for payment addressed to the Executive Director, JPMC, Karachi after opening of L/C along with following documents :

- i. Three copies of Bill/Invoice
- ii. Undertaking on stamp paper
- iii. Three copies of Purchase Order
- iv. Original shipping documents i.e. (Bill of lading, Performa Invoice, Packing list, insurance, etc.).


 Director (Dev)
 Health Department
 Government of Sindh
 District South Karachi


 DR. BAHRAM KHAN
 MBBS, DCS M.Sc. D. Cr. (UK)
 Assistant Director
 Department of Dermatology
 Jinnah Postgraduate Medical Centre
 Karachi.


 PROF. DR. TAHIR MAHMOOD
 FSC, FICS, FICPS
 Director General
 Department of Health
 Government of Sindh
 Karachi.


 Assistant Engineer
 Provincial Electrical Sub Division No. VIII
 Karachi

General & Special Conditions of Contract

- 1) The Contract shall be governed by and interpreted in accordance with laws of the Islamic Republic of Pakistan.
- 2) Store is required within delivery period. The bidder may however give their short guaranteed delivery period by which the supply will be completed but not later than 120 days from date of purchase order. No Extension will be granted / accorded for the supply.
- 3) The manufacturer should provide an undertaking that if his sole agent fails to carry out any assignment in total or in part, manufacturer will be responsible to carry out the same.
- 4) The Contract Price shall be made to the Contractor as specified in the Contract Agreement, subject to the general principle / procedure of the Government of Sindh.
- 5) The Contract shall be executed in accordance with the Contract Documents and procedures.
- 6) The Purchaser or its representative shall inspect the Machinery / Equipment to confirm their conformity to the Contract specification. The inspection will be conducted at the premises of consignee after receipt of supply.
- 7) If the Contractor fails to attain Completion of the supply or installation within the Time for Completion shall pay to the Purchaser liquidated damages at the rate of 2% per month (0.5% per week) of the Contract Price, or the relevant part thereof. The aggregate amount of such liquidated damages shall in no event exceed the amount of 10%. Once the "Maximum" is reached, the Purchaser may consider termination of the Contract.
- 8) The Contractor warrants that the supplied equipment or any part thereof shall be free from defects in the design, engineering, materials etc. In case of defect in any part at the time of supply of installation it shall be replaced with new one instead of repair.
- 9) The purchaser, without prejudice to any other remedy for breach of contract by written notice of default sent to the supplier, may terminate this contract in whole or in part:

(a) If the supplier fails to deliver any or all of the contracted items within the period(s) specified in the Contract, or within any extension thereof granted by the Purchaser.

(b) If the Supplier fails to perform any other obligation(s) under the Contract.


(c) If the supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

Service charges @ current prevailing charges of the value of the Contract will realized/charged by the A.G. Sindh, while making payment to the contractors for award of each contract.



Deputy Director (Dev't)
Health Department
Government of Sindh


(Sajjad Ahmed Abro)
Assistant Commissioner Sadder
District South Karachi


DR. BAHRAM KHAN
MBBS, D.D.S.M. Sc. D.S.M. (UK)
Assistant Professor
Department of Dermatology
Jinnah Postgraduate Medical Centre
Karachi.


PROF. DR. TAHIR MAHMOOD
F.C.S. (LAW), F.C.P.S.
F.A.S. (LAW), F.A.S. (CIVIL)
F.A.S. (MUNICIPALITY)
F.A.S. (MUNICIPALITY)
F.A.S. (MUNICIPALITY)

6


Assistant Engineer
Provincial Electrical Sub Division No. VIII
Karachi

Criteria for evaluation of bids

- 1 Earnest money submission (Original attach with financial proposal and copy attach with technical proposal).
- 2 Compliance of terms and conditions, required documents / information as described in the Instructions of bidders, General and special conditions of the bid document. Bidder must qualify the bid evaluation. Only qualified bid evaluation bidders will be evaluated technically.
- 3 Relevant Experience and past performance of manufacturer / sole distributor in terms of supply & after sale service.
- 4 After sale service facility with availability of work shop, Technical staff, Tools and spare parts.
- 5 Authority letter from manufacturer with validity period not less than five years.
- 6 Submission of original Catalogue with complete mailing address of the company, telephone / Fax Nos. and Web site for each quoted item.
- 7 Technical evaluations as per tender specification.
- 8 Operational cost of equipment.
- 9 Delivery schedule.
- 10 Evaluation of quoted price (After opening financial proposal).

