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Website: www.iiap.res.in
ASTROPHYSICS

INDIAN INSTITUTE OF

IIND BLOCK, SARJAPUR ROAD, KORAMANGALA,
BANGALORE-560 034

PUBLIC TENDER NOTICE NO: PR/PT/TS/SPP/HESP/CAP/478 DATED 31ST DECEMBER 2012

The Director, Indian Institute of Astrophysics invites Quotations/Bids from reputed firms for following / specification. Hence the firm (s) interested in offering bids should have executed similar items/works.

Sl.No.	Description	Quantity	E.M.D (Refundable) Rs.	Tender Fee (Non-refundable) Rs.
1.	Supply, Installation, Testing and Commissioning of Solar Power Plant – Solar Photo Voltaic 30 Kwatt Power Plant for Indian Astronomical Observatory, Hanle, Ladakh Region. (As per detailed specification in the Annexure I)	01 No.	2,50,000/-	500/-

Note: The Tender documents with Specification details are available on IIA website www.iiap.res.in/tenders.htm. The interested tenderers may at their option down load the same from our website (as no hard copies of Tender documents is/are provided from this office) and submit their offer along with EMD (refundable) & Tender fee (non-refundable) prescribed therein, only in the form of Demand Draft drawn in favour of Director, IIA. However, your offer (both Technical & Commercial bids) with bids should be superscribed in a envelope mentioning the tender notice no., Date of opening, and submit the Bids in a sealed envelope addressed in favour of Director, Indian Institute of Astrophysics, 2nd Block, Koramangala, Bangalore – 560 034.

02. The firms who fulfill the following requirements shall be eligible to submit their bids. Joint ventures are not acceptable.

(a) Tendering Company shall be professionally managed and equipped with facility for the supply and maintenance of tendered items.

(b) The tenderers should have completed, in the last 3 financial years (i.e., current year and two previous financial years) at least one similar single work for a minimum value of Rs.100 Lacs.

(c) The total contract amount received during the last 3 financial years, and the current financial year should be minimum of 150% of the above mentioned value. The tenderer should submit Audited Balance Sheet duly certified by the chartered accountant to this effect. They should also submit Bankers Solvency Certificate to a minimum of Rs.100 Lacs.

(d) The Private Body Contractor shall be required to produce the TDS Certificate indicating the Income Tax deducted by the client for the execution of similar items, completed individually of value not less than Rs.100 Lacs.

03. Both Technical / Commercial/Price Bids supported by the above information should be submitted in Sealed envelope duly superscribed with the name of work/item. The completed Bids will be received by this office **upto 15.00 Hrs. latest by 24th January 2013.**
04. If any information furnished by the tenderers is found incorrect at a later stage, the firm shall be liable to be debarred from tendering and taking up of work in IIA. The Institute reserves the right to verify the particulars furnished by the tenderers.
05. The interested tenderers may contact Dr.T.Sivarani Thirupathi (Ph.No.22541357) to discuss Technical Clarification and Shri.Y.K.Raja Iyengar (Ph.No.22541244) for Commercial Clarification, if any, with prior permission on or before 17th January 2013, before submitting bids.
- 06.The firms should submit the both Technical / Commercial / price bids separately superscribed along with Tender fee of prescribed amount **upto 15.00 Hrs. Latest by 24th January 2013.** The technical bids will be opened in presence of the bidders or their authorized representatives **at 15.30 Hrs. on 24th January 2013.**
- 07.EMD and Tender fee of prescribed value shall be sent along with the Technical bids, tenderers in the form of demand draft only in favour of "The Director, IIA, Bangalore, drawn from any Indian Nationalised / Reputed Banks in india.
08. Incomplete bids are liable for rejection.
09. Late / delayed offer will not be considered.
10. IIA is not responsible for any delay / loss of documents in transit.
11. No bids will be considered if prescribed Tender Fee and EMD is not found with the bid.
12. The offer should be valid for a minimum period of 120 days from the date of opening of bid.
13. IIA reserves the right to reject any or all tenders without assigning any reasons.

Administrative Officer
IIA, Bangalore-34

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INDIAN INSTITUTE OF ASTROPHYSICS

IInd Block, Koramangala, Bangalore-560 034

No. PR/PT/TS/SPP/HESP/CAP/478

DATED: 31st December 2012

M/s.

