

भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

दूरभाष /Telephone:+91-40-20203009	दिनांक / Date: 23.07.2025
वेबसाइट / Website : <u>www.tifrh.res.in</u>	ईमेल / Email: krishnaae@tifrh.res.in

# निविदा आमंत्रित करने की सूचना

## **NOTICE INVITING TENDER**

(दो भाग निविदा) निम्नलिखित कार्यों के लिए:

# (TWO-PART TENDER) for the following works:

Supply, Installation, Testing and Commissioning of Additional Electrical works for Petawatt Laser Lab Ground Floor, Plot-B, TIFR, Survey No. 36/P, Gopanpally (Village), Serilingampally (Mandal), Ranga Reddy Dist., Hyderabad- 500046.

2.5th, my dordsad cook for	
निविदा सं. / Tender No.	TIFR/PD/CF25-68/250546
निविदा का प्रकार / Type of Tender	दो भाग की निविदा (भाग-I: तकनीकी बोली और भाग-II: मूल्य बोली)/Two Part Tender (Part-I: Technical Bid and Part- II: Financial Bid)
अनुमानित लागत / Estimated Cost	रु. Rs.14,98,180/-
अनुमानित लागत / Cost of EMD	रु. Rs. 29,964/-( ("मांग ड्राफ्ट "टीआईएफआर सेंटर फॉर इंटरडिसिप्लिनरी साइंसेज" हैदराबाद में देय (तकनीकी बोली भाग-I के साथ संलग्न होने के लिए) के पक्ष में तैयार किया जाना है।" / Demand Draft to be drawn in favour of "TIFR Center for Interdisciplinary Sciences", Payable at Hyderabad (To be enclosed with the Technical Bid Part – I).
बोली पूर्व बैठक और समय /Pre bidding meeting Date & Time	25.07.2025 at 11:00 Hrs
निविदा प्रस्तुत करने की अंतिम तिथि/ Last Date for Submission of Tender	31.07.2025 by 13:00 Hrs
बोली खोलने की तिथि (केवल भाग-I: तकनीकी बिड) /Date of Opening Bids(Only Part-I: Technical Bid)	31.07.2025 at 15:00 Hrs

● "यदि भाग "I" और भाग "II" बोलियों को अलग-अलग लिफाफों में सील नहीं किया जाता है तो निविदा को अस्वीकार कर दिया

जाएगा।"



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046 Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

In case the Part "I" and Part "II" bids are not sealed in separate envelopes the tender will be rejected.

- तकनीकी बोली में मूल्य का कोई संकेत नहीं होना चाहिए।
   The technical bid should not contain any indication of the price.
- निविदा शुल्क और ईएमडी के भुगतान के बिना प्राप्त तकनीकी बोली को सरसरी तौर पर अस्वीकार कर दिया जाएगा। The Technical Bid received without payment of tender fees and EMD shall be summarily rejected.
- संपर्क: श्री कृष्ण, दूरभाष: 040- 20203009 किसी भी तकनीकी या वाणिज्यिक शर्तों के लिए निविदा में उल्लिखित स्पष्टीकरण Contacts: Mr. Krishna A.E., Engineer (E) Electrical, Tel: 040- 20203009, Email Id: krishnaae@tifrh.res.in for any technical or commercial terms clarifications mentioned in the tender.

Sealed tenders are invited for the aforesaid works from contractors having similar work experience in reputed Research Institutions, Universities, Central Government/Public Sector Undertaking, Private Laboratories, Multinational Companies, etc. Interested contractors who are satisfying prequalification criteria stipulated by TIFR-Hyderabad shall only submit their bids. For further details and any clarification on the tender, you may please contact Head-Technical Services, Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046.

निविदा जमा करने की अंतिम तिथि 31.07.2025 को 13:00 बजे तक है।

The last date for submission of the tender is 31-07-2025 by 13:00 Hrs.

(राजशेखर आर/Rajasekhar. R)

प्रमुख - तकनीकी सेवाएं/Head-Technical Services



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

# **TENDER DOCUMENT**

Supply, Installation, Testing & Commissioning of Additional Electrical works for Petawatt Laser Lab Ground Floor, Plot-B, TIFR, Survey No. 36/P, Gopanpally (Village), Serilingampally (Mandal), Ranga Reddy Dist.,

Hyderabad- 500046

NAME	OF THE	TEND	ERER: <sub>-</sub> .	 	 	 
Addr	ess:			 	 	 
		•••••		 	 •••••	 

Last date of submission of the tender: On or before 31.07.2025 by 13:00 Hrs.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

# TECHNICAL BID

# **PART-I**

Supply, Installation, Testing & Commissioning of Additional Electrical works for Petawatt Laser Lab Ground Floor, Plot-B, TIFR, Survey No. 36/P, Gopanpally (Village), Serilingampally (Mandal), Ranga Reddy Dist., Hyderabad- 500046



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेइडी जिला, हैदराबाद - 500 046 Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District,

Hyderabad-500046, Telangana

Tender Notice : TIFR/PD/CF25-68/250546

Name of Work : Supply, Installation, Testing &

Commissioning of Additional Electrical works for Petawatt Laser Lab Ground Floor, Plot-B, TIFR, Survey No. 36/P, Gopanpally (Village), Serilingampally (Mandal), Ranga Reddy Dist.,

Hyderabad- 500046

Location : Tata Institute of Fundamental Research

Survey No. 36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy

District, Hyderabad - 500046.

Estimated Cost : Rs.14,98,180/-

EMD : Rs.29,964/- (Demand Draft to be drawn in

favour of "TIFR Centre for Interdisciplinary Sciences", Payable at Hyderabad (To be enclosed with the Technical Bid Part – I).

Delivery Period : 90 Days (Completion Period)

Validity : 75 (Seventy Five) days after opening of Part-I,

**Technical Bid** 



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046 Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

#### **INDEX**

SECTION	DESCRIPTION	PAGE NO.
SECTION I	IMPORTANT INFORMATION	7-9
SECTION II	SECTION II ELIGIBILITY CRITERIA FOR QUALIFICATION OF TENDER	
SECTION III	NOTICE & INSTRUCTIONS	16-18
SECTION IV	GENERAL INFORMATION	19-31
SECTION V	TECHNICAL SPECIFICATIONS	32-37
SECTION VI	LIST OF MAKES	38
SECTION VII	ANNEXURES	39-45
SECTION VIII	FINANCIAL BID (PART II)	46-52



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

SECTION-I

**IMPORTANT INFORMATION** 

#### INTRODUCTION

The Tata Institute of Fundamental Research is a National Centre of the Government of India, under the umbrella of the Department of Atomic Energy, as well as a deemed University awarding degrees for master's and doctoral programs. Tata Institute of Fundamental Research Centre for Interdisciplinary Sciences, Hyderabad invites bids for the following work:

Supply, Installation, Testing & Commissioning of Additional Electrical works for Petawatt Laser Lab Ground Floor, Plot-B, TIFR, Survey No. 36/P, Gopanpally (Village), Serilingampally (Mandal), Ranga Reddy Dist., Hyderabad- 500046

#### 1. PARTICULARS

a)	Location	TIFR, Survey No. 36/P, Gopanpally (Village), Serilingampally (Mandal), Ranga Reddy Dist., Hyderabad-500046.
b)	Pre-Bid Meeting Date & Time	25.07.2025 at 11:00 Hrs
c)	Closing date & time of receipt of bids	31.07.2025 by 13:00 Hrs
d)	Date & time of opening of Sealed Cover-I containing Technical Bid	31.07.2025 at 15:00 Hrs
e)	Date of opening of Sealed cover-II containing Financial Bid of eligible bidders	To be intimated to eligible bidders within 7 days from the date of tender open.

#### 2. GENERAL INSTRUCTIONS

- 2.1. TIFR shall award the contract for the project through the two Bid systems.
- 2.2. The Contractor is advised to visit and examine the site of work and its surroundings and obtain any information that may be necessary, in addition to those provided in this document. The Contractor shall be deemed to have fully acquainted himself about the site condition, whether he inspects it or not.
- 2.3. The Contractor should adhere to the building bye-laws applicable for the area.
- 2.4. All clarifications shall be sought before the date of pre-bid meeting. The bidders may make suggestions which shall be considered during the Pre Bid Meeting. No further clarifications shall be issued after the issue of noteworthy replies to the pre-bid queries.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

- 2.5. The submission of the bid by Contractor would imply that they have carefully read and agreed to the terms and conditions contained in this bid document.
- 2.6. The bid for the work shall remain open for acceptance for a period of **75** (**Seventy Five**) days from the date of submission of the bids, which period may be extended by mutual agreement and the Contractor shall not cancel or withdraw the offer during this period.
- 2.7. This bid document shall form a part of the contract agreement.

#### 3. SUBMISSION OF BIDS

Bids shall be submitted to Head- Technical Services, *TIFR*, Survey No. 36/P, Gopanpally (Village), Serilingampally (Mandal), Ranga Reddy Dist, Hyderabad-500046 in a sealed Master envelope super scribed "Bid for Supply, Installation, Testing & Commissioning of Additional Electrical works for Petawatt Laser Lab Ground Floor, Plot-B, TIFR, Survey No. 36/P, Gopanpally (Village), Serilingampally (Mandal), Ranga Reddy Dist., Hyderabad- 500046 with our enquiry no. and due date, containing two separate sealed covers clearly super scribed as "Technical Bid" and "Financial Bid" before the closing date and time of submission in the following manner:

- a) "**Technical Bid**": This will contain Technical part, Eligibility Documents along with testimonials. Earnest Money Deposit (EMD).
- b) "Financial Bid": This will contain the complete bidding document with duly filled in Schedule of Financial Quote of Financial Bid & Tender Drawings.