UNDERTAKING

- a) That I/we agree whether our tender accepted for total, partial or enhanced quantity for a or any single item. I/We also agreed to supply and accept the said item at the rates for the supply of contracted quantity within the stipulated period shown in the contract.
- b) I/We understand and confirm the refund of cost difference if the same goods is/was supplied at lower rates to any other Govt. /Semi Govt. institution in the province in the same fiscal year.
- c) I/We undertake that, if any of the information submitted in accordance to this tender Enquiry found incorrect, our contract may be cancelled at any stage on our cost and risk.

CERTIFICATE

We guarantee to supply the stores exactly in accordance with the requirements specified in the invitation to this tender.


Director (Dy),
Health Department
Government of Sindh
Karachi


(Sajjad Ahmad Abro)
Assistant Commissioner Sudder
District South Karachi

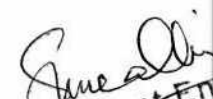

DR. BAHRAM KHAN
MBBS, D.D.S, M.Sc. Derm (UK)
Assistant Professor
Department of Dermatology
Jinnah Postgraduate Medical Centre
Karachi.


PROF. DR. TARIQ MAHMOOD
MBBS, D.D.S, M.Sc. Derm (UK)
Assistant Professor
Department of Dermatology
Jinnah Postgraduate Medical Centre, Karachi

Signature of Tenderer -----

Name & Designation-----

Address:-----


Assistant Engineer
Provincial Electrical Sub-Division No. VIII
Karachi


**TECHNICAL SPECIFICATION OF 1000 KVA GENERATING SET (TWO UNITS)
FOR JINNAH POST GRADUATE MEDICAL CENTRE, KARACHI, PAKISTAN**

Tender is invited for a 1000 KVA Generating Sets (Two Units). The detailed specifications are as follows:

S. No.	Specifications / Requirements
1.	Product Specifications
1.1	General Genset Requirements
	The generator set shall be Prime Duty rated at 800 ekW, 1,000.0 kVA, 1500 RPM, 0.8 power factors, 400 V, 3-Phase, 50 hertz, including radiator fan and all parasitic loads. Generator set shall be sized to operate at the specified load at a maximum ambient of 122.0F (50C) and altitude of 328 feet (100.0 m). Prime Power Rating: <ul style="list-style-type: none"> ▪ Average Power Output = 70% of prime power rating ▪ Load = Varying ▪ Typical Hours/Year = Unlimited ▪ Typical Peak Demand = 100% of prime rated ekW with 10% overload capability for emergency use for a maximum of one (1) hour in 12. Overload operation cannot exceed 25 hours per year. ▪ Typical Application = Industrial, Pumping, Construction, Rental or Co-Generation
1.2	Material and Parts
	All materials and parts comprising the unit shall be new and unused.
1.3	Engine
	The engine shall be diesel fueled, four (4) cycles, water-cooled, while operating with nominal speed not exceeding 1500 RPM.
1.4	Engine Governing
	<ul style="list-style-type: none"> ▪ The engine governor shall be electronic module with 24-volt DC Electric Actuator. ▪ The module shall be enclosed in an environmentally sealed, die-cast aluminum housing which isolates and protects electronic components from moisture and dirt contamination. ▪ Speed droop shall be adjustable from 0 (isochronous) to 10%, from no load to full rated load. ▪ Steady state frequency regulation shall be +/- 6 RPM. Speed shall be sensed by a magnetic pickup off the engine flywheel ring gear. ▪ A provision for remote speed adjustment shall be included. ▪ The ECM shall adjust fuel delivery according to exhaust smoke, altitude and cold mode limits. ▪ In the event of a DC power loss, the forward acting actuator will move to the minimum fuel position. ▪ The Module should be owned by engine manufacturer and be company fitted.
2.	Generator
2.1	Digital Voltage Regulator
	<ul style="list-style-type: none"> ▪ The digital voltage regulator shall be microprocessor based with fully programmable operating and protection characteristics. ▪ The regulator shall maintain generator output voltage within +/- 0.25% for any constant load between no load and full load. ▪ The regulator shall be capable of sensing true RMS in three phases of alternator


(Sajjad Ahmed Abro)
Assistant Commissioner Sadder
District South Karachi


DR. BAHRAM KHAN
MBBS, DPS M.Sc. (Dermatology)
Assistant Professor
Department of Dermatology
Jinnah Postgraduate Medical Centre
Karachi.