Dear Sirs,

The Director, Indian Institute of Astrophysics, Bangalore invites Sealed Tenders for the supply of Stores detailed in the Tender Form hereto annexed. The Tender Terms enclosed are also may be noted carefully. If you are in a position to quote for the supply in accordance with the requirement, please submit your quotation in the attached Tender Form also.

Your Tender must reach this office on or before the date and time indicated in the Tender Schedule.

Thanking you,

Yours faithfully,

Encl: as above.

P.Kumaresan
Administrative Officer

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INDIAN INSTITUTE OF ASTROPHYSICS

IInd Block, Koramangala, Bangalore-560 034

No. PR/PT/TS/SPP/HESP/CAP/478

DATED: 31st December 2012

FROM:

TO
THE DIRECTOR,
Indian Institute of Astrophysics.,
Bangalore-560 034.

Sir,

I/We hereby offer to supply the stores indicated below at the price hereunder quoted and agree to hold this offer open till_____. I/We shall be bound to supply the store hereby offered upon the issue of the Purchase Order communicating to the acceptance thereof on or before the expiry of the last mentioned date. You are at liberty to accept any one or more of the items of such stores. I/We notwithstanding that the offer in this tender has not been accepted in whole, shall be bound to supply such items and such portion or portions of one or more of the items as may be specified in the said Purchase Order communicating the acceptance.

Sl.No.	Description of the item(s)	Quantity	Unit	Rate	Dely. Period
2.	Supply, Installation, Testing and Commissioning of Solar Power Plant – Solar Photo Voltaic 30 Kwatt Power Plant for Indian Astronomical Observatory, Hanle, Ladakh Region (As per detailed specification in the Annexure I)	01 No.			

Place at which the Delivery is required : At Indian Astronomical Observatory, Skara Village, Post Box No.100, Leh-Hanle, Jammu and Kashmir.

Date by which the supplies are required : Within 30 days from the date of receipt of PO

2. I/We have understood the items of the tender annexed to the invitation to this Public Tender and have thoroughly examined the specifications/drawing and /or pattern quoted or referred to herein and/are fully aware of the nature of the stores required and my/our offer is to supply the stores strictly in accordance with the requirements subject to the terms and conditions contained in the Purchase Order, if communicated on the acceptance of this tender either in whole or in part.

Date:

Signature and seal of Tenderer

ANNEXURE - I

REQUEST FOR PROPOSAL

For

1. **Supply, Installation, Testing and Commissioning of 30KWp SPV power plant.**

At Indian Astronomical Observatory, Hanle, Leh-Ladakh(J&K)

INTRODUCTION:

Indian Institute of Astrophysics, Bangalore operates Indian Astronomical Observatory(IAO), at Hanle in the Ladakh area of Jammu and Kashmir. Hanle is about 265 kms from Leh, at an altitude of 4,500mtrs. The Observatory has already setup 2 nos of 31.5KWp SPV and 1 no of 30KWp SPV systems with 415V AC, 3 phase power for its operations. No utility power supply of any sort is available in this region except for DG sets as back up.

BACKGROUND INFORMATION:

The Observatory for the past 10 years has been working on Solar Power hassle free continuously round the clock. The Solar power has been clean, natural and environment friendly power. With the ever increasing oil prices the Solar power is the need for all the continuous power requirement at such a remote place. The cost of operation and maintenance is low.

SITE INFORMATION:

Latitude	: 32d46m46s N
Longitude	: 78d57m51s E
Altitude	: 4500 meters above msl
Climatic conditions	
a) Outdoor Temp	:-35 deg C to +30 deg C
b) Wind Speed	:Maximum 200km/hr
c) Humidity	:0-95%

JUSTIFICATION OR STATEMENT OF PURPOSE:

1. A new instrument High Resolution Spectrometer (HESP) is being commissioned with the Himalayan Chandra Telescope at the Observatory. This requires an additional SPV system of nominally 30KWp.

1. 30 KWp SOLAR POWER PLANT FOR High Resolution Spectrometer (HESP), IAO, Hanle.

1.1 DESIGN:

The SPV plant should be designed in such a way that it should be able to deliver the sustained load of 10 KW with an autonomy of two cloudy day. The plant shall be designed

to be integrated with DG power available at site for recharging of the batteries during the cloudy days and supply to the load as well.