The Bids without signature of the authorized person of bidder and seal, without EMD, with conditions or conditional rebates shall be summarily rejected.

#### 4. EVALUATION OF BID

- 4.1. **EVALUATION OF TECHNICAL BID:** The bids received will first be first opened and will be examined for EMD/ Declaration Letter, Eligibility Criteria, Conditions, etc. Conditional Tenders and Tenders without EMD shall be summarily rejected.
- 4.2. **EVALUATION OF FINANCIAL BID:** The Financial Bid should contain the complete bid document with duly filled in Schedule of Financial Quote of Financial Bid and signed Tender drawings. Financial Bids of Technically qualified Bidders will only be opened. Work will be awarded to lowest bidder (L1) based on their quotes after making necessary arithmetical checks.

#### 5. SCOPE & OBJECTIVE

The Objective of the tender is to Supply, Installation, Testing & Commissioning of Additional Electrical works for Petawatt Laser Lab Ground Floor, Plot-B, TIFR, Survey No. 36/P,



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

Gopanpally (Village), Serilingampally (Mandal), Ranga Reddy Dist., Hyderabad- 500046 as per the specifications and Bill of quantities mentioned in the Financial Bid.

Period of Completion of Work: 90 days from the date of issue of work order

**Defect Liability Period:** 12 months from the date of handing over of completed system as per tender.

#### 6. PAYMENT SCHEDULE:

The contractor shall submit the bills for payments along with a detailed statement showing the actual works carried out under different heads of items in the format specified by the TIFR. Minimum value of the work for interim payment (**Two Running Bills**) shall be **30% on Work order value**. All interim (Maximum Three Running Bills) and final bills will be settled based on the joint measurements of each item of work and certified by TIFR Engineer. The bills for nonperishable materials on site may also be submitted and the payment by TIFR against the same shall be to the maximum extent of 60% of the value of these materials on production of sufficient documentary evidence ie. Original invoice, Inventory, etc. All interim bills will be paid within **15** days from the date of submission and Final Bill along with all relevant documents will be settled within **30** days from the date of submission with certification of TIFR Engineer.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

#### SECTION-II

#### **ELIGIBILITY CRITERIA FOR TENDER QUALIFICATION**

Supply, Installation, Testing & Commissioning of Additional Electrical works for Petawatt Laser Lab Ground Floor, Plot-B, TIFR Survey No. 36/P, Gopanpally (Village), Serilingampally (Mandal), Ranga Reddy Dist., Hyderabad- 500046

#### Eligibility criteria:

- 1. The Agencies/Contractors shall hold a valid 'A' grade electrical contractor license issued by appropriate authority and must be valid throughout the contractual period
- 2. The Agencies/Contractors shall hold a valid labour license issued by appropriate authority and must be valid throughout the contractual period.
- 3. IT Returns for the last three consecutive financial years ended on March 31, 2024.
- 4. The Agencies/Contractors should have an average annual turnover of Rs.5.99 lakhs during three previous financial years ending March 31, 2024 audited by CA.
- 5. The Agencies/Contractors should have valid PAN from Income Tax Authority, GST registration No. etc. and any other registration applicable/mandatory for contract.
- 6. The Agencies/Contractors should have executed similar works successfully at least
  - 6.1. One similar work costing Rs.11.98 Lakhs or
  - 6.2. Two similar works costing Rs.8.99 Lakhs or
  - 6.3. Three similar works costing Rs. 5.99 Lakhs during the last 7 financial years ended on the end date of receiving tender for Research Institutes, Universities, Private Laboratories, R & D institutes, etc. in any Government /PSU/Private organizations of repute.

The value of executed works shall be brought to the current costing level by enhancing the actual value of work at a simple rate of 7% per annum calculated from the date of completion to the last date of receipt of applications for tender.

The Agencies/Contractors should furnish copies of work orders and completion certificates from the clients in support of the above.

#### Note:

- Agencies/Contractors should have a full-fledged in-house project management team to undertake the jobs.
- The Agencies/Contractors shall <u>strictly furnish</u> aforesaid information in the formats/schedules given. Non adherence to furnishing of information in the given format/schedules given will lead to disqualification of tender.
- Instructions to Agencies/Contractors for furnishing the information is given as under:
- > Each page of the application shall be signed by a person having necessary authority to do so.
- > If the space in the proforma is insufficient for furnishing full details, such information may be given in separate sheets.
- Applicants are required to furnish information against each item of the application. In case a certain item is not applicable, please write NA. Application containing incorrect and or inadequate information is liable to be rejected.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

# SCHEDULE - A BASIC INFORMATION

1.	Name of the firm	:
2.	a) Address	:
	h) Talanhara / Fay Na	
	b) Telephone / Fax No.	:
	c) Mobile No. Contact Person	:
	d) PAN No.	:
	e) GST Registration No.	:
	f) Labour License Details	:
	g) Electrical A grade License Details	:
	h) Branch Office if any in Hyderabad	:
3.	Type of Organization (Proprietorships / Partnership) Ltd. Co. / Co-Operative) (Copy of relevant document to be enclosed)	:
4.	Date of Incorporation	:
5.	Nature of Business	:
6.	Experience as prime Agencies/ Contractors (in Yrs.)	:
7.	Name and address of Bankers	:
8.	Organization chart of the Company including names and positions of directors / key personnel	:



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - **500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

#### SCHEDULE - B

#### Major Electrical works (Copies of the completion certificate to be enclosed)

A. Similar work of costing Rs.11.98 lakhs or two similar works of costing Rs.8.99 lakhs or 3 similar works of costing Rs.5.99 Lakhs during last 7 financial year ending March 31st 2023 for Research Institutes, Universities, Private Laboratories, R & D institutes, etc

Sr.No	Name of the project & Address	Descriptio n of work in brief	Name of the Engineer	Name of the client also indicate whether Govt or semi Govt or Pvt body with	Contra ct Amount in Rs.	Year of commenc ement	ommenc		Whether work was left /uncompleted or the contract was terminated from either side? Give	Any other relevant informatio n relevant informatio
1.				full postal address					side? Give Details.	n

B. List of works in progress above Rs.5.99 Lakhs.

Sr No.	Name of the project & Address	Description of work in brief	Name of the Engineer with full postal address.	Name of the Client. Also indicate whether Govt. or semi Govt. or Pvt. Body with full postal address	Contract Amount in (Rs.)	Date of Completion	Present stage of work with reasons if the work is getting delayed	Any other relevant information
1.								



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

#### SCHEDULE - C

#### **TECHNICAL PERSONNEL & SPECIAL EXPERIENCE**

List of technical personnel in your establishment giving details about their technical qualification and experience

Sr No.	Name	Age	Qualifications	Project Experience	Nature of works handled	Name of the project Handled	Date from which employed in your organization	Indicate special experience in Electrical Installation & Testing projects in which were employed
1								
2								

2.	Indicate other points if ar	v to show your	technical and m	anagerial comp	etency to indicate	any importan	t point in your favou	ur.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - **500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

#### SCHEDULE - D

## **FINANCIAL POSITION AND WORKING RESULTS**

2021-22 2022-23 2023-24

1 Annual turnover : Rs.

2. Net Profit : Rs.

3. Credit Facilities from the Bank : Rs.

a) Cash Credit : Rs.

b) Overdraft Limit : Rs.

c) Guarantee : Rs.

d) Others : Rs.

4. Certificate from the : Enclosed (Yes / No)

Bankers regarding financial soundness of the applicant

5. Solvency Certificate from the : Enclosed (Yes / No)

Bankers



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

# SCHEDULE – E MISCELLANEOUS INFORMATION

Whether it would be possible to process Bank Guarantee for various advances during execution of the work.

Details of Civil Suits / Litigations arised during execution of the contracts in the last 5 years.

3 Latest Income Tax Clearance Certificate

A Name of the two senior official of Organizations preferably Govt./Semi Govt/ Autonomous/ Public Sector Organization for whom you have executed important and major Electrical works, who may be directly contracted by TIFR to gather information about your ability, competence and capacity of your work/organization/etc.

5 Number of Supplementary sheets attached.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046 Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

SECTION-III NOTICE & INSTRUCTIONS

**1. Sealed item rate tenders** in the prescribed form are invited from Head-Technical Services, Tata Institute of Fundamental Research, Centre for Interdisciplinary Services, Hyderabad, for the following:

Tender Notice No.	TIFR/PD/CF25-68/250546
Name of Work	Supply, Installation, Testing & Commissioning of Additional Electrical works for Petawatt Laser Lab Ground Floor, Plot-B, TIFR, Survey No. 36/P, Gopanpally (Village), Serilingampally (Mandal), Ranga Reddy Dist., Hyderabad- 500046
Estimated Cost	Rs.14,98,180/-
Time Limit	90 days (Completion Period)
Earnest Money Deposit	Rs. 29,964/- (Demand Draft to be drawn in favour of "TIFR Center for Interdisciplinary Sciences", Payable at Hyderabad (To be enclosed with the Technical Bid Part – I)
Last Date & Time of Submission of Tender	31.07.2025 by 13:00 Hrs
Date & Time of Opening of Technical Bid	31.07.2025 at 15:00 Hrs

#### 2. Submission of Tender & Opening:

Tenders shall be submitted in a sealed envelope super scribed with Tender enquiry No., Due Date and with heading as "Supply, Installation, Testing & Commissioning of Additional Electrical works for Petawatt Laser Lab Ground Floor, Plot-B, TIFR, Survey No. 36/P, Gopanpally (Village), Serilingampally (Mandal), Ranga Reddy Dist., Hyderabad- 500046" containing two separate sealed covers clearly super scribed as "TECHNICAL BID" and "FINANCIAL BID" on or before the closing date and time of submission in the following manner:

"TECHNICAL BID": This will contain the following:

- a) Proof of Tender Cost paid already
- b) Earnest Money Deposit as stipulated



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

c) Schedules giving information on Eligibility Criteria with supporting documents specified for tender qualification.

