

**DETAILED LETTER OF ACCEPTANCE**

DLOA No. TFL/TALCHER/C&P/E&I WORKS/LOA-25/23-24

February 23, 2024

M/s SOPAN O&M COMPANY LIMITED,  
201A, A. G. Trade Center, NDA - Pashan Road,  
Ram Nagar Colony, Bavdhan,  
Pune-411021, Maharashtra

Tel. No. - 020-67704141  
Mob. No. 09428736355  
Email ID - [marketing@sopan.co.in](mailto:marketing@sopan.co.in)

Kind Attn.: Mr. Aniruddha Kadvekar

**Sub:** Detailed Letter of Acceptance (DLOA) for "Composite Supply cum Erection of Electrical & Instrumentation Works for OSBL Facilities on Item Rate Basis at Talcher Fertilizers Limited, Angul, Odisha"

**Ref.:**

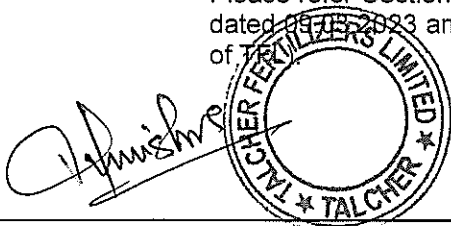
1. NIT / Tender Document No. **PNPM/PC-183/E/8003/NCB** dated **09.03.2023** [E-Tender ID: 2023\_PDIL\_744266\_1] issued by PDIL (on behalf of TFL) and all associated Amendments thereof (as listed in Annexure-I of the DLOA attached hereto) for "Composite Supply cum Erection of Electrical & Instrumentation Works for OSBL Facilities on Item Rate Basis at Talcher Fertilizers Limited, Angul, Odisha".
2. Your Offer No. SOP/MKTG/TFL/E&I/1872 Dated: 17/04/2023 (E Bid No. 2797984) and all subsequent Correspondences received against above referred Tender and its associated Amendments thereof.
3. Our FOA (Fax of Acceptance) No. TFL/NOIDA/C&P/E&I WORKS/FOA-005/23-24 dated 14.09.2023

Dear Sir / Madam,

Further to our FAX OF ACCEPTANCE (FOA) No. TFL/NOIDA/C&P/E&I WORKS/FOA-005/23-24 dated 14.09.2023, we are pleased to issue this "Detailed Letter of Acceptance (DLOA)" for "Composite Supply cum Erection of Electrical & Instrumentation Works for OSBL Facilities on Item Rate Basis at Talcher Fertilizers Limited, Angul, Odisha". The 'Detailed Letter of Acceptance' shall be executed strictly in accordance with the terms and conditions set out below:

**1.0 SCOPE OF WORK/TECHNICAL SPECIFICATIONS:**

Please refer Section VI of tender document (Tender No. PNPM/PC-183/E/8003/NCB dated 09.03.2023 and its associated Amendments thereof, floated by PDIL on behalf of TFL)



Page 1 of 8

**2.0 CONTRACT VALUE:**

The total estimated Contract value shall be **INR 21,04,52,143/-** (Indian Rupees Twenty One Crores Four Lakhs Fifty Two Thousand One Hundred Forty Three only) excluding GST and **INR 24,83,33,529/-** (Indian Rupees Twenty Four Crores Eighty Three Lakhs Thirty Three Thousand Five Hundred Twenty Nine only) including GST (presently @18%). Detailed SCHEDULE OF RATES (SOR) is attached as **Annexure – C**.

**3.0 FIRM PRICE:**

The unit rates appearing in the detailed SCHEDULE OF RATES (SOR) [Annexure-C] shall remain FIRM AND FIXED and valid until completion of the Contract and will not be subject to variation on any account, except specifically mentioned elsewhere in the tender document.

Any new taxes & Duties, if imposed by the State/ Govt. of India after due date of bid submission but before the Contractual Delivery Date, shall be reimbursed to the contractor on submission of documentary evidence for proof of payment to State/ Govt. Authorities and after ascertaining it's applicability with respect to the contract. If any new taxes and/or duties are imposed beyond Completion/ Contract period for reasons not due to Owner's default, such taxes and duties shall be to Contractor's account.

If any new taxes and/or duties are imposed beyond Completion/ Contract period for reasons not due to Owner's default, such taxes and duties shall be to Contractor's account. If any new taxes and/or duties are imposed beyond Completion / Contract period for reasons due to Owner's default, such taxes and duties shall be to Owner's account.

Other terms and conditions w.r.t. statutory variation in taxes and duties shall be as per tender document and its associated Amendment(s).

**4.0 TERMS & CONDITIONS:**

This DLOA is strictly subject to all terms and conditions contained in the tender document No. PNP/PC-183/E/8003/NCB dated 09.03.2023 and all associated Amendment(s) issued against the NIT.