1.2 SPECIFICATION:

1.2.1 Solar PV modules and array

Peak power capacity of the array should be at least 30 KW. The solar PV modules should be supplied with suitable frames, structures and fixtures for erections. The module frame should be made of corrosion resistant materials, which is electrolytically compatible with the structural material used for mounting the module. The structures shall be made of MS drawn sections, hot dip galvanized, designed for fixed optimum angle. The solar array and the structure should withstand harsh environmental conditions prevalent at Hanle. Field junction boxes with blocking diodes, bypass diode, metal oxide varistors for lightening protection and other protection mechanism to be provided for satisfactory functioning of the solar array.

The suppliers shall provide a performance guarantee for the SPV module wattage for a minimum period of 10 years. The predicted electrical degradation at the end of the warranty period shall be less than ten percent (10%) of the initial standard test condition (STC) wattage.

The alignment and tilt angle shall be decided on the location of the array installation so as to provide maximum annual energy output.

The supplier/manufacturer shall specify installation details of the PV modules and the support structures with appropriate diagrams and drawings. The drawings along with detailed design shall be submitted to IIA, Bangalore/IAO-Leh for approval before starting the execution of work. The work will be carried out as per designs approved by IIA, Bangalore.

1.2.2 Junction box

The junction boxes shall be dust, vermin and waterproof and the terminals shall be connected to copper bus bar arrangement of proper sizes. It should have suitable cable entry points fitted with cable glands of appropriate sizes for both incoming and out going cables. Suitable markings shall be provided on the bus bar for easy identification and cable ferrules shall be fitted at the cable termination points for identification. The rating of the JB's shall be suitable with adequate safety factor to inter connect the Solar PV array. There should be provision for isolating each array for testing and maintenance.

1.2.3 Solar Power Conditioning Unit:

1. 12.5 KVA Continuous rating-Bidirectional Inverter
2. 35KW Integral Solar Regulator
3. 120V DC Input
4. 400 V AC output 3 phase, 50 Hz, 4 wire output, pure sine wave with less than 3% total harmonic distortion
5. 200% Surge Rating
6. The output regulation should be under $\pm 2\%$ AC voltage and $\pm 0.5\%$ Frequency.
 - i) Minimum Efficiency should be 90%.
 - ii) The PCU supervisory control shall supervise the DC voltage and current and shall disconnect AC and DC side in case of fault.
 - iii) The Charge controller should be state of the art device. It must maximize the battery charging and must enhance the life of the batteries by accurately controlling the PV charge current.
 - iv) The charge controller should have an option of Boost Charging of the Battery bank.

v) The PCU shall be capable of operating in parallel with the grid utility service as well as reverse charge the batteries when 400V 3phase 50Hz is made available to it.

vi) LCD Interface and Key Pad

- a) Instantaneous Grid or Diesel and Inverter per phase KW or Amp, voltage, pf and frequency.
- b) Grid or Diesel on line status
- c) Battery voltage, current, temperature.
- d) Solar charge current
- e) Solar radiation
- f) Inverter KWh summation

13. Data Logging

- a) Instantaneous feedback of power, voltage, power factor and frequency of the grid, diesel and the inverter system.
- b) Periodic logging of power, voltage, power factor and frequency of the grid diesel and the inverter system.
- c) Periodic logging of battery statistics including battery voltage, current, temperature and renewable current contribution
- d) Adjustable logging period from 60 second averages to 24 hour daily logs.
- e) Time and date stamped log entries
- f) Time and date annotated fault log, holding the fault description, operating statistics and fault source.
- g) Bulk log download for immediate data importation into a spreadsheet.

14. Remote Monitoring Package should also be included.

15. Download Log Capabilities:

Date and time stamped with selectable log periods one minute to 24 Hours

- a) Solar charge current
- b) Battery current
- c) Battery voltage
- d) Battery temperature
- e) Grid or diesel KW, voltage, pf, frequency
- f) Inverter KW, voltage, pf, frequency
- g) Engine operating status
- i) System faults

16. Operating Temperature Range : 0-50 deg Celsius

17. Humidity: 0-95 % non condensing.

1.2.4 Battery Bank:

The total capacity of the battery bank should be 3600Ah (C10) at 120V. Each cell should be of 1800Ah capacity. The batteries shall be low maintenance, lead acid solar photo voltaic batteries with flooded electrolyte of specific gravity 1.280. The batteries shall be of Exide make or equivalent. Battery terminal shall be provided with covers, vent plugs as well as electrolyte level indicator. Charging instructions shall be provided along with the batteries. Suitable lifting handle shall be provided.