"FINANCIAL BID": Signed copy of the Financial Bid quoting amount in the stipulated format and signed copies of the tender drawings.

**5. Acceptance of Tender:** The competent authority, on behalf of TIFR, Hyderabad does not bind itself to accept the lowest or any other tender, and reserves to himself the authority to reject any or all the tenders received, without assignment of any reason. All tenders, in which any of the prescribed conditions is not fulfilled or any condition, including that of conditional rebates, is put forth by the tenderer, shall be summarily rejected.

The Competent Authority, on behalf of TIFR, Hyderabad reserves to itself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rates quoted. The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest tender or any other tender.

**6. Validity of Tender:** The tender for the work shall remain open for acceptance for a period of 75 days from the last date of submission of tenders. If any tenderer withdraws his tender before the said period, or before issue of Letter of Intent, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the Department, then TIFR, Hyderabad shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money absolutely. Further the tenderer shall not be allowed to participate in the retendering process of the work.

#### 7. Levy / Taxes payable by contractor:

- i. GST or any other tax on materials and services in respect of this contract shall be payable by the contractor and TIFR shall not entertain any claim whatsoever in this respect.
- ii. The contractor shall deposit royalty and obtain necessary permits as required for supply of the sand, aggregate, stone etc. from local authorities.
- **8. Deduction of Income Tax**: As per Section 194-C of Income tax Act 1961, as amended by letter No. 275/9/72/9-TJ (Circular No. 86) dated 19.5.72 and No. 275/14/91-IT (B) (Circular No. 593) dated 5.2.91, received from Ministry of Finance, Department of Revenue, Central Board of Direct Taxes, New Delhi, the Income tax @ 2% and Surcharge thereon @12% (or any other amended rate by Ministry of Finance from time to time), of the gross value of the work done will be recovered from the bills. A certificate for the amount so recovered will be issued by the Department.
- **9. Site visit by the tenderer before tendering:** Tenderers are advised to inspect and examine the site and its surroundings during working hours and satisfy themselves before submitting their



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

tenders as to the nature of the ground and subsoil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed.

- **10. Signing of Tender and receipts for payments:** In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power-of-attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act-1952. Receipts for payments made on account of work, when executed by a firm, must also be signed by all the partners, except where contractors are described in their tender as a firm, in which case the receipts must be signed in the name of the firm by one of the partners, or by some other person having due authority to give effectual receipts for the firm.
- 11. Tenderer's responsibilities: The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that they have read this notice & all other contract documents, and has made himself aware of the scope & specifications of the work to be done and local conditions and factors having a bearing on the execution of the work.
- **12. Signing of contract:** The Notice Inviting Tender shall form a part of the contract document. The successful tenderer / contractor, on acceptance of his tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of: the Notice Inviting Tender, all the documents including all conditions, specifications and drawings, if any, forms the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
- **13. Canvassing,** either directly or indirectly, in connection with the tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection and may be barred from future participation in TIFR works.

**Head-Technical Services** 

For and on behalf of **TIFR**, **Hyderabad** 



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046 Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

#### **SECTION-IV**

#### **GENERAL CONDITIONS OF CONTRAC**

#### 1. Definition of Terms:

- 1.1. In constructing these general conditions and the specifications the following works shall have the meanings herein assigned to them unless there is something in the subject or context inconsistent with such construction.
- 1.2. The `Purchaser' shall mean Tata Institute of Fundamental Research -- Hyderabad, Tata Institute of Fundamental Research, 36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad 500046 and shall include the Purchaser's heirs, successors and assigns.
- 1.3. The term 'Engineer In-Charge' and `Engineer' shall mean Engineer In-Charge, TIFR- Hyderabad or some other person for the time being or from time to time duly appointed in writing by the Purchaser to act as Engineer In-Charge for the purpose of the Contract or in default of such appointment the Purchaser.
- 1.4. The term `Contractor'/`Supplier'/`Bidder'/`Vender' shall mean the Bidder whose tender has been accepted by the Owner and shall include the Bidder's heirs, successors and assigns approved by the Purchaser:
- 1.5. The term `Sub-Contractor' shall mean the firm or persons named in the contract for any art of the work or any person to whom any part of the work has been sublet with the consent in writing of the Engineer In-Charge and shall include his heirs, successors and assigns approved by the Purchaser.
- 1.6. The Term 'Inspector' shall mean any person appointed by or on behalf of the Purchaser to inspect supplies, stores or work under the contract or any person deputed by the Inspector for the purpose.
- 1.7. The term 'Particulars' shall mean, the following:
- 1.7.1. Specifications
- 1.7.2. Drawing (ANNEXURE-IV)
- 1.7.3. Sealed Pattern denoting a pattern sealed and signed by the Inspector.
- 1.7.4. Proprietary make denoting the product of an individual firm.
- 1.7.5. Any other details governing the construction, manufacture and/or supply as existing for the contract.
- 1.8. The term 'Specification' shall mean the specifications annexed to or issued with these Conditions of Contract.
- 1.9. The term 'Site' shall mean the place or places at which the Equipment is to be delivered or work done by the Contractor; and shall include, where applicable, the lands and buildings upon or in which the works are to be executed and shall also include the place or places at which fabrication and other work is being carried out by the Contractor.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046 Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

- 1.10. `Electrical Equipment', `Stores', `Work' or `Works' shall mean and include equipment and materials to be provided and work to be done by the Contractor under the Contract.
- 1.11. The 'Contract' shall mean acceptance of the work order placed on contractor/supplier under section (2) of these conditions and shall include these conditions of Contract, Specifications, Schedule, Drawing, Letter of Intent of the Purchaser and any subsequent amendments mutually agreed upon.
- 1.12. 'Tests on Completion' shall mean such tests which are prescribed by the specifications or have been mutually agreed to between the Contractor/Supplier and the Purchaser to be made before the equipment is taken over by the Purchaser.
- 1.13. Writing' shall include any manuscript, typewritten or printed statement under or over signature or seal as the case may be. Words importing 'person' shall include firms, companies, corporations and association of individuals whether incorporated or not.
- 1.14. Words importing singular shall also include plural and vice versa where context requires.
- 1.15. Bidders are advised to visit and inspect the work-site to make themselves fully conversant with the site conditions and nature of work. Any claim by them after the opening of bids on account of themselves being unaware of any site condition shall not be entertained.

#### 2. Contract

Contractor/Supplier/Manufacturer should send their acceptance letter on receipt of `Letter of Intent' or 'Work Order' or 'Purchase Order' within the stipulated period. On expiry of said period or exorbitant delay in commencing or executing the work, the Purchaser shall not be liable to any claim from the Contractor/ Supplier for work entrusted to and may revoke the contract.

#### 3. Work at Site

- 3.1. Access to the works shall be allowed only to the Contractor/Supplier, Sub-Contractors or his duly appointed representatives. The Contractor/ Supplier shall not object to the execution of other works by other contractors or tradesmen and shall afford them every facility for execution of their several works simultaneously with his own.
- 3.2. Work at the Purchaser's premises shall be carried out at such time as the Purchaser may approve but the Purchaser shall give the Contractor/ Supplier all reasonable facilities for the same. The Contractor/Supplier shall provide sufficient fencing, notice boards etc. to guard the works and warn the public.
- 3.3. The Contractor shall obey Central, Local and State regulations and enactments pertaining to workmen and labour and the Engineer In-Charge shall have the right to enquire into and decide all complaints on such matters. The Contractor should comply with the Minimum Wages Act and should also ensure that safe practices are followed by his people at site.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - **500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

## 4. Delays

The Contractor/Supplier shall not be entitled to any compensation for any loss suffered by him on account of delays in commencing or executing the work, whatever the cause for such delays may be, including delays in procuring Government controlled or other materials and delay in obtaining instructions and decisions from the Engineer In-Charge.

## Taking Over

The equipment when erected at site shall be deemed to have been taken over by the Purchaser when the Engineer In-Charge will have certified in writing that the equipment has fulfilled the contract conditions.

#### 6. Extension of Time

If the Contractor/Supplier is delayed in the progress of work by changes ordered in the work, or by any cause, which the Engineer In-Charge shall decide to justify the delay, then the time of completion shall be extended by a reasonable time. In this regard, Contractor shall maintain proper hindrance register and record all such events with due signature of E-I-C on occurrence of such instants for seeking extension of time. However, no such extension shall be allowed unless requested for extension is made in writing by the Contractor/Supplier to the Engineer In-Charge within 15 days from the date of occurrence of the delay.

#### 7. Liquidated Damages

- 7.1. For all delays, which do not merit any extension of time, the Contractor/ Supplier shall attract 1% penalty per week for the first 4 weeks of delay and 2% penalty per week for the next 4 weeks of the total contract value. The amount of liquidated damages shall be recoverable from the payment due to the Contractor/Supplier up to maximum of 10% of value of contract.
- 7.2. The deduction of liquidated damages shall not, however, absolve the Contractor/Supplier of his responsibility and obligations under the contract to complete the work in its entirety and shall also be without prejudice to action by the Purchaser under clause:

`Termination of Contract by the Purchaser'. After that the same shall be completed by the Purchaser at the Contractor's/Supplier's risk and cost.