PROF. DR. MUHAMMAD ALI
Ph.D. (Electrical Engineering)
Cybernetics & Information Technology
Department of Electrical Engineering
Jinnah Postgraduate Medical Centre
Karachi


Assistant Engineer
Provincial Electrical Sub-Division No. VIII
Karachi

	<p>output voltage, or operating in single phase sensing mode.</p> <ul style="list-style-type: none"> ▪ The voltage regulator shall include a VAR/Pf control feature as standard. ▪ The regulator shall provide an adjustable dual slope regulation characteristic in order to optimize voltage and frequency response for site conditions. ▪ The voltage regulator shall include standard the capability to provide generator paralleling with reactive droop compensation and reactive differential compensation. ▪ The voltage regulator shall communicate with the Generator Control Panel via a J1939 communication network with generator voltage adjustments made via the controller keypad. ▪ Additionally, the controller shall allow system parameter setup and monitoring, and provide fault alarm and shutdown information through the controller. ▪ A PC-based user interface shall be available to allow viewing and modifying operating parameters in a windows compatible environment.
2.2	Motor Starting
	<ul style="list-style-type: none"> ▪ Provide locked rotor motor starting capability of 2,291.8 skVA at 30% instantaneous voltage dip as defined per NEMA MG 1. Sustained voltage dip data is not acceptable.
2.3	Alternator Data
	<ul style="list-style-type: none"> ▪ The alternator provided will be 1000KVA prime duty with Internal Excitation. ▪ The insulation provided will be Class H, The alternator pitch must be 0.6667. ▪ The Efficiency of generator shall be approximately nearer to 95%.
2.4	Controls - Generator Set Mounted
	<p>Provide a fully solid-state, microprocessor based, generator set control. The control panel shall be designed and built by the Genset manufacturer. The control shall provide all operating, monitoring, and control functions for the generator set. The control panel shall provide real time digital communications to all engine and regulator controls.</p> <ul style="list-style-type: none"> ▪ Environmental The generator set control shall be tested and certified to the following environmental conditions: <ol style="list-style-type: none"> 1. -40°C to +70°C Operating Range 2. 100% condensing humidity, 30°C to 60°C 3. IP22 protection for rear of controller; IP55 when installed in control panel 4. 5% salt spray, 48 hours, +38°C, 36.8V system voltage 5. Sinusoidal vibration 4.3G's RMS, 24-1000Hz 6. Electromagnetic Capability (89/336/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, BS EN 50081-2, 50082-2) 7. Shock: withstand 15G ▪ Functional Requirements The following functionality shall be integral to the control panel. <ol style="list-style-type: none"> 1. The control shall include a readable pixel, positive image, transfective LCD display with text based alarm/event descriptions. 2. The control shall include a minimum of 3-line data display. 3. Audible horn for alarm and shutdown with horn silence switch Standard ISO labeling. 4. Multiple language capability. 5. Remote start/stop control. 6. Local run/off/auto control integral to system microprocessor 7. Cool down timer 8. Speed adjust 9. Lamp test

Deputy Director (C-IV)
Health Department
Government of Sindh


(Sajjad Ahmed Abro)
Assistant Commissioner Saddar
District South Karachi

DR. BAHRAM KHAN
MRBS, DDS, M.S. (Dentistry)
Assistant Director
Department of Health
Jinnah Postgraduate Medical Science
Karachi.


9
PROVINCIAL ELECTRICAL
ASSISTANT ENGINEER
Karachi

Assistant Engineer
Provincial Electrical Sub Division No. VIII
Karachi

	<ol style="list-style-type: none"> 10. Emergency stop push button 11. Voltage adjust 12. Voltage regulator V/Hz slope - adjustable 14. Password protected system programming 	
2.5	<p>Digital Monitoring Capability</p> <p>The controls shall provide the following digital readouts for the engine and generator. All readings shall be indicated in either metric or English units.</p> <ul style="list-style-type: none"> ▪ Engine <ol style="list-style-type: none"> 1. Engine oil pressure 2. Engine oil temperature 3. Engine coolant temperature 4. Engine RPM 5. Battery volts 6. Engine hours 7. Engine crank attempt counter 8. Engine successful start counter 9. Service maintenance interval 10. Real time clock ▪ Generator <ol style="list-style-type: none"> 1. Generator AC volts (Line to Line, Line to Neutral and Average) 2. Generator AC current (Avg and Per Phase) 3. Generator AC Frequency 4. Generator kW (Total and Per Phase) 5. Generator kVA (Total and Per Phase) 6. Generator kVAR (Total and Per Phase) 7. Power Factor (Avg and Per Phase) 8. Total kW-hr 9. Total kVAR-hr 10. % kW 11. % kVA 12. % kVAR 	
2.6	<p>Alarms and Shutdowns</p> <ul style="list-style-type: none"> ▪ Engine Alarm/Shutdown <ol style="list-style-type: none"> 1. Low oil pressure alarm/shutdown 2. High coolant temperature alarm/shutdown 3. Loss of coolant shutdown 4. Over speed shutdown 5. Over crank shutdown 6. Emergency stop shutdown 7. Low coolant temperature alarm 8. Low battery voltage alarm 9. High battery voltage alarm 10. Control switch not in auto position alarm 11. Battery charger failure alarm ▪ Generator Alarm/Shutdown <ol style="list-style-type: none"> 1. Generator phase sequence 2. Generator over voltage 3. Generator under voltage 4. Generator over frequency 	