1.2.5 DC Distribution Board (DCDB)

It shall have MCCB of suitable rating for connection and disconnection of array input. It shall have meters for measuring Array voltage and Array current.

1.2.6 AC Distribution Board (ACDB)

For control and monitoring of delivered AC power, ACDB should have energy meter to record energy supplied to loads. The net metering concept shall be utilized in-order to know the energy drawn from the grid/DG. The ACDB should also have digital Voltmeter and Ampere meter along with selector switch. MCCB of suitable rating should also be provided alongwith.

1.2.7 Cables and accessories

All the cables shall be supplied conforming to IS 1554 / 694 Part 1 of 1988 & shall be of 650 V/ 1.1 kV grade as per requirement. Only polyethylene copper cables capable of operating in the harsh environmental condition at Hanle shall be used. The size of the cables between array interconnections, array to junction boxes, junction boxes to DCDB, DCDB to PCU etc shall be so selected to keep the voltage drop and losses to the minimum.

1.2.8 **Earthing**

The array structure of the PV yard shall be grounded properly using adequate number of Earthing kits. All metal casing / shielding of the plant shall be thoroughly grounded to ensure safety of the power plant. Neutral should be grounded(-ve grounding).

1.2.9 Lightning

The SPV Power Plant shall be provided with lightning & over voltage protection. The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc.

1.2.10 Spare List

Recommended spares for Power Conditioning Unit to be provided for a period of three years

1.2.11 **Documentation and manuals**

The documentation and manuals provided have to enable local staff to perform supervision and maintenance, find faults and replace faulty items. All items have to be provided in 3 copies.

1.2.12 **Solar distillation plant**

Solar distillation plant shall be supplied along with the battery bank as per the requirement.

TIME FRAME

PERIOD OF COMPLETION

Time of completion for complete work is nine months from date of issue of work order. Time is of essence as the working season available at Hanle is from May to September and Road link between Delhi – Manali closes after October for nearly 7 months.

TERMS AND CONDITIONS OF CONTRACT:

1. DEFINITIONS:

- a). The terms 'Purchaser' shall mean the Director, Indian Institute of Astrophysics, Bangalore-560 034.
- b). The term 'Contractor' shall mean, the person, firm or company with whom or with which the order for the supply of stores is placed and shall be deemed to include the Contractor's successors, representative, heirs, executors and administrators unless excluded by the contract.
- c). The 'Stores' shall mean that contractor agrees to supply under the contract as specified in the Purchase order including Design, Supply, installation, testing and commissioning of computer / data center at IIA, Koramangala, Bangalore, as a turkey project inclusive of relocation of computer equipments and accessories from exiting computer rooms of the proposed data center at Ground Floor A concept drawing and specifications are in Annexure II in the Purchase Order.
- d). The terms 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by an officer duly authorized intimating the acceptance on behalf the Purchaser on the terms and conditions mentioned or referred to in the said communications accepting the tender or offer of the contractor for supply of stores or plant, machinery or equipment or part thereof.

2. PRICES:

Tenders, offering firm prices will be preferred, where a price variation clause is insisted upon by tenderer, quotations with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variations.

3. DUTY EXEMPTION

- a). Excise duty exemption certificate will be provided if considered against the categories of items tendered, under the Govt. of India Notification No. 10/97 valid till 2016.

4. SECURITY DEPOSIT:

On acceptance of Tender, the Contractor shall, at the option of the Purchaser and within the period specified by him deposit with him in cash or any other form as the Purchaser may determine, Security deposit not exceeding ten percent of the value of the contract as the Purchaser shall specify. If the contractor is called upon by the purchaser to deposit 'Security' and the contractor fails to provide the security within the period specified, such failure shall constitute a breach of the contract and purchase shall be entitled to make other arrangements for the re-purchase of the stores contracted for at the risk of contractor in terms of sub-clause (ii) and (iii) of clause 10 (b) hereof and/or to recover from the contractor damages arising from such cancellation.