# 8. Other Damages:

8.1. The Contractor/Supplier/Manufacturer shall be responsible for all injury to persons, animals or things and for all damage to the works, structure of, and decorative work in the property which may arise from operation or neglect of himself or any of his Subcontractor or of his or Sub-Contractor's employees, whether such injury or damage may arise from carelessness, accident or any other cause whatever in any way connected with the carrying out of this contract. This clause shall be held to include any damage to buildings, whether immediately adjacent or otherwise, any damage to roads, streets, foot paths, as well as all damage caused to the works forming the subject of this contract by frost or other inclemency of weather. The Contractor/Supplier shall indemnify the Purchaser and hold him harmless in respect of all and any expenses on property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of Government or otherwise and also in respect of any award of



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046 Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

compensation or damages consequent upon such claim. Contractor shall furnish necessary insurance documents (Contractor All Risk Policy) taken for the site before commencement of work.

- 8.2. The Contractor/Supplier/Manufacturer shall reinstate all damage of every sort mentioned in this clause, so as to deliver up the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of the Owner/third parties.
- 8.3. The Contractor/Supplier/Manufacturer shall indemnify the Purchaser against all claims which may be made against the Purchaser, by any member of the public or other party, in respect of anything which may arise in respect of the works or in consequence thereof and shall, at his own expense, effect and maintain, until the work has been 'Taken Over' under clause 5.
- 8.4. The Contractor/Supplier/Manufacturer shall also indemnify the Purchaser against all claims which may be made upon the Purchaser whether under the Workmen's Compensation Act or any other statute in force during the currency of this contract or at common law in respect of any employee of the Contractor/Supplier or of any of his sub-contractor and shall at his own expense effect and maintain until the work has been `Taken Over', with an approved office. Contractor shall furnish a copy of the labour license before commencement of work. If the aforesaid are not applicable contractor should furnish declaration to this effect and shall indemnify TIFR-Hyderabad, Hyderabad for violation of any such compliances.
- 8.5. The Purchaser, with the concurrence of the Engineer In-Charge, shall be at liberty and is hereby empowered to deduct the amount of any damages compensation costs, charges and expenses arising or accruing from or in respect of any such claims or damages from any sums due to or become due to the Contractor/Supplier.
- 9. Earnest Money Deposit and Performance Guarantee/Security Deposit:
- 9.1. **Earnest Money Deposit (EMD):** EMD shall be submitted in the form of Demand Draft to be drawn in favour of "TIFR Centre for Interdisciplinary Sciences", Payable at Hyderabad (To be enclosed with the Technical Bid Part-I))
- 9.2. **Performance guarantee:** The tenderer, whose tender is accepted, will be required to furnish a performance guarantee/security deposit of **2.5% of the tendered amount within 7 (seven) working days from the date of intimation** ie (including adjustment of EMD amount submitted). This guarantee shall be in the form Demand Draft / Pay Order / Banker's cheque / Deposit or Government Securities / Fixed Deposit Receipt (FDR) or Guarantee Bonds (BG) of any Scheduled Bank in accordance with the form as Annexure II hereto. In case a fixed deposit receipt of any Bank is furnished by the contractor to TIFR as part of the performance guarantee and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to TIFR to make good the deficit.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

- 9.3. The Performance Guarantee shall be initially valid up to the stipulated date of completion plus 60 days beyond that. In case the time for completion of work gets enlarged, the contractor shall get the validity of performance Guarantee extended to cover such enlarged time for completion of work. The performance guarantee/security deposit shall be returned to the contractor, without any interest, after recording of the completion certificate for the work by the competent authority.
- 9.4. The Engineer-in-charge shall make a claim under the Performance guarantee/Security Deposit for amounts to whichTIFR entitled under the contract (notwithstanding and / or without prejudice to any other provisions in the contract agreement) in the event of:
- 9.4.1. Failure to attend and rectify the problems in the guarantee period, in which event the Engineer-in-charge may claim the full amount of the Performance guarantee/Security Deposit.
- 9.4.2. Failure by the contractor to pay TIFR, Hyderabad any amount due, either as agreed by the contractor or determined under any of the Clauses / Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-charge.
- 9.5. In the event of the contract being determined under provisions of any of the relevant clauses of the agreement, the performance guarantee/security deposit shall stand forfeited in full and shall be absolutely at the disposal of TIFR, Hyderabad.

# 1. Security Deposit:

The tenderer, whose tender is accepted, will also be required to furnish by way of **Security Deposit for fulfillment of his contract, an amount equal to 5% of the value of the work order**. Earnest Money deposited at the time of tenders will be treated as part of the Security Deposit.

or

The successful tenderer shall permit TIFR, Hyderabad at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 5% of the gross amount of each running bill till the sum along with the sum already deposited as earnest money, will amount to security deposit of 5% of the value of the work order. Such deductions will be made and held by TIFR by way of Security Deposit unless he has / they have deposited the amount of Security at the rate mentioned above in cash or in the form of Fixed Deposit Receipts.

In case a fixed deposit receipt of any bank is furnished by the contractor to TIFR, Hyderabad as part of the security deposit and the bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to TIFR, Hyderabad to make good the deficit.

All compensation or the other sums of money payable by the contractor under the terms of this contract may be deducted from, or paid by the sale of a sufficient part of his security deposit or from the interest arising there from, or from any sums which may be due to or may become due to the contractor by TIFR or any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions or sale as aforesaid, the contractor shall within 10 days make good in cash or



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046 Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

fixed deposit receipt tendered by the State Bank of India or by scheduled banks (if deposited for more than 12 months) endorsed in favour of the TIFR, HYDERABAD, any sum or sums which may have been deducted from, or raised by sale of his security deposit or any part thereof.

Security Deposit shall be initially valid up to one year from the date of completion of work. In case the time for completion of work gets enlarged, the contractor shall get the validity of Security Deposit extended to cover such enlarged time for completion of work. The Security Deposit shall be returned to the contractor, without any interest, after completion of defect liability period.

Security Deposit as deducted above can be released against Bank Guarantee issued by a Scheduled Bank on its accumulation to a minimum of Rs.5 Lakhs subject to the condition that amount of such Bank Guarantee, except last one, shall not be less than Rs.5 Lakhs.Bank Guarantee should be submitted which will be valid up to the expiry of defect liability period.

## 10. Guarantee and Defects Liability Period:

- 10.1. The Contractor/Supplier/Manufacturer shall guarantee that all equipment shall be free from any defect due to the defective materials and bad workmanship and that the equipment shall operate satisfactorily and that the performance and efficiencies of the equipment shall be not less than the guaranteed values. The guarantee shall be valid for a period of 12 months after the date of commissioning as certified by the Engineer In-Charge. Any parts found defective shall be replaced free of all costs by the Contractor/Supplier. The services of the Contractor's/Supplier's personnel if requisitioned during this period for such work shall be made available free of any cost to the Purchaser.
- 10.2. If the defects be not remedied within a reasonable time, the Purchaser may proceed to do so at the Contractor's/Supplier's risk and expense without prejudice to any other rights.

#### 11. Terms of Payment

The contractor will be paid only Two Running Account (RA) Bills and Final Bill considering the progress of works based on measurement of works completed. The contractor shall submit the bills for payments along with a detailed statement showing the actual works carried out under different heads of items in the format specified by TIFR-, Hyderabad. Minimum value of the work for interim payment shall be 30% on Work order value.

#### **BILL FORMAT**

Tender Ite	Description of Item (A least 2 lines)	<u>Unit</u>	Tender Qty	Executed Qty	<u>Rate</u>	% work done	<u>Amount</u>

NOTE: All quantities in the bill should be cumulative.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - **500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

All measurements should be in the order of tender sequence and should be recorded in the measurement book. The Measurement should be strictly in the below mentioned format only.

#### MEASUREMENT FORMAT

Tender Iter No.	Description of Item & Location against each Measurement taken	Nos.	Length	Breadth /width	Height	Qty.	Remarks

The works which have been certified for running bills will also be verified along with the final bill and any defects found need to be replaced / rectified by the contractor at his cost. Till the time, the site is handed over in full, it is the contractor's liability to safeguard the works done and completed at site. The Progress of work should not be affected in any way quoting the reason of non-availability of funds / materials / releasing of Running bill. The liability of the contractor is to complete all works in his scope in the scheduled time as per the terms of contract and will not relieve the contractors from his obligations once the Running bill is paid / kept pending.

#### **Final Payment**

Payments of Final bill shall be made after deduction of Performance guarantee as specified. The Security Deposit / Performance guarantee, shall be refunded on expiry of the Defects Liability Period after rectifying all defects to the satisfaction of the TIFR-Hyderabad/E.I.C. The acceptance of payment of the final bill by the Contractor would indicate that he would have no further claim in respect of the work executed.

#### 12. Special conditions of Contract governing supplies of the Equipment of this Tender:

# 12.1. **Scope:**

- 12.1.1. This specification covers the supply of material as per the enclosed details and quantities and supervision of erection/installation, testing and commissioning of the material.
- 12.1.2. The Contractor/Manufacturer/Supplier shall quote for all the materials along with accessories as mentioned in the enquiry.
- 12.1.3. All the supply shall be in accordance with relevant I.S. Specifications and recognized standards.
- 12.2. Inspection & Testing of Material:
- 12.2.1. Contractor/Manufacturer/Supplier shall submit the lists of Type Tests and Routine Tests to be conducted on the material in the Technical Data Sheet.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

- 12.2.2. All the materials shall be tested at factory as per IS Specifications of material by Purchaser's Engineer In-Charge/Engineers before dispatch at the cost of Contractor/Manufacturer/Supplier.
- 12.2.3. Contractor/Manufacturer/Supplier shall inform the concerned Engineer In-Charge for inspection and testing in accordance and fix up a suitable date for the same.

#### 12.3. Test Certificates:

Contractor/Manufacturer/Supplier shall submit the Test Certificates of all materials.