 Deputy Director (Dist)
 Health Department
 Government of Sindh
 KARACHI
 (Sajjad Ahmed Abro)
 Assistant Commissioner Sadder
 District South Karachi


 DR. BAHRAM KHAN
 MBBS, DDS, M.Sc. Derm (UK)
 Assistant Professor
 Department of Dermatology
 Jinnah Postgraduate Medical Centre
 Karachi.


 10
 PROF. DR. TARIQ MAHMOOD
 ANNU. FCPS
 Director General Health Services
 Government of Sindh
 Karachi.


 Assistant Engineer
 Provincial Electrical Sub Division No. VIII
 Karachi

	<ol style="list-style-type: none"> 5. Generator under frequency 6. Generator reverse power (real and reactive) 7. Generator overcurrent <ul style="list-style-type: none"> ▪ Voltage Regulator Alarm/Shutdown <ol style="list-style-type: none"> 1. Loss of excitation alarm/shutdown 2. Instantaneous over excitation alarm/shutdown 3. Time over excitation alarm/shutdown 4. Loss of sensing 5. Loss of PMG 	
2.7	Inputs and Outputs	
	<ul style="list-style-type: none"> ▪ Programmable Digital Inputs The Controller shall include the ability to accept programmable digital input signals. The signals may be programmed for either high or low activation using programmable Normally Open or Normally Closed contacts. ▪ Programmable Relay Outputs The control shall include the ability to operate programmable relay output signals, integral to the controller. The output relays shall be rated for 2A @ 30VDC and consist of six (6) Form A (Normally Open) contacts and two (2) Form C (Normally Open & Normally Closed) contacts. ▪ Programmable Discrete Outputs The control shall include the ability to operate two (2) discrete outputs, integral to the controller, which are capable of sinking up to 300mA. 	
2.8	Maintenance	
	<p>All engine, voltage regulator, control panel and accessory units shall be accessible through a single electronic service tool. The following maintenance functionality shall be integral to the generator set control</p> <ol style="list-style-type: none"> 1. Engine running hours display 2. Service maintenance interval (running hours or calendar days) 3. Engine crank attempt counter 4. Engine successful starts counter 5. 40 events are stored in control panel memory 6. Programmable cycle timer that starts and runs the generator for a predetermined time. The timer shall use 7 user-programmable sequences that are repeated in a 7-day cycle. Each sequence shall have the following programmable set points: <ol style="list-style-type: none"> a) Day of week b) Time of day to start c) Duration of cycle 	
	Remote Communications	
	<ul style="list-style-type: none"> ▪ The control shall include Modbus RTU communications as standard via RS-485 half duplex with configurable baud rates from 2.4k to 57.6k. 	
3.	Cooling System	
	<ul style="list-style-type: none"> ▪ The generator set shall be equipped with a rail-mounted, engine-driven radiator with blower fan and all accessories. ▪ The cooling system shall be sized to operate at full load conditions and 110 F*(50C) ambient air entering the room or enclosure (If an enclosure is specified). ▪ The generator set supplier is responsible for providing a properly sized cooling system based on the enclosure static pressure restriction. 	