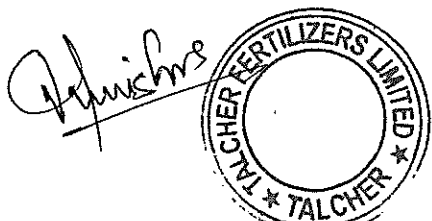
**5.0 COMPLETION PERIOD:**

Contractor shall be required to complete the WORK under the CONTRACT as mentioned below:

<b>Completion Period / Completion Schedule</b>	14 (Fourteen) Months from date of issuance of FOA (Fax of Acceptance) i.e. 14.09.2023
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The basic consideration and essence of the Contract is the strict adherence to the Time schedules for performing the specified works as stipulated in the Contract.

If at any time, the Owner/ Consultant is of opinion that the Contractor has fallen behind the approved construction schedule, the Owner/ Consultant may, without any cost to Owner/ Consultant, require the Contractor to take such steps as may be



necessary to improve his progress, especially require him to employ overtime operations, increase the number of shifts, work on holidays and Sundays or increase the capacity of his construction plant and equipment and require him to submit evidence demonstrating the manner in which the Contractor proposes to comply with the construction schedule. Failure of the Contractor to comply with the above will be considered a failure to execute the work with due diligence.

All other Terms & Conditions related to "Completion Period / Completion Time / Time Schedule" shall be as per tender document and its associated Amendment(s).

#### **6.0 PRICE REDUCTION SCHEDULE (PRS)**

Time is the essence of the CONTRACT. In case the CONTRACTOR fails to complete the WORK within the stipulated period, then, unless such failure is due to Force Majeure as defined in Clause 26 of GCC or due to EMPLOYER's defaults, the Total Contract price shall be reduced by ½ % of the total Contract Price per complete week of delay or part thereof subject to a maximum of 5 % of the Total Contract Price, by way of reduction in price for delay and not as penalty. The said amount will be recovered from amount due to the Contractor/ Contractor's Contract Performance Security payable on demand.

The decision of the OWNER in regard to applicability of Price Reduction Schedule shall be final and binding on the CONTRACTOR.

Please also refer Clause No. 50 of Section-III of Tender document (Provision regarding invoice for reduced value or credit note towards PRS).

All other Terms & Conditions related to "PRS" shall be as per tender document and its associated Amendment(s).

#### **7.0 TAXES AND DUTIES:**

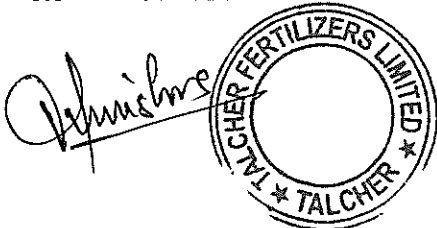
Please note that the responsibility of payment of **GST (CGST & SGST or IGST or UTGST)** lies with the Contractor of Goods / Services only. Supplier of Goods / Services (Service Provider) providing taxable service shall issue an Invoice/ Bill/ e-Invoice, as the case may be as per rules/ regulation of GST. Further, returns and details required to be filled under GST laws & rules should be timely filed by Contractor of Goods / Services (Service Provider) with requisite details.

Payments to Service Provider for claiming **GST (CGST & SGST/UTGST or IGST)** amount will be made provided the above formalities are fulfilled. Further, OWNER may seek copies of challan and certificate from Chartered Accountant for deposit of **GST (CGST & SGST/UTGST or IGST)** collected from Owner.

The quoted price includes all taxes, duties, levies etc., as applicable at prevailing rates. In case, contractor has not included any such taxes, duties, levies etc., at all and/or at prevailing rates (deliberately or otherwise) and it becomes leviable during execution of the contract, then contractor has to pay all such taxes, duties, levies etc. and OWNER shall not be liable for payment of such liabilities and/or OWNER shall not reimburse such taxes, duties, levies etc. to the CONTRACTOR.

All other Terms & Conditions related to contract value / price & taxation shall be as per the tender document and its associated Amendment(s).

#### **8.0 CONTRACT AGREEMENT:**



A "Contract Agreement" [as per **Format F-23** (i.e. "**PROFORMA FOR CONTRACT AGREEMENT**") of Tender document] on Non-Judicial stamp paper (of appropriate value) shall be executed between the OWNER and the CONTRACTOR within fifteen (15) days from the date of issuance of FOA (i.e. 14.09.2023). The cost of stamp paper shall be borne by CONTRACTOR.

CONTRACTOR shall sign the CONTRACT AGREEMENT (in duplicate) and submit to the OWNER. OWNER shall sign both the copies and return one copy to the CONTRACTOR and retain the other copy. The CONTRACT AGREEMENT shall be signed by an authorized officer of the CONTRACTOR.

**Note:** Contract Agreement has already been executed between TFL and Contractor and a copy of the same is placed at **Annexure-A** of this DLOA.

**9.0 TERMS OF PAYMENT:**

The 'Terms of Payment' shall be governed by the terms enumerated in Clause No. 40.0 of SCC (Section-V) of the Tender Document and its associated Amendments (refer Amendment-I dated 28.03.2023 to Tender).

**PAYING AUTHORITY**

Director (Finance),  
Talcher Fertilizers Limited  
Administrative Building  
Talcher, Post: Vikrampur,  
Dist: Angul, Pincode: 759106  
Odisha.

Any other provision related to "Terms of Payment / Payment Terms" shall be as per the tender document and its associated Amendment(s).