## 12.4. **Delivery of Material:**

- 12.4.1. The Contractor/Manufacturer/Supplier shall arrange for safe transit and shall be held responsible for loading of all equipment and for the stores being sufficiently and properly packed for transport by rail, road, sea or air so as to ensure their being free from any loss or damage on arrival at destination. The packing and marking of packages shall be done by and at the expenses of Manufacturer/Supplier. Each package shall contain a packing note quoting purchase order number and detail of the contents.
- 12.4.2. All the materials must be delivered at site i.e. Hyderabad TIFR at 36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046. The unloading and positioning of all equipment at the designated locations specified by the Engineer In-Charge shall be in the scope of the Supplier. The Supplier shall arrange for handling equipment, labour for rigging, etc. as required.
- 12.4.3. Material must be delivered at site in all respects as mentioned in the Purchase Order.
- 12.4.4. Contractor shall arrange necessary storerooms and security at site to store materials. TIFR shall not be responsible for any missing/theft of materials at site.

#### 12.5. Guarantee:

If during the period of guarantee any fault or defect arises, the material shall be replaced/repaired immediately free of cost, as well as any replacement of accessories required shall be done free of cost.

12.6. **Mistake in Drawing:** The Contractor/Supplier shall be responsible for and shall pay for any alterations in works due to any discrepancies, errors or omissions the drawings or other particulars supplied by him whether such drawings or particulars have been approved by the Purchaser or not.

#### 12.7. Responsibility for Completeness:

Any fittings or accessories which may not be specifically mentioned in the specifications but which are usual or necessary are to be provided by the Contractor/Supplier without extra charge and the equipment must be complete in all details.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

#### 12.8. Extra/Deviation items & Variations in quantity

TIFR-Hyderabad has the right to omit/delete any of the items and also increase/decrease the quantities mentioned in the tender. No claim or any compensation in this regard will be accepted or paid to the contractor. However, if any new /additional items/deviated items are to be executed, the contractor is bound to execute such items with prior approval from TIFR-Hyderabad after furnishing the proper rate analysis for such extra/deviated items

# 12.9. Rejection of Defective Equipment:

- 12.9.1. If the equipment after the acceptance thereof is discovered to be defective, notwithstanding that such defects could have been discovered at the time of inspection or found to have failed to fulfill the requirements of the contract or developed defects after the erection within a period of 12 months from the date of erection, even if such erection is done by the Purchaser, he shall be entitled to give a notice on the Contractor/Supplier setting forth details of such defects or failure and the Contractor/Supplier shall, provided such notice is given within a period of 14 months from the date of such erection or acceptance, forthwith make the defective equipment good or alter the same to make it comply with the requirements of the contract at his own cost and further if in the opinion of the Purchaser, the defects are of such a nature that the defects cannot be made good or required without impairing the efficiency or workability of the equipment or if in the opinion of the Purchaser the Equipment cannot be repaired or altered to make it comply with the requirements of the Contract, the Contractor/Supplier shall, provided a notice given by the Purchaser in this behalf within a period of 14 months from the date of erection or acceptance thereof, remove and replace the same with the equipment conforming to the stipulated particulars, in all respects at the Contractor's/Supplier's own cost. Should he fail to do so within a reasonable time, the Purchaser may reject and replace, at the cost of the Contractor/Supplier. with equipment of the same particulars or if equipment conforming to the stipulated particulars are not in the opinion of the Purchaser readily procurable, such opinion being final, then with the nearest substitutes.
- 12.9.2. In the event of such rejection the Purchaser shall be entitled to use the Equipment in a reasonable and proper manner for a time reasonably sufficient to enable him to obtain replacement equipment as herein before provided.

#### 12.10. Inspection and Final Tests:

All tests necessary to ensure that the Equipment complies with the particulars and guarantee shall be carried out at such place or places as may be determined by the Inspector. Should, however, it be necessary for the final test as to performance or guarantee to be held over until the Equipment is erected at site they shall be carried out within one month of completion of erection.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

#### 12.11. Intimation about Delivery:

If the Purchaser shall have notified the Contractor/Supplier in writing that the former is not ready to take delivery, no equipment or materials shall be forwarded until an intimation in writing shall have been given to the Contractor/Supplier by the Purchaser that he is ready to take delivery.

#### 12.12. **Delay in erection:**

Wherever erection of an equipment or machinery is the responsibility of the Contractor/Supplier as a term of the contract and in case the Contractor fails to carry out the erection as and when called upon as to do within the period specified by the Purchaser, the Purchaser shall have right to get the erection done through any source of his choice. In such an event, the Contractor/Supplier shall be liable to bear any additional expenditure that the Purchaser may incur towards erection. The Contractor/Supplier shall, however not be entitled to any gain due to such an action by the Purchaser.

#### 12.13. **Definition of Equipment:**

The work 'Equipment' wherever, it appears in these 'Special Conditions of Contract' governing supplier of Equipment in this Tender shall mean all switchgears, panels, etc. or parts thereof or what the Contractor/Supplier agrees to supply under Contract as specified in the work order.

#### 12.14. Force Majeure:

Normally Force Majeure shall cover only acts of God, fire, wars, strike, riots and civil commotion, floods, epidemic, quarantine related strikes, freight embargoes, etc. The contractor shall not be liable for any liquidated damages for delay or any failure to perform the contract arising out of Force Majeure conditions, provided that the contractor shall within ten days from the beginning of such delay notify the department in writing the cause of delay along with convincing supporting evidence. The department once convinced and accepted the reason may extend the supply completion period by a suitable / reasonable margin.

# 12.15. **Termination of Contract by the Purchaser:**

12.15.1. If the Contractor/Supplier commits any `Act of Insolvency' or shall be adjudged an Insolvent or shall have an order for compulsory winding up made against him or pass effective resolution for winding up voluntarily, or if the Contractor/Supplier shall suffer any payment under this contract to be attached by or on behalf of any of the creditors of the Contractor/ Supplier, or shall assign the Contract without the prior consent in writing of the Engineer In-Charge, or shall charge or encumber this Contract or any payments due or which may become due to the Contractor/Supplier there under, or if the Engineer In-Charge shall certify in writing to the Purchaser that the Contractor/Supplier —



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046 Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

12.15.1.1. has abandoned the Contract, or

- 12.15.1.2. has failed to commence the works, or has without any lawful excuse these conditions suspended the progress of the works for seven days after receiving from the Engineer In-Charge written notice to proceed, or
- 12.15.1.3. has failed to proceed with the work with such due diligence and failed to make such due progress as would enable the works to be completed in accordance with the approved programme of work,, or
- 12.15.1.4. has failed to remove materials from the site or to pull down and replace work for seven days after receiving from the Engineer In-Charge written notice that the said materials or work were condemned and rejected by the Engineer In-Charge under these conditions, or
- 12.15.1.5. has neglected or failed persistently to observe and perform all or any of the acts matters or things by this contract to be observed and performed by the Contractor for seven days after written notice shall have been given to the Contractor/ Supplier requiring the Contractor/Supplier to observe or perform the same, or
- 12.15.1.6. has to the detriment of good workmanship or in defiance of the Engineer In-Charge's instructions to the contrary sub-let any part of the contract, then and in any of the above said causes, the Purchaser with the written consent of the Engineer In-Charge may, notwithstanding any previous waiver, after giving seven days' notice in writing under the provisions of this clause to the Contractor/Supplier, determine the contract but without prejudice to the powers of the Engineer In- Charge or the obligations and liabilities of the Contract, the whole of which shall continue to be in force as if the contract has not been so determined and as if the work subsequently executed has been executed by and on behalf of the Contractor/ Supplier.
- 12.15.2. After the issue of such notice, the Contractor/Supplier shall not be at liberty to remove from site any equipment, tools and materials belonging to him which shall have been placed thereon for the purpose of the works and the Purchaser shall have lien upon such equipment, tools or materials to subsist from the date of such notice and until the notice shall have been complied with.
- 12.15.3. If the Contractor/Supplier shall fail to comply with the requirements of said notice for seven days after such notice has been given, the Purchaser shall have the power to enter upon and take possession of the works and site and all equipment, tools and materials thereon, and to engage any other person, firm or agency to complete the works, utilizing the equipment, tools and materials to the extent possible. The Purchaser shall not in any way be responsible for damage or loss of the tools, equipment and materials and the Contractor/Supplier shall not have any compensation therefore.
- 12.15.4. Upon completion of the works, the Engineer In-Charge shall certify the amount of expenditure properly incurred consequent on and incidental to the default of the Contractor/Supplier as aforesaid and such amount shall be deducted from the payments due to the Contractor/Supplier, including the Security Deposit. If the said amount exceeds the payment due to the Contractor/Supplier, the Purchaser shall be at liberty to dispose off any of the



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

Contractor's/Supplier's materials, tools or equipment and apply the proceeds for the payments due from the Contractor/Supplier and recover the balance by process of law.

12.15.5. After the works have been completed after the amounts due to the Contractor/Supplier, the Engineer In- Charge shall give notice in writing to the Contractor/Supplier to remove the surplus equipment and material from site. If such equipment and materials are not removed within a period of 14 days after such notice, the Purchaser shall have the power to remove and sell the same holding the proceeds less the cost of removal and sale, to the credit of the Contractor/Supplier. The Purchaser shall not be responsible for any loss sustained by the Contractor/Supplier from the sale of the equipment and material.