Secretary
Health Department
Government of Sindh


(Sajjad Ahmed Abro)
Assistant Commissioner Sadder
District South Karachi

DR. BAHRAM KHAN
MBBS, DDS, M. Sc. (Dent) (UK)
Assistant Professor
Department of Oral Pathology
Jinnah Postgraduate Medical Centre
Karachi


11
PROF. DR. TARIQ MOHAMMAD
Assistant Professor
Department of Oral Pathology
Jinnah Postgraduate Medical Centre
Karachi

Assistant Engineer
Provincial Electrical Sub Division No. VIII
Karachi

3.1	Fuel System	
	<ul style="list-style-type: none"> ▪ The fuel system shall be integral with the engine. In addition to the standard fuel filters provided by the engine manufacturer, there shall also be installed a primary fuel filter/water separator in the fuel inlet line to the engine. ▪ All fuel piping shall be black iron or flexible fuel hose rated for this service. No galvanized piping will be permitted. ▪ Flexible fuel lines shall be minimally rated for 300 degrees F and 100 psi. 	
3.2	Exhaust System	
	Silencer <ul style="list-style-type: none"> ▪ A industrial grade silencer, companion flanges, and flexible stainless steel exhaust fitting properly sized shall be furnished and installed according to the manufacturer's recommendation. ▪ Mounting shall be provided by the contractor as shown on the drawings. ▪ The silencer shall be mounted so that its weight is not supported by the engine nor will exhaust system growth due to thermal expansion be imposed on the engine. ▪ Exhaust pipe size shall be sufficient to ensure that exhaust back-pressure does not exceed the maximum limitations specified by the engine manufacturer. 	
3.3	Starting System	
	<ul style="list-style-type: none"> ▪ Starting Motor A DC electric starting system with positive engagement shall be furnished. The motor voltage shall be as recommended by the engine manufacturer. ▪ Jacket Water Heater Jacket water heater shall be provided and shall be sized to insure that Genset will start within the specified time period and ambient conditions. ▪ Batteries Batteries - A lead-acid storage battery set of the heavy-duty diesel starting type shall be provided. Battery voltage shall be compatible with the starting system. ▪ Battery Charger Battery Charger - A current limiting battery charger shall be furnished to automatically recharge batteries. The charger shall be dual charge rate with automatic switching to the boost rate when required. The battery charger shall be mounted on the Genset package or inside the Genset enclosure/room. 	
4.	General	
4.1	References and Standards	
	<p>The generator set covered by these specifications shall be designed, tested, rated, assembled and installed in strict accordance with all applicable standards below:</p> <ul style="list-style-type: none"> • CSA C22.2 No14 • CSA 282 • CSA 100 • EN61000-6 • EN55011 • FCC Part 15 Subpart B • ISO8528 • IEC61000 • UL508 • UL2200 • UL142 • Designed to allow for installed compliance to NFPA 70, NFPA99 and NFPA 110 	
	Work Included	
	<ul style="list-style-type: none"> ▪ Fuel System The CONTRACTOR shall provide a full tank of diesel fuel for the completion of 	


 Sajjad Ahmed Abro
 Assistant Commissioner Saddar
 District South Karachi


 DR. BAHRAM KHAN
 MBB, DDM Sr. Doctor (LMS)
 Assistant Professor
 Department of Microbiology
 Jinnah Postgraduate Medical Centre
 Karachi.

12

 PROJECT OFFICER
 KARACHI
 4th Floor, Jinnah Postgraduate Medical Centre
 Karachi.


 Assistant Engineer
 Provincial Electrical Sub Division No. VIII
 Karachi

	<p>all testing.</p> <ul style="list-style-type: none"> ▪ System Test A complete system load test shall be performed after all equipment is installed. Guidelines in the Start-up Section. ▪ Requirements, Codes and Regulations The equipment supplied and installed shall meet the requirements of above standards. All equipment shall be of new and current production by a MANUFACTURER who has 25 years of experience building this type of equipment. Manufacturer shall be ISO9001 certified.
4.3	Submittals
	<ul style="list-style-type: none"> ▪ Engine-generator submittals shall include the following information: <ol style="list-style-type: none"> 1. Factory published specification sheet. 2. Manufacturer's catalog cut sheets of all auxiliary components such as battery charger, control panel, enclosure, etc. 3. Dimensional elevation and layout drawings of the generator set and related accessories. 4. Weights of all equipment. 5. Interconnect wiring diagram of complete emergency system, including generator battery charger, control panel. 6. Engine mechanical data, including heat rejection, exhaust gas flows, combustion air and ventilation air flows, fuel consumption, etc. 7. Generator electrical data including temperature and insulation data, cooling requirements, excitation ratings, voltage regulation, voltage regulator, efficiencies. 8. Generator resistances, reactance's and time constants. 9. Generator Locked Rotor Motor starting curves. 10. Manufacturer's documentation showing maximum expected transient voltage and frequency dips, and recovery time during operation of the generator set at the specified site conditions with the specified loads. 11. Manufacturers and dealers written warranty.
4.4	System Responsibility
	<ul style="list-style-type: none"> ▪ Generator Set Distributor The completed engine generator set shall be manufactured in USA/Europe/ Japan and supplied by the Manufacturer's sole Agent only.
4.5	Warranty
	<p>Prime (ISO 8528-1: PRP) Rated Generator Set Warranty</p> <ul style="list-style-type: none"> ▪ The manufacturer's standard warranty shall in no event be for a period of less than five (5) years from date of initial start-up of the system including with service contract; shall include consumables, overhauling works, repair parts, labor, and reasonable travel expense necessary for repairs at the job site. ▪ Running hours shall not be a limiting factor for the system warranty by either the manufacturer or servicing distributor. ▪ Submittals received without written warranties as specified will be rejected in their entirety.
4.6	Parts and Service Qualifications
	<ul style="list-style-type: none"> ▪ Service Facility The engine-generator supplier shall maintain 24-hour parts and service capability within 100 miles of the project site. The distributor shall stock parts as needed to support the generator set package for this specific project. The supplier must carry sufficient inventory to cover no less than 80% parts service within 24hrs and 95% within 48 hours.