**10.0 COMPENSATION FOR EXTENDED STAY**

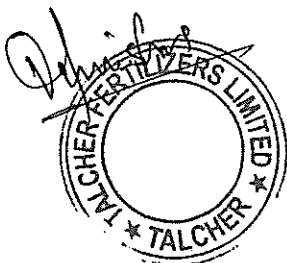
NOT APPLICABLE

**11.0 Compliance to DMI & SP (Domestically Manufactured Iron & Steel Products) Policy**

The above Policy shall be as per Gazette notification dated 29<sup>th</sup> May, 2019 and its subsequent Amendment attached as Appendix-I to Section-II (Bid Evaluation Criteria & Evaluation Methodology) of Tender Document and its associated Amendment(s). Contractor shall ensure compliance to the DMI&SP policy.

**12.0 Compliance to "Public Procurement (Preference to Make in India) Order 2017"**

You have given undertaking in your bid document that you are to be considered as a "Local supplier" under "Public Procurement (Preference to Make in India) Order 2017" by virtue of meeting the mandatory minimum Local Content requirement of 50% specified in the said policy. Accordingly, the provisions of the said policy dated 16.09.2020 as attached with the tender document and its associated Amendment(s) shall be applicable for this contract.



**13.0 DEFECT LIABILITY PERIOD:**

Defect Liability Period shall be 12 months from the date of completion of works in all respects as declared by EIC.

All other Terms & Conditions related to "Defect Liability Period" shall be as per the tender document and its associated Amendment(s).

**14.0 CONTRACT PERFORMANCE SECURITY (CPS) / SECURITY DEPOSIT (SD)**

The CONTRACTOR shall furnish to the EMPLOYER, within 30 days from the date of the date of issuance of 'Fax of Acceptance', a **Contract Performance Security @ 3%** (Three Percent) of the contract value (excluding GST) in accordance with the terms and conditions of tender document and its associated Amendment(s). The Contract Performance Security shall be in the form of either Banker's Cheque or Demand Draft or Bank Guarantee as per **Form F-4** and shall be in the currency of the Contract.

The Contract Performance Security shall be towards faithful performance of the contractual obligations and performance of the equipment. For other details, please refer Clause No. 38 of Section – III of Tender i.e. Instructions to Bidders.

If CPS is submitted in the form of Bank Guarantee, the same shall be in the prescribed format as per Tender document (**Form F-4**).

The original "Contract Performance Security (CPS) / Security Deposit (SD)" (by way of Bank Guarantee or Demand Draft or Banker's Cheque) shall be sent to following address:

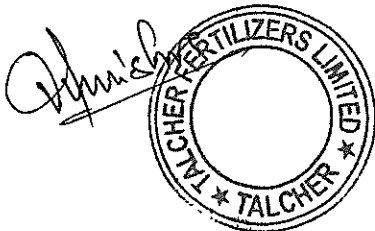
Mr. Vivek Mishra,  
Sr. Manager (C&P)  
Administrative Building  
Talcher Fertilizers Limited,  
Talcher, Post: Vikrampur,  
Dist. Angul, Pin - 759106  
Odisha

**Note:**

- In case CPS is submitted by way of Bank Guarantee, the non-judicial Stamp paper of appropriate value only or equivalent document value shall have to be purchased in the name of the bank executing the bank guarantee and not in the name of the CONTRACTOR.
- In case CPS is submitted by way of Bank Guarantee/IMPS/NEFT/RTGS/SWIFT etc., the bank details of TFL is as under–

**Account holder's name:** Talcher Fertilizers Limited  
**Bank Name:** State Bank of India  
**Branch:** CAG II, New Delhi  
**Account Number:** 41256023769  
**Type (Current/Saving):** Current  
**IFSC code:** SBIN0017313

All other Terms & Conditions related to Contract Performance Security/Security Deposit" shall be as per the tender document and its associated Amendment(s).



**15.0 AHR (ABNORMALLY HIGH RATE) ITEMS**

The list of AHR items is attached as **Annexure - D**.

The payment of AHR items beyond the SOR stipulated quantities shall be made at the lowest amongst the following rates:

- i) Rates as per SOR, attached with this DLOA.
- ii) Rate of the item, which shall be derived as follows:
  - a. Based on rates of Machine and labour as available from the contract (which includes contractor's supervision, profit, overheads and other expenses).
  - b. In case rates are not available in the contract, rates will be calculated based on prevailing market rates of machine, material and labour plus 15% to cover contractor's supervision profit, overhead & other expenses.

All other Terms & Conditions related to "AHR (Abnormally High Rate) Items" shall be as per the tender document and its associated Amendment(s).

**16.0 ENGINEER-IN-CHARGE (EIC):**

EIC shall be Mr. Sanjay Kumar Barnwal, DGM (Electrical), PDIL, Mobile No. 09971882568, E-mail: [sk\\_barnwal@pdilin.com](mailto:sk_barnwal@pdilin.com)

You are requested to contact above mentioned official for further instructions.

**17.0 INTEGRITY PACT AGREEMENT**

INTEGRITY PACT shall be applicable for this contract. The Integrity Pact Agreement is placed at **Annexure - E**.