5. GUARANTEE AND REPLACEMENT:

- a) The contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material workmanship and performance.
- b) For a period of (12) twelve months after the acceptance of the stores, if any defects are discovered therein or any defects therein found to have developed under proper use arising from faulty stores, design or workmanship, contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months from the date of acceptance thereof by the purchaser who shall state in writing in what respect the store or any part thereof are faulty.
- c) If in the opinion of the purchaser, it becomes necessary to replace or renew any defective stores such replacement or renewal shall be made by the Contractor free of all costs to the purchaser provided the notice informing the contractor of the defect is given by the purchaser in this regard within the said 14 months from the date of acceptance thereof.
- d) Should the contractor fail to rectify the defects, the purchaser shall have the right to reject or repair or replace at the cost of the contractor the whole or any portion of the defective stores.
- e) The decision of the purchaser, notwithstanding any prior approval of acceptance or inspection thereof on behalf of the purchaser, as to whether or not the stores supplied by the contractor are defective or any defects has developed within the said period of 12 months or as to whether the nature of the defectives required renewal or replacement shall be final, conclusive and binding on the contractor
- f) To fulfill guarantee conditions outlined in Clause 5(a) to (d) above, the contractor shall, at the option of the purchaser, furnish a Bank Guarantee (as prescribed by the purchaser) from a Bank approved by the purchaser for an amount equivalent to 10% of the value of the contract along with first shipment documents. On the performance and completion of the contract in all respects, the Bank Guarantee will be returned to the contractor without any interest.
- g) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of stores at Purchaser's site.
- h) Even while the 12 months guarantee applied to all stores in case where a greater period is called forth by our specifications then such a specification shall apply; in such cases the period of 14 months referred to in Para 5(b) and (c) shall be 'asked for' guarantee period plus two months.

6. PACKING, FORWARDING AND INSURANCE:

The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by rail, road, sea or air, to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packing shall be done by and at the expenses of the contractor. The Purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the contractor and the Purchaser shall pay only for such stores as are actually received in good condition, in accordance with contract.

7. TEST CERTIFICATE:

Wherever requested Test Certificate should be sent along with the relevant dispatch documents.

8. ACCEPTANCE OF STORES:

Wherever required Test Certificate should be sent along with the relevant dispatch documents.

- a) The Stores shall be tendered by the contractor for inspection at such places as may be specified by the purchaser at the Contractor's own risk, expenses and cost.
- b) It is expressly agreed that the acceptance of stores, contracted for is subject to final approval by the Purchaser, whose decision shall be final.
- c) If, in the opinion of the Purchaser all or any of the stores that do not meet the performance or quality requirements specified in the Purchase Order, they may be either rejected or accepted at the price to be fixed by the purchaser and his decision as to rejection and the prices to be fixed shall be final and binding on the contractor.
- d) If the whole or any part of the store supplied are rejected in accordance with Clause No.8 (c) above, the Purchaser shall be at the liberty, with or without notice to the Contractor, to purchase in the open market at the expenses of the Contractor, stores meeting the necessary performance and quality contracted for in place of these rejected, provided that either the purchase, or the agreement to purchase, from another supplier is made within six months from the date of rejection of the stores as aforesaid.

9. REJECTION OF STORES:

Rejected Stores will remain at the destination at the Contractor's risk and responsibility, if instructions for their disposal are not received from the Contractor within a period of 14 days from the date of receipt of the advice or rejection, the Purchaser or his representative has, at his discretion the right to scrap or seal or consign the rejected stores to the Contractor's address at the Contractor's entire risk and expense, freight being payable by the Contractor at actual.

10. DELIVERY PERIOD:

- a) The delivery period of the stores stipulated in the Purchase order shall be deemed to be the essence of the Contract, and delivery must be completed on or before the specified dates/period.
- b) Should the Contractor fails to deliver the stores or any consignment thereof within the period prescribed for such delivery, the Purchaser shall be entitled at his option either.
 - i) to recover from the Contractor as agreed liquidated damages and not by way of penalty, a sum of 2% of the price of any stores which the contractor has failed to deliver as aforesaid for each month or part of a month, during which the delivery of such stores may in arrears, or
 - ii) to purchase elsewhere, without notice to the Contractor on the account and at the risk of the contractor, the stores not delivered or others of similar description (where other exactly complying with the particulars are not, in the opinion of the purchaser readily procurable, such opinion being final) without canceling the Contract in respect of the consignment(s) not yet due for delivery or,
 - iii) to cancel the contract or a portion thereof, and, if so desired to purchase or authorize the purchase of stores not so delivered or others of similar

description (where others exactly complying with the particulars are not, in the opinion of the purchaser readily procurable, such opinion final) at the risk and cost of the Contractor.