#### 13. Contractor's Representative:

- 13.1. The Contractor/Supplier shall employ at least one qualified representative (ie. Electrical supervisory License with minimum 3 years of experience of similar works as stipulated by TIFR-Hyderabad in the work order) whose name shall have previously been communicated in writing to the Engineer In-Charge and approved by him to supervise the erection. Any written order or instructions given to the representative shall be deemed to have been given to the Contractor/Supplier. The Engineer In-Charge shall be at liberty to object to any particular representative/or any persons employed by the Contractor/Supplier on the work and the Contractor/Supplier shall remove the person objected to, on the receipt of the Engineer In-Charge, in writing, a request requiring him to do so and shall provide in his place another competent representative acceptable to the Engineer In-Charge.
- 13.2. The Contractor's/Supplier's representative shall be a qualified electrical/ mechanical engineer possessing adequate site experience in similar nature of works.

#### 14. Completion Time:

Unless otherwise agreed in writing between the Purchaser and the Contractor/Supplier, the work contract shall be completed within the stipulated period mentioned elsewhere in this tender document from the date of Work/Purchase Order issued to Contractor/Supplier by the Purchaser.

#### 15. Measurements:

All joint measurements of quantities shall be done by the Contractor at his own cost in the presence of the Engineer In-Charge or any authorized person deputed by him who will certify the routes, length and quantities etc. for the purpose of determination of the amount payable.

#### 16. Spare Parts & Manuals:

Manufacturer/Contractor/Supplier should submit operation, maintenance and spare part list and manuals for all equipment.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046 Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

#### 17. Training:

Manufacturer/Contractor/Supplier should provide training for operation and maintenance free of cost for equipment supplied.

#### 18. Special Instruction for bidding process

This tender is a two part tender. The Part-I: Technical Bid and Part-II: Financial Bid. Bidders shall seal each bid separately with a clear label on the envelope about its content. Both the bids should be submitted in a single drop two cover method. Any pricing details must not appear in the Part-I: Technical Bid.

#### 19. Drawings and Documentation:

As-built drawings as specified in this technical specifications shall be submitted by the Contractor.

#### 20. Permissions and Approvals:

All statutory permissions and approvals from Electricity authority as may be required for commissioning of the entire system shall be carried out by the contractor. All necessary documentation for obtaining such permissions and approvals shall be done by the contractor. Purchaser shall assist in providing required declarations. Statutory fees shall be paid by the purchaser.

#### 21. Guarantee:

The equipment shall be guaranteed against all design and manufacturing defects, poor workmanship etc. for a period of 12 months from the date of commissioning or 18 months from the date of supply, whichever is earlier. Any defects discovered during this period shall be rectified by the vendor free of cost to the purchaser.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

SECTION-V

# **TECHNICAL SPECIFICATION**

## 5.1 Scope of Works

- 5.1.1 Supply, Installation, Testing and Commissioning of 1.1KV grade armoured/unarmoured XLPE/PVC LT cables in ground/wall/false ceiling to draw power from DBs to individual rooms, and circuits for power & lighting.
- 5.1.2 Supply, Installation, Testing and Commissioning of DB with Industrial Plug & Socket along with MCBs along with internal Wiring with suitable rating cables/wires as per the BOQ.
- 5.1.3 Supply, Installation, Testing and Commissioning of Pendent Type Switch boards along with Powder coated rectangular MS box providing 6 Module plates two sides (One side with 1No of 16/20A Switch, 2 Nos of 16/20A Sockets, 1 No Network Port and Second side with 1No of 16/20A Switch, 2 Nos of 16/20A Sockets, 1 No Network Port) and other four sides closed type and top side surface mounting provision to Puff Panel Ceiling including all required hardware etc as per the BOQ.
- 5.1.4 Supply, Installation, Testing and Commissioning of MCCB/MCB with MS Enclosure and distribution Boards as per the BOQ
- 5.1.5 Supply, Installation, Testing and Commissioning of LED light fixtures to maintain the required lux level in hostel rooms & other common areas.
- 5.1.6 Supply, laying, Fixing of Heavy Duty PVC conduit and other related works etc.

**Other Works:** All other civil works which might not have been specifically mentioned in the specifications and in the Schedule of quantities but are essential for operational requirements of the entire system shall be in the scope of work. Bidder shall specifically bring out such items in Technical bid and submit quote in separate sheet along with the Financial Bid.

5.1.7

#### **ELECTRICAL WORKS**

#### Scope:

This specification is intended to cover the requirements of supply, installation, testing and commissioning of electrical wiring installation and other accessories required for its satisfactory operation. This covers the essential requirements or precautions regarding wiring installations for ensuring satisfactory and reliable service.

#### Standards:

The Electrical wiring installations and other accessories shall comply with latest IS: 732 - 1989 and National Electrical code – 1985 and to the latest amendments from time to time.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

#### Lamps:

All Light Fixtures, unless otherwise specified shall be hung at a height of not less than 2.5 m above the finished floor level.

## **Recessed PVC conduit wiring system**

- a) Making of chase: The chase in the wall shall neatly be made and shall be of suitable dimension to permit the conduit to be fixed in the manner desired by the Engineer-in- charge. In the case of buildings under construction, chases shall be provided in the wall, ceiling, etc. at the time of their construction and shall be filled up neatly after erection of conduit and brought to the original finish of the wall.
- b) Fixing of conduit in chase: The conduit shall be fixed by means of staples or by means of saddles not more than 600 mm apart. Fixing of standard bends or elbows shall be avoided as far as practicable and all curves maintained by bending the conduit pipe itself with a long radius which will permit easy drawing-in of conductors. All the threaded joints of rigid steel conduits shall be treated with approved preservative compound to ensure protection against rust.
- c) Inspection boxes: To permit periodical inspection and to facilitate replacement of wires, suitable inspection boxes shall be provided at convenient locations. They shall be mounted in flush with the wall. The minimum size of inspection boxes shall be 75 x 75 mm. Suitable ventilating holes shall be provided in the inspection box covers.
- d) Types of accessories to be used: All outlets, such as switches and sockets, may be either of flush mounting type or of surface mounting type. The switches and other outlets shall be mounted on such boxes. The metal box shall be efficiently earthed with the earth continuity wire run along the conduit. When crossing through expansion joints in buildings, the conduit sections across the joint may be through flexible copper bellows of the same 33 size as PVC conduit. The Number of wires that can be drawn through a conduit shall be strictly as per IS 732 and as mentioned in Drawings.

#### **TESTING OF WIRING:**

The following tests shall be carried out on all types of wiring on completion of the work and before energizing the installation:

- i) Insulation resistance test.
- ii) Electrical continuity test,
- iii) Earth continuity test,
- iv) Earth electrode resistance test,
- v) Switch polarity test.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046 Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

i) Insulation Resistance test: The insulation resistance shall be measured by using 500 v megger between the following points. Phase and neutral conductor with all fuses in position and all switches in closed condition and main switch in OFF position with lamps and other devices removed. Between earth and the whole system of conductors with all fuses in place, all switches closed and all lamps in position. Between all conductors connected to one phase of the supply of the above tests shall not be less than 50 divided by the number of points on the circuit. Where a whole installation is being tested, a lower value than that given by the above formula is acceptable subject to a minimum of one mega ohm.

The insulation resistance in mega ohm as obtained by each of the above tests shall not be less than 50 divided by the number of points on the circuit. Where a whole installation is being tested, a lower value than that given by the above formula is acceptable subject to a minimum of one mega ohm.

- (ii) Electrical continuity test: Each and every circuit shall be tested for electrical continuity by using a multimeter.
- (iii) Earth continuity test: The earth continuity conductor including metal conduit shall be tested for electrical continuity and the resistance of the same along with the earthing lead measured from the connection with the earth electrode to any point in the earth continuity conductor in the complete installation shall not exceed one ohm.
- iv) Earth electrode resistance test: The earth electrode resistance shall be tested as specified in section (v). Switch polarity test: Test shall be made to verify that all switches in every circuit have been fitted in the same conductor throughout and such conductor shall be marked for connection to the phase conductor.

#### **Distribution Boards:**

All the distribution boards shall be with MCCBs/ MCBs as described in the respective schedule. The distribution boards shall be controlled by a switch fuse, miniature circuit breaker or an isolator as described in the respective schedule. Each outgoing circuit shall be provided either with MCB or a fuse on the phase. The neutral shall be connected to a common link and be capable of being disconnected individually for testing purposes. 34 The distribution boards shall be located as indicated in the respective electrical working drawings and as directed by Engineer - in - charge. The distribution boards shall be fixed on wall in the niche provided and marked with the details of circuits, source of supply, size of incoming wires Etc., All marking shall be clear and legible. The total load of the consuming devices shall be evenly distributed between the numbers of ways of distribution board. The consuming devices circuit shall be connected to the distribution board in proper sequence, so as to avoid unnecessary crossing of wires. Cables shall be connected to a terminal only by crimped lugs. Cables shall be rigidly fixed in such a manner that a clearance of at least 2.5cm is maintained between conductors of opposite polarity or phase and between the conductors and any material other than insulating material. The incoming and outgoing cables shall be neatly bunched.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

**MOUNTING HEIGHTS:** The Mounting heights of various fixtures shall be as specified in the Drawings. 10.Flexible conduits are strictly not envisaged, only industrial type GI Bind flexible conduit shall be used in a spot where the conduits and bends cannot be possible to run.

#### L. T. CABLES:

All power and distribution cables shall be 1100V grade, PVC / XLPE insulated and sheathed, armored/unarmoured, multi strand aluminum conductor/ copper conductor cables unless otherwise specified. All control cables shall be 1100V grade PVC insulated and sheathed unarmoured multi-strand copper conductor cables unless otherwise specified. The cables shall conform to IS 1554-1988 & IS 7098:1988 with up to date amendments. Type test certificates of the cables from manufacturers for the particular drums shall be provided. Shop inspection shall be offered for routine tests if specifically asked for.