**18.0 BANK DETAILS:**

The Bank Detail of M/s Sopan O&M Company Limited is attached as **Annexure-F**.

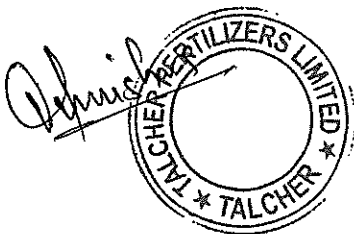
**19.0 POST ORDER CORRESPONDENCE**

**(A) Head Office (PDIL-Noida)**

TO,  
Mr. Kailash Joshi  
Project Manager,  
M/s Projects & Development India Limited,  
P.D.I.L Bhawan, A-14, Sector-1,  
Noida -201301  
E-Mail: [kjoshi@pdilin.com](mailto:kjoshi@pdilin.com)

**COPY TO:**

- (1) Mr. Sanjay Kumar Barnwal  
Engineer-In-Charge / DGM (Electrical), PDIL  
Administrative Building  
Talcher Fertilizers Limited,



Talcher, Post: Vikrampur,  
Dist. Angul, Pin - 759106  
Odisha  
E-Mail: [sk\\_barnwal@pdilin.com](mailto:sk_barnwal@pdilin.com)

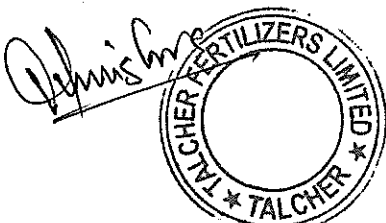
- (2) Mr. S. S. Patil,  
COO (D/S)  
Administrative Building,  
Talcher Fertilizers Limited  
Talcher, Post: Vikrampur,  
Dist. Angul, Pin – 759106  
Odisha  
E-Mail: [coods@tflonline.co.in](mailto:coods@tflonline.co.in)
- (3) Mr. Nilesh Pandit, CM (Elect.) / Mr. Shakti Swaroop Nayak, SE (Elect.)  
Administrative Building,  
Talcher Fertilizers Limited  
Talcher, Post: Vikrampur,  
Dist. Angul, Pin – 759106  
Odisha  
E-Mail: [nkpandit@rcfltd.com](mailto:nkpandit@rcfltd.com) / [ss.nayak@tflonline.co.in](mailto:ss.nayak@tflonline.co.in)

**(B) For Site Related Activities (at TFL, Talcher)**

TO,  
Mr. Sanjay Kumar Barnwal  
Engineer-In-Charge / DGM (Electrical), PDIL  
Administrative Building  
Talcher Fertilizers Limited,  
Talcher, Post: Vikrampur,  
Dist. Angul, Pin – 759106  
Odisha  
E-Mail: [sk\\_barnwal@pdilin.com](mailto:sk_barnwal@pdilin.com)

**COPY TO:**

- (1) Mr. Kailash Joshi  
Project Manager,  
M/s Projects & Development India Limited,  
P.D.I.L Bhawan, A-14, Sector-1,  
Noida -201301  
E-Mail: [kjoshi@pdilin.com](mailto:kjoshi@pdilin.com)
- (2) Mr. S. S. Patil,  
COO (D/S)  
Administrative Building,  
Talcher Fertilizers Limited  
Talcher, Post: Vikrampur,  
Dist. Angul, Pin – 759106  
Odisha  
E-Mail: [coods@tflonline.co.in](mailto:coods@tflonline.co.in)
- (3) Mr. Nilesh Pandit, CM (Elect.) / Mr. Shakti Swaroop Nayak, SE (Elect.)  
Chief Manager (Electricals),  
Administrative Building,



DLOA NO.TFL/TALCHER/C&P/E&I WORKS/LOA-25/23-24 dated 23.02.2024

Talcher Fertilizers Limited  
Talcher, Post: Vikrampur,  
Dist. Angul, Pin – 759106  
Odisha  
E-Mail: nkpandit@rcfltd.com / ss.nayak@tflonline.co.in

## 20.0 OTHERS TERMS & CONDITIONS OF CONTRACT

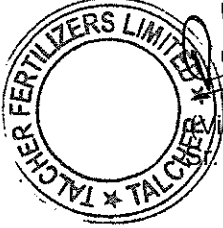
All other terms and conditions of the contract shall be governed by Tender No. PNPMM/PC-183/E/8003/NCB dated 09.03.2023 and all associated Amendment(s) issued against the NIT.

This DLOA is being issued to regularize the FAX OF ACCEPTANCE No. TFL/NOIDA/C&P/E&I WORKS/FOA-005/23-24 dated 14.09.2023.

This Detailed Letter of Acceptance (DLOA) along with all enclosures is being issued to you in duplicate. You are requested to return to us one copy, duly signed and stamped on each page.