Deputy Director (Dev)
Health Department
Government of Sindh
Karachi

(Sajjad Ahmed Abro)
Assistant Commissioner Sudder
District South Karachi

DR. BAHRAM KHAN
MBBS, DPM, D. Sc. (Gen) (UK)
Jinnah Postgraduate Medical Centre
Karachi.

PROJEN TOWER SINDH
13/13/2018
Cybernetics
Karachi

Assistant Engineer
Provincial Electrical Sub-Division No. VIII
Karachi

	<ul style="list-style-type: none"> Service Personnel The dealer shall maintain qualified factory trained service personnel.
5	<p>Execution</p> <ul style="list-style-type: none"> Start-Up and Testing Coordinate all start-up and testing activities with the Engineer and Owner. After installation is complete and normal power is available, the manufacturer's local dealer shall perform the following: <ol style="list-style-type: none"> Perform a 4 hour load bank test at 1.0 PF at full name plate rating. Load Bank, Cables and other equipment required for this test to be supplied to the customer. Operation and Maintenance Manuals Provide two (2) sets of operation and maintenance manuals covering the generator, and auxiliary components. Include final as-built wiring interconnect diagrams and recommended preventative maintenance schedules. Training On-Site Training Provide on-site training to instruct the owner's personnel during commissioning in the proper operation and maintenance of the equipment. Review operation and maintenance manuals, parts manuals, and emergency service procedures.
	Other terms and conditions
	<p>Site planning</p> <ul style="list-style-type: none"> The bidder shall visit the site before submission of tender and ensure that cost of all necessary civil/electrical boards/cables/earthling needed to install and commissioning the complete system is included in the tender cost for the two units 1000 KVA Diesel Generating Sets. Necessary civil/electrical boards/cables/earthling etc. needed to install and commissioning the complete system as per standard shall be responsibility of successful firm/vender. The successful firm/bidder shall provide Genset for backup at onsite till new unit 1000 KVA Genset installation, testing & commissioning. Their rent expenses will be included in tender cost.
	For technical bid each vendor is requested to fill up the above mentioned Performa with the desired information in the last column, on the same MS word format in yes or no form with verifiable references (along with proper pagination, paragraph & line description)
	Vendor must also enclose a soft copy on CD/USB in addition to hard copy for technical evaluation committee
	Pricing of optional configuration and post warranty terms should be quoted separately.
	Pricing of optional configuration with accessories and services should be quoted separately.
	Technical evaluation will be based on the standard configuration with accessories of the whole unit.
	Commercial evaluation will be based on the standard configuration with accessories of the whole unit.
	The bidder must indicate the number of 1000 KVA Generating Sets installed within Pakistan especially in health sector and letter of satisfaction from the end user.
	Quality Safety Standards:
	The bidder should have own in-house facility of minor and major overhauling works simultaneously for fuel pump injector calibration.
	Country of manufacture and origin should be USA/Europe/Japan and equipment approval of their respective quality standards is mandatory.

Deputy Director (Dev)
Health Department
Government of Sindh
KARACHI

(Sajjad Ahmed Abro)
Assistant Commissioner
District South Karachi

DR. BAHRAM KHAN
MBBS, DCS, M.Sc. Dorn (UK)
Assistant Professor
Department of Dermatology
Jinnah Postgraduate Medical Centre
Karachi.