#### LAYING:

- The cables shall be thoroughly inspected for transit damage and irregularity in sheath etc.
- Sufficient manpower with necessary equipment like jacks, rollers shall be provided for
- unwinding and laying the cables and dragging and twisting shall be avoided. Proper
- unwinding methods shall be used to avoid twists & cable should be meggered before starting laying.
- Cables shall be laid at a depth of at least 750mm from ground level with 50mm sand bedding, brick box with cushion for protection. Bending radius provision of at least 12 D shall be kept while laying. The trenches shall be filled and reinstated layer by layer leaving a crown on top.
- H.T. and L.T. cables shall not be laid in the same trench. When more than one cable is laid in the same trench a gap of at least 150 mm shall be kept between the cables.
- Cables laid on walls; trenches shall be supported at every 600mm for vertical run and every 450mm for horizontal run. Suitable clamps shall be provided for fixing and support. Vertical runs near ground level shall be protected by GI Pipes of suitable size up to the height of at least 1200 mm.
- The length of the cables in schedule will be approximate and actual site measurements shall be taken by contractor prior to cutting any cable.
- Cable identification tags shall be provided at appropriate locations throughout the length of cables and at both ends.

#### JOINTING:

Jointing or end termination of cables shall be done by a skilled person only. Straight through joints shall be avoided as far as possible. Heavy-duty compression type brass glands shall be used for all connections. Crimping type lugs with suitable brass/Chrome Plated hardware shall be provided for connections.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

The cables on panel side are connected to bus bars Cu or Al, Care should be taken to avoid heating & corrosion at the joints. All LT cable joints in outdoor and humid atmospheres shall be done with double compression glands only / if done by Single compression Gland should be accommodated by PVC HOOD Of Appropriate size.

#### **TESTING:**

Cables shall be meggered as soon as they are brought to site. Insulation resistance shall also be tested.

- a) After cutting.
- b) After laying and preparing the joint.

The following test shall be taken after completing the installation.

- a) Cable continuity.
- b) Earth continuity.
- c) Insulation resistance.

1000V megger shall be used for testing 3 phase 415 Volt systems. All HT cables shall be pressure tested after making the end joints at site. Insulation resistance tests shall be done by 5000V megger for all H.T. Cables.

#### SURFACE CONDUITING:

The surface conduits shall be fixed with help of 20 SWG saddles on spacers at every 600mm for vertical run and every 450 mm for horizontal run. The runs shall be straight with pull boxes and inspection type bends as required. Contractors are required to provide suitable sleeves for structural member crossing at the time of casting. No elbows shall be allowed.

In case of false ceilings the conduits shall run on walls/trusses/slabs above false ceiling level as far as possible. The connections between such runs and fixtures shall be made with flexible conduits.

#### **CONCEALED CONDUITING:**

The concealed conduit work shall be carried out along with construction of walls prior to plaster. The work covers chasing walls with wall cutters only if necessary fixing the conduits, boxes, and accessories, redoing the damaged surface using chicken mesh. All horizontal conduit runs shall be straight at wall point light level to necessary junction/pull boxes and then straight vertical drop to switch box if necessary.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेइडी जिला, हैदराबाद - **500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

The conduits shall be laid such that they are little below the brick level to avoid cracks. Elbow shall not be used and bends shall be avoided as far as possible using offsets. Pull boxes shall be provided at suitable locations. All necessary sleeves shall be provided in beams, columns, and prior to casting. Deep junction boxes only shall be used in slabs.

The pull and junction boxes shall not be clustered at one place and shall be so arranged that they should not be easily seen from heavy movement areas. All cases shall be taken to secure joints and boxes in place. All vertical runs shall be sealed at top, while masonry civil works are going on. Conduit with 25mm dia. minimum shall be used for all concealed work. Generally in areas with false ceiling conduits will not be concealed in slab but will be concealed below the false ceiling area. Conduits above false ceiling in such cases shall run with proper supports / suspenders. Conduits shall not be rested on a false ceiling grid in any case. Flexible conduits shall not be used in concealed work.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

SECTION-VI LIST OF MAKES

#### **LIST OF APPROVED MAKES**

S.No	Item Description	Approved Makes
1	DB with Industrial Plug & Sockets	Legrand/ABB/ Schneider /Siemens /Equivalent Approved
2	Pendant Type Switch boards	Legrand/ABB/ Schneider /Siemens /Equivalent Approved
3	МССВ	Legrand/ABB/ Schneider /Siemens /Equivalent Approved
4	МСВ	Legrand/ABB/ Schneider /Siemens /Equivalent Approved
5	LT Cables	Poly Cab/ Universal/Havells /KEI/ Equivalent Approved
6	Brass Cable Gland	Dowell's/Crompton/Bico/Siemens/Comet/ Equivalent Approved
7	PVC Glands	Peeco,/ Comet,/ Dowell's/ Equivalent Approved
8	Cu Lugs	Peeco/, Comet, /Dowell's/ Equivalent Approved
9	Distribution Boards	Legrand/Schneider/Hager/ Equivalent Approved
10	MS Enclosure	Legrand/Schneider/Hager/ Equivalent Approved
11	Terminals	Elmex/ Connectwell / Equivalent Approved
12	Cu strip	99% Electrolyte Copper
13	LED lights	Phillips/Havells/Wipro/ Equivalent Approved
14	PVC Conduits	Sudhakar/Equivalent Approved
15	DLP Truncking	Legrand/MK/ Equivalent Approved
16	All other items not covered above	AS PER SAMPLES APPROVED



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046 Survey No 36/P Gopannally Village, Serilingampally Mandal Ranga Reddy District

Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

SECTION-VII ANNEXURES

ANNEXURE-I

## Form of Performance Security (Guarantee) Bank Guarantee Bond-Format - I

In consideration of TATA INSTITUTE OF FUNDAMENTAL RESEARCH HYDERABAD (hereinafter called "THE TIFR") having offered to accept the terms and conditions of the proposed agreement between
1. We,
2. We,(indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demure, merely on a demand from the Government stating that the amount claimed as required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs(Rupees
3. We, the said bank further undertake to pay the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.
4. We,
5. We,

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - **500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - **500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

#### **ANNEXURE II**

#### **UNDERTAKING BY THE TENDERER**

I / We have read and examined the Tender document including terms & conditions, specifications, Schedule of quantities, drawings and designs, general rules & directions, General Conditions of Contract, Special Conditions of Contract and all relevant other documents, publications and rules referred to in the Conditions of Contract and all other contents in the tender documents for the work.

I / We, hereby tender for execution of the work specified for the TIFR-Hyderabad, Hyderabad within the time specified and in accordance in all respects with the specifications, designs, drawings and instructions in writing.

Further, I / We agree that in case of forfeiture of earnest money or both Earnest Money & Performance Guarantee as aforesaid, I / We shall be debarred for participation in the re-tendering process of the work.

I / We hereby declare that I / We shall treat the tender documents, drawings and other records connected with the work as secret / confidential documents and shall not communicate information derived there-from to any person other than a person to whom I / We am / are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

person other than a person to whom I / We am / are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Seal & Signature of Contractor Postal Address

Dated

**Witness** 

**Address Occupation** 



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

#### **ANNEXURE-III**

#### **CERTIFICATE OF LOCAL CONTENT**

\*We [name of manufacturer] hereby confirm in respect of quoted item(s) that local Content is equal to or more than 50% and come under 'Class-I Local Supplier' Category. As being 'Class-I Local Supplier', we are eligible for Purchase Preference under 'Make in India' Policy vide Gol Order No.P-45021/2/2017-PP (B.E.-II) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019 and 04.06.2020)

OR

\*We [name of manufacturer] hereby confirm in respect of quoted items(s) that Local Content is more than 20% but less than 50% and come under 'Class-II Local Supplier' Category.

The details of the location (s) at which the local value.	
2	
Date:	Seal & Signature of the Bidder
NOTE:	

Self-certification that the item offered meets the minimum local content (as above) giving details of the location(s) at which the local value addition is made in case the bidder wishes to avail the benefits under the make in India policy, if applicable.

In cases of procurement for a value in excess of Rs.10 crores, the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content to avail the benefits under the make in India policy, if applicable.



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046 Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

**Annexure-IV** 

#### FORM OF AGREEMENT

(herein after called "The Vendor/Contractor/Supplier") of the other part.

Whereas the Employer is desirous that certain works should be executed by the Vendor/Contractor/Supplier, viz ("the Works") and has accepted a Bid by the Vendor/Contractor/Supplier for the execution and completion of the works and the remedying of any defects therein.

Now this Agreement witnessed as follows:

- 1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
- 2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz:
- (a) The Letter of Award;
- (b) The said Bid;
- (c) The General Conditions of Contract;
- (d) Prequalification document
- (e) Instructions to Bidders and Specific Conditions of Contract;
- (f) The Specification;
- (g) The Drawings;
- (h) The Price Bid
- (i) Any other relevant documents referred to in this Agreement or in the aforementioned documents
- 3. In consideration of the payments to be made by the Employer to the Vendor/Contractor/Supplier as hereinafter mentioned, the Vendor/Contractor/Supplier hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of this work.
- 4. The Employer hereby covenants to pay the Vendor/Contractor/Supplier in consideration of the execution and completion of the Works and the remedying of defects therein the Contract Price or only



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद **- 500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

such other sums as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

In Witness whereof the parties hereto have caused this Agreement to be executed the day and year first before written. Signed, Sealed, and Delivered by the Said.