Thanking you,

Yours faithfully,  
For M/s Talcher Fertilizers Limited,

  
*[Signature]*  
Avek Mishra  
Mgr. (C&P)

### ENCLOSURES:

1. Annexure-A Contract Agreement executed between M/s. Talcher Fertilizers Ltd. and M/s Sopan O&M Company Limited, Pune (4 Pages, Page No. 1327 to 1330)
2. Annexure-B FOA No. TFL/NOIDA/C&P/E&I Works/FOA-005/23-24 dated 14.09.2023 (2 Pages, Page No. 1325 to 1326)
3. Annexure-C Schedule of Rates (SOR) [63 Pages, Page No. 1262 to 1324]
4. Annexure-D List of AHR items (42 Pages, Page No. 1220 to 1261)
4. Annexure-E Pre-Signed Integrity Pact Agreement (9 Pages, Page No. 1211 to 1219)
5. Annexure-F Bank details of M/s. Sopan O&M Company Limited, Pune (2 Pages, Page No. 1209 to 1210)
6. Annexure-G Public Procurement (Preference to Make In India) Order 2017 (12 Pages, Page No. 1197 to 1208)
7. Annexure-H Provision for procurement from a bidder which shares a land border with India (1 Page, Page No. 1196)
8. Annexure-I All associated Amendment(s) to Tender document (Totalling 10 nos. Amendment) [129 Pages, Page No. 1067 to 1195]
9. Annexure-J Complete set of Tender Document No. PNPMM/PC-183/E/8003/NCB dated 09.03.2023 [1066 Pages, Page No. 0001 to 1066]

*[Signature]*  




**ANNEXURE- A**  
**CONTRACT AGREEMENT**



सत्यमेव जयते

INDIA NON JUDICIAL



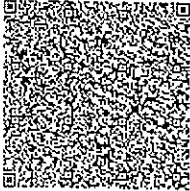
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**Government of Uttar Pradesh**

**e-Stamp**

Certificate No. : IN-UP20806811471041V  
 Certificate Issued Date : 21-Sep-2023 05:42 PM  
 Account Reference : NEWIMPACC (SV)/ up14018804/ GAUTAMBUDDH NAGAR 1/ UP-GBN  
 Unique Doc. Reference : SUBIN-UPUP1401880437229370352429V  
 Purchased by : TALCHER FERTILIZER LIMITED  
 Description of Document : Article 5 Agreement or Memorandum of an agreement  
 Property Description : Not Applicable  
 Consideration Price (Rs.) :  
 First Party : TALCHER FERTILIZER LIMITED  
 Second Party : SOPAN O AND M CO PVT LTD  
 Stamp Duty Paid By : TALCHER FERTILIZER LIMITED  
 Stamp Duty Amount(Rs.) : 100  
 (One Hundred only)



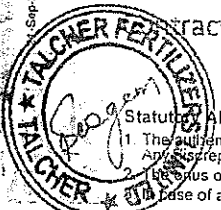
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CONTRACT AGREEMENT

FOA No. TFL/NOIDA/C&P/E&I WORKS/FOA-005/23-24 dated 14.09.2023

TFL's PAN No. AAFCT8667A

Contract Agreement for the work of "COMPOSITE SUPPLY CUM ERECTION OF ELECTRICAL



Statutory Alert:

1. The authenticity of this Stamp certificate should be verified at 'www.shcilestamp.com' or using e-Stamp Mobile App of Stock Holding  
 Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.  
 The onus of checking the legitimacy is on the users of the certificate.  
 In case of any discrepancy please inform the Competent Authority.

TALCHER FERTILIZER LIMITED TALCHER FERTILIZER LIMITED TALCHER FERTILIZER LIMITED TALCHER FERTILIZER LIMITED TALCHER FERTILIZER LIMITED

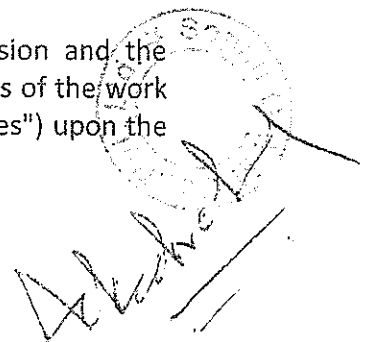
& INSTRUMENTATION WORKS ON ITEM RATE BASIS" of TALCHER FERTILIZERS LIMITED made on 27.09.2023 between Sopan O&M Co Pvt. Ltd. a Company having its registered office at C-4, 2nd Floor, Malviya Nagar, New Delhi – 110017, India hereinafter called the "CONTRACTOR" (which term shall unless excluded by or repugnant to the subject or context include its successors and permitted assignees) of the one part and TALCHER FERTILIZERS LIMITED hereinafter called the "EMPLOYER" (which term shall, unless excluded by or repugnant to the subject or context include its successors and assignees) of the other part.