14
PROF. DR. SAJJAD AHMED ABRO
FRCGS, FRCR, FRCR (S), FRCR (G)
FRCR (M), FRCR (P), FRCR (S), FRCR (G)
FRCR (M), FRCR (P), FRCR (S), FRCR (G)

Assistant Engineer
Provincial Electrical Sub Division No. VIII
Karachi

GOVERNMENT OF SINDH
JINNAH POSTGRADUATE MEDICAL CENTRE
KARACHI-75510

ANNUAL PROCUREMENT PLAN (M&R-SNE)
FOR THE FINANCIAL YEAR 2016-17

S#	Description of Procurement	Quantity (Where applicable)	Estimated Unit Cost (Where applicable) (Million)	Funds allocated (Million)	Source of Funds (ADPs Non ADPs)	Proposed Procurement Method	Timing of Procurement				Remarks
							1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	
1	Supply & Installation of 1000 KVA Generating Sets (Two Units) for Jinnah Postgraduate Medical Centre, Karachi.	02 Items	70.00 millions	70.00 million SNE		Tender SPPRA 46(2)		Oct-Dec	Jan-March		



(Prof. Anisuddin Bhatti)
Executive Director

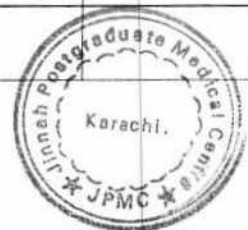
NAME OF WORK :-	SUPPLY AND INSTALLATION OF 1000 KVA GENERATING SETS (TWO UNITS) FOR JINNAH POSTGRADUATE MEDICAL CENTRE KARACHI.
-----------------	------------------------------------------------------------------------------------------------------------------------

“ SCHEDULE ‘B’ ”

S #	DESCRIPTION OF WORK FOR “SITE-A”	QTY/ UNIT	RATE	AMOUNT
1	Supply, installation, testing and commissioning of 1000 kVA diesel generating set operating on 3-phase, 400V, 50 Hz, 1500 RPM, Water cooled.	1 Unit		
2	Installation and Placement of (1000 KVA) Genset with Engine mounted Radiator and its attachments on Genset foundation pad as per Installation guideline including crane, fork lifter, rigging or chain block arrangement as required to move and place Genset from Outside Power House Building to foundation Pad inside engine room.	1 Job		
3	Leveling, alignment and grouting work of Genset on its foundation pad with installation of vibration isolators.	1 Job		
FUEL SYSTEM				
4	Supply and installation of MS Sch 40 fuel piping (Supply & Return) from existing Diesel Day Fuel Tank to engine with valves, elbows, premiering & painting of pipe with necessary supporting and fixing arrangement.	1 Job		
5	Adjustment of height in Diesel Day Fuel Tank as per height of DG set such that max fuel level height should be above than engine injector level. (Existing Fuel Tank will be used).	1 Job		
LUBE OIL SYSTEM				
6	Extension (with supply of flexible pipe included) of Fume disposal / Crank case breather piping with supply of oil collector pan.	1 Job		
EXHAUST SYSTEM				
7	Supply and Installation of 1 lot of MS Sch 20 Exhaust System piping having 10-12" dia with bellow expander, elbows, supports & Brackets with 100kg/m ³ Density, 100 mm thick Rock Wool Thermal Lagging & GI Cladding with 24 Gauge Sheet on pipe complete in all respects. Thermal lagging and GI Cladding will be done on exhaust pipe within engine room only.	1 Job		
RADIATOR DUCTING				
8	Supply & Installation of Radiator Ducting of GI 22 Gauge sheet with supporting of MS Angle Iron & flexibility through Canvas. The area of duct opening should be 1.25 times the area of radiator.	1 Job		



EARTHING & NEUTRAL SYSTEM				
9	Digging / Boring connection of 1 lots of Earth & Neutral pit up to water level or 80 Ft. whichever comes first for Genset.	2 Nos.		
10	Supply, laying and termination of earthing cable (95 sq. mm)	50 Meters		
ELECTRICAL SYSTEM				
11	Supply & Installation of MCC Panel for 40,000-50,000 CFM Supply Fans, Jacket Water Heater, Space Heater, Pre Lube Pump & Battery Charger.	1 No.		
12	Supply, laying and termination of power cables for 40,000-50,000 CFM Supply Fans, Jacket Water Heater, Space Heater, Pre Lube Pump & Battery Charger in conduit/cable tray.	1 Lot		
13	Supply & Installation of Power Panel (1600Amp) with Motorized Circuit Breakers with ATS / AMF function. (As per 1000kVA - 1600Amps required)	1 No.		
14	Dismantling of existing power cables and connection with new Genset with lugs and glands.	1 Job		
15	Supply, laying and termination of 1C, Cu, 300 Sq. mm, PVC/PVC, unarmored cables, 4 per phase and 2 for neutral. (12 meter each length) (630sqmm power cable is difficult to install at site therefore 1C - 300sqmm is recommended)	168 Meter		
16	Supply & Installation of cable ladder for power cables.	1 Lot		
VENTILATION SYSTEM				
17	Supply & Installation of 1 lot. of Air Intake Canopy with Air Intake Louvers, wire mesh, Aluminum washable filters and ducting works including leveling & alignment.	1 Job		
18	Supply & Installation of 40,000-50,000 CFM supply fan including leveling, alignment complete in all respects.	1 Job		
19	Supply of kWh meter along with fitness approval	1 Job		
ADDITIONAL MISCELLANEOUS WORK				
20	Supply of 2000 hours spares	1 Job		
21	Paint work and renovation with lighting , fire extinguisher etc.	1 Job		
22	Provision of rental Generator (Backup Power) till the completion & commissioning of complete project.	1 Job		