In the event of action being taken under sub-clause (ii) and (iii) of clause 10 above, the Contractor shall be liable for any loss which the Purchaser may sustain on that account, provided that the re-purchase, or, if there is an agreement to re-provide shall be made within (6) six months from the date of such failure. But the Contractor shall not be entitled to any gain on such re-purchase made against default. It shall not be necessary for the purchaser to serve a notice of such re-purchase on the defaulting Contractor. This right shall without prejudice to the right of the purchase to recover damages for breach of contract by the Contractor.

11. EXTENTION OF DELIVERY TIME:

As soon as it is apparent that Contractor delivery period / dates cannot be adhered to, an application shall be sent by the Contractor to the Purchaser. If failure, on the part of the Contractor to deliver the stores in proper time shall have arisen from any cause which the Purchaser may admit as reasonable ground for an extension of the time (and his decision shall be final he may allow such additional time as he considers it to be justified by the circumstances of the case without prejudice to the Purchaser's rights to recover liquidated damages under clause 10(i) (ii) and (iii).

Payment Terms:

Contractor's bill will be passed only after the stores have been received, inspected and accepted by the Purchaser for payment.

13. RECOVERY OF SUMS DUE:

Whenever there is a breach of contract whether liquidated or not, money arising out of or under this contract against the contract, the Purchaser shall be entitled to recover such sum by appropriating, in part or whole, the security deposited by the Contractor, if a Security is taken against the contract. In the event of the Security being insufficient or if no security has been taken from the Contractor, then the balance or the total sum recoverable as the case may be shall be deducted from any sum then due or which at any time thereafter may become due to the contractor under this or any other contract with the Purchaser. Should this sum be not sufficient to cover the full amount recoverable, the Contractor shall pay to the Purchaser on demand the remaining balance due? Similarly, if the purchaser has or makes any claims, whether liquidated or not, against the Contractor under any other contract with the purchaser, the payment of all moneys payable under the contract to the Contractor including the Security Deposit shall be withheld till such claims of the Purchaser are finally adjudicated upon and paid by the Contractor.

14. INDEMNITY:

The Contractor shall warrant and be deemed to have warranted that all stores supplied against this contract are free and clean of infringement of any patent, copy right or trade mark, and shall at all time indemnify the purchaser against all claims which may be made in respect of the stores for infringement of any right protected by patent, registration of design or trade mark and shall take all risk of accidents of damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for sufficiency of all the means used by him for the fulfillment of contract

15. ARBITRATION:

In the event of any question, dispute or difference arising under these conditions contained in the purchase order in connection with this contract, (except as to any matters the decision of which is specially provided for by these conditions), the same shall be referred to the sole arbitration of the Head of the Institution or of some other person appointed by him. It will be no objection that the arbitrator is a Government Servant, that he has to deal with matter to which the Contract relates or that in the course of his duties as Government Servant he has expressed views on all or any of the matters in dispute binding on the parties of this Contract.

(a) IT IS TERMS OF THIS CONTRACT:

If the Arbitrator be the Head of the Institution,

vii) in the event of his being transferred or vacating his office by resignation or otherwise, it shall be lawful for his successor-in-office either to proceed with the reference himself, or to

viii) appoint another person as arbitrator, or, in the event of his being unwilling or unable to act for any reason, it shall be lawful for the Head of the Institution, to appoint another person as arbitrator or,

(b) IF THE ARBITRATOR BE A PERSON APPOINTED BY THE HEAD OF THE INSTITUTION:-

In the event of his death, neglecting or refusing to act, or resigning or being unable to act for any reason, it shall be lawful for the Head of the Institution either to proceed with reference himself or to appoint another person as arbitrator in place of the outgoing arbitrator. Subject as aforesaid, the Arbitration Act, 1940 and the rules there under and any statutory modifications thereof for the time being in force shall be deemed to apply to the arbitration proceedings under this clause. The Arbitrator shall have the power to extend with the consent of the Purchaser and the Contractor the time for making a publishing the award. The venue of Arbitration shall be the place as the Purchaser. In his absolute discretion may determine. Work under the contract shall if reasonably possible, continue during Arbitration proceedings.

16. COUNTER TERMS AND CONDITIONS OF SUPPLIERS:

Where Counter Terms and Conditions/printed or cyclostyled conditions have been offered by the Supplier, the same shall not be deemed to have been accepted by the Purchaser, unless specific written acceptance thereof is obtained.

17. SECURITY FOR PURCHASER'S MATERIAL(S):

Successful Tenderer will have to furnish in the form of a Bank Guarantee or any other form as called for by the Purchaser towards adequate security for the materials/property provided by the Purchaser for the due execution of the Contract.