WHEREAS

- A. The EMPLOYER being desirous of having provided and executed certain work mentioned, enumerated or referred to in the Tender Documents including Letter Inviting Tender, General Tender Notice, General Conditions of Contract, Special Conditions of Contract, Specifications, Drawings, Plans, Time Schedule of completion of jobs, Schedule of Rates, Agreed Variations, other documents has called for Tender.
- B. The CONTRACTOR has inspected the SITE and surroundings of WORK specified in the Tender Documents and has satisfied himself by careful examination before submitting his tender as to the nature of the surface, strata, soil, sub-soil and ground, the form and nature of site and local conditions, the quantities, nature and magnitude of the work, the availability of labour and materials necessary for the execution of work, the means of access to SITE, the supply of power and water thereto and the accommodation he may require and has made local and independent enquiries and obtained complete informations to the matters and thing referred to, or implied in the tender documents or having any connection therewith and has considered the nature and extent of all probable and possible situations, delays, hindrances or interferences to or with the execution and completion of the work to be carried out under the CONTRACT, and has examined and considered all other matters, conditions and things and probable and possible contingencies, and generally all matters incidental thereto and ancillary thereof affecting the execution and completion of the WORK and which might have influenced him in making his tender.
- C. The Tender Documents including the Notice Letter Inviting Tender, General Conditions of Contract, Special Conditions of Contract, Schedule of Rates, General Obligations, SPECIFICATIONS, DRAWINGS, PLANS, Time Schedule for completion of Jobs, Letter of Acceptance of Tender and any statement of agreed variations with its enclosures copies of which are hereto annexed form part of this CONTRACT though separately set out herein and are included in the expression "CONTRACT" wherever herein used.

AND WHEREAS

The EMPLOYER accepted the Tender of the CONTRACTOR for the provision and the execution of the said WORK at the rates stated in the schedule of quantities of the work and finally approved by EMPLOYER (hereinafter called the "Schedule of Rates") upon the



terms and subject to the conditions of CONTRACT.

NOW THIS AGREEMENT WITNESSETH AND IT IS HEREBY AGREED AND DECLARED AS FOLLOWS:-

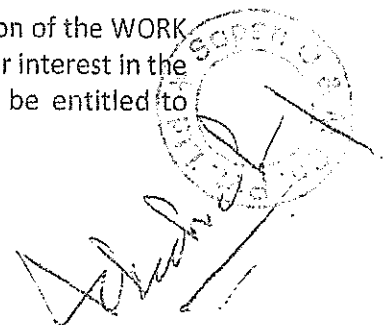
1. In consideration of the payment to be made to the CONTRACTOR for the WORK to be executed by him, the CONTRACTOR hereby covenants with EMPLOYER that the CONTRACTOR shall and will duly provide, execute and complete the said work and shall do and perform all other acts and things in the CONTRACT mentioned or described or which are to be implied there from or may be reasonably necessary for the completion of the said WORK and at the said times and in the manner and subject to the terms and conditions or stipulations mentioned in the contract.
2. In consideration of the due provision execution and completion of the said WORK, EMPLOYER does hereby agree with the CONTRACTOR that the EMPLOYER will pay to the CONTRACTOR the respective amounts for the WORK actually done by him and approved by the EMPLOYER at the Schedule of Rates and such other sum payable to the CONTRACTOR under provision of CONTRACT, such payment to be made at such time in such manner as provided for in the CONTRACT.

AND

3. In consideration of the due provision, execution and completion of the said WORK the CONTRACTOR does hereby agree to pay such sums as may be due to the EMPLOYER for the services rendered by the EMPLOYER to the CONTRACTOR, such as power supply, water supply and others as set for in the said CONTRACT and such other sums as may become payable to the EMPLOYER towards the controlled items of consumable materials or towards loss, damage to the EMPLOYER'S equipment, materials construction plant and machinery, such payments to be made at such time and in such manner as is provided in the CONTRACT.

It is specifically and distinctly understood and agreed between the EMPLOYER and the CONTRACTOR that the CONTRACTOR shall have no right, title or interest in the SITE made available by the EMPLOYER for execution of the works or in the building, structures or work executed on the said SITE by the CONTRACTOR or in the goods, articles, materials etc., brought on the said SITE (unless the same specifically belongs to the CONTRACTOR) and the CONTRACTOR shall not have or deemed to have any lien whatsoever charge for unpaid bills will not be entitled to assume or retain possession or control of the SITE or structures and the EMPLOYER shall have an absolute and unfettered right to take full possession of SITE and to remove the CONTRACTOR, their servants, agents and materials belonging to the CONTRACTOR and lying on the SITE.

The CONTRACTOR shall be allowed to enter upon the SITE for execution of the WORK only as a licensee simpliciter and shall not have any claim, right, title or interest in the SITE or the structures erected thereon and the EMPLOYER shall be entitled to terminate such license at any time without assigning any reason.



The materials including sand, gravel, stone, loose, earth, rock etc., dug up or excavated from the said SITE shall, unless otherwise expressly agreed under this CONTRACT, exclusively belong to the EMPLOYER and the CONTRACTOR shall have no right to claim over the same and such excavation and materials should be disposed off on account of the EMPLOYER according to the instruction in writing issued from time to time by the ENGINEER-IN-CHARGE.

In Witness whereof the parties have executed these presents in the day and the year first above written.

Signed and Delivered for and on behalf of EMPLOYER

Signed and Delivered for and on behalf of the CONTRACTOR

TALCHER FERTILIZERS LIMITED

SOPAN O&M CO. PVT. LTD.

*Geogam*  
Sura Deogam,  
DM (C&P)



*[Signature]*  
*[Stamp]*

Date: 28/9/2022

Date: 27/09/22

Place: \_\_\_\_\_

Place: Pune

IN PRESENCE OF TWO WITNESSES

IN PRESENCE OF TWO WITNESSES

1. *[Signature]*  
(Sanjya Kumar Dash)  
OM - Electrical.