S #	DESCRIPTION OF WORK FOR "SITE-B"	QTY UNIT	RATE	AMOUNT
1	Supply, installation, testing and commissioning of 1000 kVA diesel generating set operating on 3-phase, 400V, 50 Hz, 1500 RPM, Water cooled.	1 Unit		
2	Supply & Installation of Weather Proof Sound Proof Drop Over Type Canopy. Sound level will be 85 dBA @ 1 meter with 5-7 meter clearance. Supply of Drop Over type Acoustic Canopy for D.G. Set with Open Bottom, painted with two coats of Anti Corrosive Primer and two coats of Synthetic Enamel paint.	1 No		
3	Supply of Critical Muffler.	1 No		
4	Supply and Installation of 1 lot of MS Sch 20 Exhaust System piping having 10-12" dia with bellow, expander, elbows, supports & Brackets with 100kg/m ³ Density, 100 mm thick Rock Wool Thermal Lagging & GI Cladding with 24 Gauge Sheeton pipe complete in all respects. Thermal lagging and GI Cladding will be done on exhaust pipe within canopy only.	1 Job		
GENERATOR SET				
5	Construction of Genset Foundation Pad.	1 Job		
6	Installation and Placement of (1000 KVA) Genset with Engine mounted Radiator and its attachments on Genset foundation pad as per Installation guideline including crane, fork lifter, rigging or chain block arrangement as required to move and place Genset from Outside Power House Building to foundation Pad inside engine room.	1 Job		
7	Leveling, alignment and grouting work of Genset on its foundation pad with installation of vibration isolators.	1 Job		
FUEL SYSTEM				
8	Supply and installation of MS Sch 40 fuel piping (Supply & Return) from existing diesel day fuel tank to engine with valves, elbows, premiering & painting of pipe with necessary supporting and fixing arrangement.	1 Job		
9	Adjustment of height in Diesel Day Tank as per height of DG set such that max fuel level height should be above than engine injector level. (Existing Fuel Tank will be used).	1 Job		
EARTHING & NEUTRAL SYSTEM				
10	Digging / Boring connection of 1lots of Earth & Neutral pit up to water level or 80 Ft. whichever comes first for Genset.	2 Nos.		
11	Supply, laying and termination of earthing cable (95 sq. mm)	50 Mtr		



ELECTRICAL SYSTEM				
12	Supply & Installation of MCC Panel for Jacket Water Heater, Space Heater, Pre Lube Pump & Battery Charger.	1 No.		
13	Supply, laying and termination of power cables for Jacket Water Heater, Space Heater, Pre Lube Pump & Battery Charger in conduit/cable tray.	1 Lot		
14	Supply & Installation of Power Panel (1600Amp) with Motorized Circuit Breakers with ATS / AMF function.	2 Nos.		
15	Supply of Power cable Non Armoured 1C - 300 sqmm PVC / PVC 1C - 300sq mm , 4/P + 2N - (22 meter each length)	308 mtrs		
16	Laying and termination of Power cable Non Armored 1C - 300sqmm PVC / PVC 1C - 300sq mm , 4/P + 2N - (22 meter each length)	308 mtrs		
17	Supply of kWh meter with electrical fitness certificate.	1 Job		
ADDITIONAL MISCELLANEOUS WORK				
18	Supply of 2000 hrs spares	1 Job		
19	Dismantling of existing shade and then re installation with painting work	1 Job		
20	Removal of shade work	1 Job		
21	Provision of rental Generator (Backup Power) till the completion & commissioning of complete project.	1 Job		