Binding Signature for and on behalf of TIFR-Hyderabad.	
Binding Signature of Vendor/Contractor/Supplier In the	
presence of Witness (1):	

Witness (2):

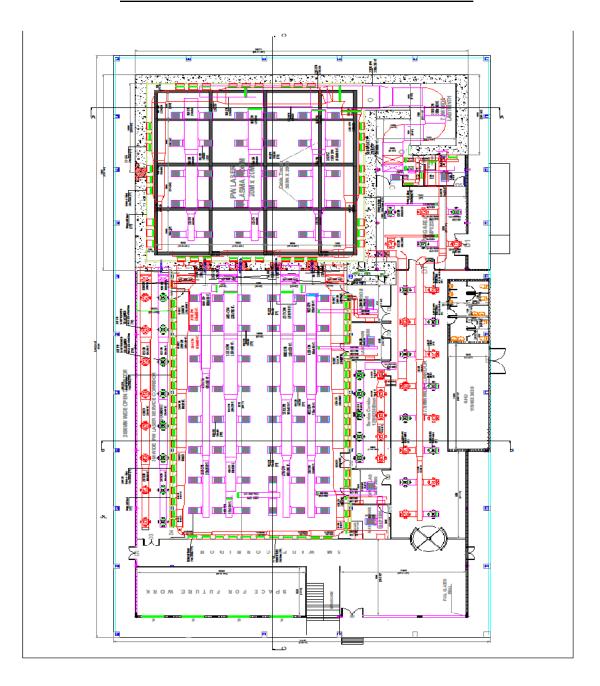


भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046 Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District,

Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad-500046, Telangana

### **ANNEXURE-V**

### PETAWATT LASER LAB GROUND FLOOR LAYOUT





भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या **36** / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - **500 046** Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

SECTION-VIII FINANCIAL BID

#### **INVITATION OF BIDS FOR**

Supply, Installation, Testing & Commissioning of Additional Electrical works for Petawatt Laser Lab Ground Floor, Plot-B, TIFR, Survey No. 36/P, Gopanpally (Village), Serilingampally (Mandal), Ranga Reddy Dist., Hyderabad- 500046

PART II

**FINANCIAL BID** 



भारत सरकार के परमाणु ऊजा विभाग का स्वायत संस्था एवं समावश्वावद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046

Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

#### **SCHEDULE OF QUANTITIES**

SI. No.	Itam Description	Unit	Oty/A)	Unit Rate	Total (C = A × P)
1	Supply, Installation, testing & commissioning of DB with Industrial Plug & Socket along with MCBs along with internal Wiring with suitable rating cables/wires with following material to make it as set.  1. SURF MTG BOX W/ DIN RAIL (Cat No. 057704) -1 No 2. 125X280 MM FACE PLATE (Cat No. 057718) -3 No 3. 32A 2P+E 230V Panel Mtng Sock (Cat No. 555284) -4 Nos 4. 32A 2P+E 230V Str plug IP44 (Cat No. 555234) -4 Nos 5. 32A 3P+N+E 415V Panel Mtng Soc(Cat No. 555289) -2 Nos 6. 32A 3P+N+E 415V Straight plug (Cat No. 555239) -2 Nos 7. DX3 FP C40A AC MCB (Cat No. 408700) -1 No 8. DX3 TP C32A AC MCB (Cat No. 408658) -2 Nos 9. DX3 SP C32A AC MCB (Cat No. 408595) -2 Nos (Make: Legrand/ equivalent approved) (The below mentioned images for Sample, but inside material as per above description only)	SET	<b>Qty(A)</b> 25	(B)	Total (C = A x B)



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय
(Autonomous Institution of the Department of Atomic Energy, Government of India)
सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046

2	Supply, installation, testing & commissioning of 185A FP Power Contactor with Suitable MS Enclosure shall be surface/recess mounting, made of sheet steel, dust protected, duly powder painted along with Spreader Links for connecting Incoming & Outgoing Cables Power Contactor shall be equivalent to Legrand Catalogue No. 4162 86 (Make: Legrand/ABB/Siemens/equivalent approved)	SET	4	
3	Supply, installation, testing & commissioning of 250A, 4P, 415V, 25kA, 50Hz Thermal Magnetic MCCB with suitable MS enclosure shall be surface/recess mounting, made of sheet steel, dust protected, duly powder painted along with Spreader Links for connecting Incoming & Outgoing Cables. MCCB shall be equivalent to Legrand Catalogue No. 4202 19, MS Enclosure shall be equivalent to Legrand Catalogue No. 5078 02 and Spreader Links shall be equivalent to Legrand Catalogue No. 4210 39 (Make: Legrand/ABB/Siemens/equivalent approved)	SET	2	



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046

4	Supply, installation, testing & commissioning of Pendant Type Switch boards along with Powder coated rectangular MS box providing 6 Module plates two sides (One side with 1No of 16/20A Switch, 2 Nos of 16/20A Sockets, 1 No Network Port and Second side with 1No of 16/20A Switch, 2 Nos of 16/20A Sockets, 1 No Network Port ) and other four sides closed type and top side surface mounting provision to Puff Panel Ceiling including all required hardware etc. Switch, Sockets, Information Socket and Plate shall be equivalent to Legrand Catalogue No. 5725 63, 5736 71, 5736 28 and 5757 42  (Make: Legrand/ ABB/ Siemens /equivalent approved)		30	
5	Supply, laying, termination, testing & commissioning of 1100V, 5C X 4 sq.mm FR PVC insulated copper conductor Flexible cable as per IS 694 with latest amendments for power circuits and laying on existing Concealed PVC Conduit on wall or False ceiling including suitable copper lugs for termination in DBs Make: Polycab/ Havells/Finolex/ RR Cables/equivalent approved	MTR	500	



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय
(Autonomous Institution of the Department of Atomic Energy, Government of India)
सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046
Survey No 36/P Gopannally Village, Serilingampally Mandal Ranga Reddy District

6	Supply, laying, termination, testing & commissioning of 1100V, 3C X 4 sq.mm FR PVC insulated copper conductor Flexible cable as per IS 694 with latest amendments for power circuits and laying on existing Concealed PVC Conduit on wall or False ceiling including suitable copper lugs for termination in DBs Make:Polycab/Havells/Finolex/RR Cables/equivalent approved	MTR	100	
7	Supply, laying, termination, testing & commissioning of 1100V, 3C X 2.5sq.mm FR PVC insulated copper conductor Flexible cable as per IS 694 with latest amendments for power circuits and laying on existing Concealed PVC Conduit on wall or False ceiling including suitable copper lugs for termination in DBs Make:Polycab/ Havells/Finolex/RR Cables/equivalent approved	MTR	100	
8	Supply, laying, termination, testing & commissioning of 1100V, 3C X 1.5sq.mm FR PVC insulated copper conductor Flexible cable as per IS 694 with latest amendments for power circuits and laying on existing Concealed PVC Conduit on wall or False ceiling including suitable copper lugs for termination in DBs Make:Polycab/Havells/Finolex/RR Cables/equivalent approved	MTR	300	
9	Supply, Installation, testing and Commissioning of LED 36-Watt 2x2 Ceiling Panel Light 3280 LUMENS (Slim, Square, Cool White 6500k) and Light fixture with all required accessories required to be fixed on False ceiling as per specifications, site conditions & as per the instructions of engineer in charge. Catalogue no Wipro CRCO23R036HP65G3 or Equivalent approved. Make: Wipro/Philips/Havells//equivalent approved	NOS	20	



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत्त संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046 Survey No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District,

10	Supply, Installation, testing and Commissioning of LED 18-Watt 1x1 Ceiling Panel Light 1500 LUMENS (Slim, Square, Cool White 6500k) and Light fixture with all required accessories required to be fixed on False ceiling as per specifications, site conditions & as per the instructions of engineer in charge. Make: Wipro/Philips/Havells//equivalent approved	NOS	10	
11	Supply, installation, testing & commissioning of 32A, 4P, 10kA MCB with suitable MS enclosure shall be surface/recess mounting, made of sheet steel, dust protected, duly powder painted along for connecting Incoming & Outgoing Cables. MCB shall be equivalent to Legrand Catalogue No. 4086 99 and MS Enclosure shall be equivalent to Legrand Catalogue No. 5077 93 (Make: Legrand/ABB/ Siemens/equivalent approved)	SET	2	
12	Supply, laying, Fixing of 32mm Heavy Duty PVC conduit (Black Colour) of ISI marked, laying in Puff Panel including/laying in wall including chipping of wall/laying on cable tray/ wall/ceiling/false ceiling /flooring accessories like, bends, PVC Junction Boxes, PVC Dummy Covers etc. to complete the work and as per instructions of Engineer in Charge. (Make: Precision/ Sudhakar / equivalent approved)	MTR	50	



भारत सरकार के परमाणु ऊर्जा विभाग की स्वायत संस्था एवं समविश्वविद्यालय (Autonomous Institution of the Department of Atomic Energy, Government of India) सर्वेक्षण संख्या 36 / पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगारेड्डी जिला, हैदराबाद - 500 046

Survey No.36/P, Gopanpally Village, Serilingampally Mandal,Ranga Reddy District, Hyderabad-500046, Telangana

	GST @ 18%
	Grand Total Supply & Installation in Rs.
	Grand Total Amount in words
	Rs
	only
Note	
1	Rates are all inclusive of profit, packing & forwarding, Transport, loading & unloading, labour and Taxes, Etc.
2	TIFR, Hyderabad has right to delete any of above items from scope of work or may increase/reduce quantities as per its requirement during execution of work. No claim or compensation for such deletion/increase/decrease will be accepted/paid to the contractor. Payment will be made as per actual quantities executed at tender rates
3	Manufacturer's warranty of respective supply items to be provided.
4	For any above item quantity exceeding more than 10% of projected qty, contractor shall take prior approval from TIFR Engineer In charge in writing.
5	For any deviating items, the contractor shall take prior approval from TIED Engineer In charge with proper rate analysis

**Sub Total**