1. *[Signature]*

2. Akhila Prasad Satapaty  
*[Signature]*  
(CCM-Const)

2. *[Signature]*

**ANNEXURE-B**

**FOA NO. TFL/NOIDA/C&P/E&I  
WORKS/FOA-005/23-24  
Dated 14.09.2023**

Fertilizers

तालचेर फर्टिलाइजर्स लिमिटेड

TALCHER FERTILIZERS LIMITED

[Erstwhile Rashtriya Coal Gas Fertilizers Limited]

निगमित पहचान क्रमांक / Corporate Identification Number (CIN) : U24120OR2015PLC019575

FAX OF ACCEPTANCE (FOA)

FOA No. TFL/NOIDA/C&amp;P/E&amp;I WORKS/FOA-005/23-24

September 14, 2023

TO : M/S SOPAN O&M COMPANY LIMITED  
 ATTN. : MR. ANIRUDDHA KADVEKAR  
 TEL NO. : 020-67704141  
 E-MAIL : [marketing@sopan.co.in](mailto:marketing@sopan.co.in)  
 FROM : MR. MANNA PAUL, DGM (C&P)

1. PLEASE REFER TO (A) TENDER NO. PNP/PC-183/E/8003/NCB DATED 09.03.2023 [2023\_PDIL\_744266\_1] FLOATED BY PDIL (ON BEHALF OF TFL) FOR 'COMPOSITE SUPPLY CUM ERECTION OF ELECTRICAL & INSTRUMENTATION WORKS ON ITEM RATE BASIS AT TALCHER FERTILIZERS LIMITED, TALCHER, ODISHA" AND ITS SUBSEQUENT AMENDMENTS (B) YOUR OFFER NO. SOP/MKTG/TFL/E&I/1872 DATED 17.04.2023 (E-BID NO. 2797984) AND (C) ALL SUBSEQUENT CORRESPONDENCES THEREOF.
2. BASED ON ABOVE, WE ARE PLEASED TO ISSUE THIS "FAX OF ACCEPTANCE (FOA)" AT A TOTAL ESTIMATED CONTRACT VALUE OF INR 21,04,52,143/- (INDIAN RUPEES TWENTY ONE CRORES FOUR LAKHS FIFTY TWO THOUSAND ONE HUNDRED FORTY THREE ONLY), EXCLUSIVE OF GST AND INR 24,83,33,529/- (INDIAN RUPEES TWENTY FOUR CRORES EIGHTY THREE LAKHS THIRTY THREE THOUSAND FIVE HUNDRED TWENTY NINE ONLY) INCLUSIVE OF GST, PRESENTLY @18%.
3. COMPLETION PERIOD:  
 COMPLETION PERIOD SHALL BE 14 (FOURTEEN) MONTHS RECKONED FROM DATE OF ISSUANCE OF THIS FAX OF ACCEPTANCE (FOA).
4. CONTRACT PERFORMANCE SECURITY (CPS) / SECURITY DEPOSIT (SD):  
 YOU ARE REQUIRED TO SUBMIT CONTRACT PERFORMANCE SECURITY (CPS) / SECURITY DEPOSIT (SD) WITHIN 30 DAYS FROM THE DATE OF ISSUANCE OF THIS FOA, FOR 3% (THREE PERCENT) OF TOTAL CONTRACT VALUE (EXCLUDING GST) IN LINE WITH CLAUSE NO. 38 OF ITB (INSTRUCTION TO BIDDERS) OF TENDER DOCUMENT AND AMENDMENTS THEREOF, IF ANY.

FOA NO. TFL/NOIDA/C&P/E&I WORKS/FOA-005/23-24 DATED 14.09.2023

5. CONTRACT AGREEMENT:

YOU ARE REQUIRED TO SUBMIT CONTRACT AGREEMENT WITHIN 15 DAYS FROM THE DATE OF ISSUANCE OF THIS FOA, ON NON-JUDICIAL STAMP PAPER IN LINE WITH CLAUSE NO. 37 OF ITB (INSTRUCTION TO BIDDERS) OF TENDER DOCUMENT AND AMENDMENTS THEREOF, IF ANY.

6. INTEGRITY PACT:

THIS CONTRACT SHALL BE GOVERNED BY INTEGRITY PACT AS ATTACHED WITH THE TENDER DOCUMENT.

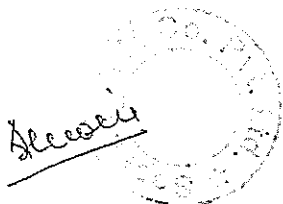
7. PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA) POLICY:

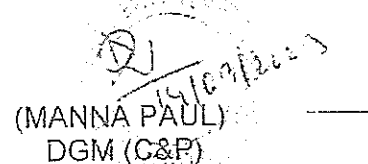
YOU HAVE GIVEN UNDERTAKING IN YOUR BID DOCUMENT THAT YOU ARE TO BE CONSIDERED AS A "LOCAL SUPPLIER" UNDER "PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA) ORDER 2017" BY VIRTUE OF MEETING THE MANDATORY MINIMUM LOCAL CONTENT REQUIREMENT OF 50% SPECIFIED IN THE SAID POLICY. ACCORDINGLY, THE PROVISIONS OF THE SAID POLICY DATED 16.09.2020 AS ATTACHED WITH THE TENDER DOCUMENT SHALL BE APPLICABLE FOR THIS CONTRACT.

ALL OTHER TERMS AND CONDITIONS SHALL BE AS PER TENDER NO. PNP/PC-183/E/8003/NCB DATED 09.03.2023 [E-TENDER ID: 2023\_PDIL\_744266\_1] AND ALL ASSOCIATED AMENDMENTS ISSUED THEREOF AGAINST THE TENDER. A "DETAILED LETTER OF ACCEPTANCE (DLOA)" SHALL FOLLOW.

YOU ARE REQUESTED TO ACKNOWLEDGE RECEIPT OF THIS FOA.

FOR TALCHER FERTILIZERS LIMITED



  
(MANNA PAUL)  
DGM (C&P)



**ANNEXURE-C**  
**SCHEDULE OF RATES (SOR)**

## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;PIE&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
1.00	SUPPLY OF ELECTRICAL ITEMS (SUPPLY: PART-A)				
1.10	TRANSFORMERS				
1.11	Supply of Transformers with all accessories, as specified in data sheets, Technical Specification - Electrical, Technical Specification Doc. No. PC183-TS-0802, etc. attached with the NIT.				
1.12	2000 KVA, 11/0.433 kV, ONAN, Dyn11, 3 phase, 50 Hz, Oil immersed type transformer with externally operated off circuit tap changer with tapping range of + 5% in steps of 2.5% and Z=7.25% (zero negative tolerance) with all applicable fittings and accessories.	2.00	Nos.	6274000.00	12548000
1.13	1600 KVA, 11/0.433 kV, ONAN, Dyn11, 3 phase, 50 Hz, Oil immersed type transformer with externally operated off circuit tap changer with tapping range of + 5% in steps of 2.5% and Z=6% (zero negative tolerance) with all applicable fittings and accessories.	2.00	Nos.	5424000.00	10848000
1.14	1250 KVA, 11/0.433 kV, ONAN, Dyn11, 3 phase, 50 Hz, Oil immersed type transformer with externally operated off circuit tap changer with tapping range of + 5% in steps of 2.5% and Z=6% (zero negative tolerance) with all applicable fittings and accessories.	2.00	Nos.	4506000.00	9012000
2.00	deleted				
3.00	HT CAPACITOR BANK				
3.11	Supply of Capacitor Bank alongwith VCB, RVT, series reactor, Control Panel, APFC Relay, HT vacuum contactor, HT Fuse, Relays etc. complete in all respect as per Technical specification - Electrical, Technical Specification - Capacitor (Doc. No. PC183-TS-0822) etc.				
3.12	300 KVAR Capacitor bank (2 Steps of 100KVAR,200KVAR each), 3.3 KV Voltage Level	2.00	Nos.	3384000.00	6768000
3.13	500 KVAR Capacitor bank (3 Steps of 100KVAR,200KVAR each), 11 KV Voltage Level	2.00	Nos.	2376000.00	4752000
4.00	CABLES (HT & LT)				
4.10	Supply of 11KV (UE) grade XLPE insulated, PVC inner sheathed, armoured, FRLS PVC (ST2) type outer sheath as per Technical specification - Electrical, Technical Specification - Cables (Doc. No. PC183-TS-0815) etc				

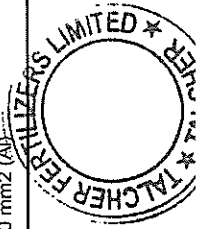
*Adrish*

TALCHER FERTILIZERS LIMITED

## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C/P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DESCRIPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
4.11	3CX240 (Al)	2900.00	Mtrs.	2516.00	7296400
4.12	3CX400 (Al)	100.00	Mtrs.	34655.00	346500
4.20	Supply of 3.3KV (UE) grade XLPE insulated, PVC inner sheathed, armoured, FRLS PVC (ST2) type outer sheath as per Technical specification - Electrical, Technical Specification - Cables (Doc. No. PC-183-TS-0815) etc.				
4.21	3CX240 (Al)	200.00	Mtrs.	2064.00	412800
4.22	Supply of 1.1KV grade, XLPE insulated, PVC inner sheath, armoured, FRLS PVC (ST2) type outer sheath as per Technical specification - Electrical, Technical Specification - Cables (Doc. No. PC-183-TS-0815) etc.				
4.23	3.5C x 630 mm2 (Al)	1200.00	Mtrs.	3498.00	4197600
4.24	3.5C x 400 mm2 (Al)	200.00	Mtrs.	1899.00	379800
4.25	3.5C x 300 mm2 (Al)	150.00	Mtrs.	1486.00	222900
4.26	3.5C x 240 mm2 (Al)	1300.00	Mtrs.	1216.00	1580800
4.27	3.5C x 150 mm2 (Al)	2600.00	Mtrs.	749.00	1947400
4.28	3.5C x 120 mm2 (Al)	1600.00	Mtrs.	638.00	1020800
4.29	3.5C x 70 mm2 (Al)	200.00	Mtrs.	428.00	85600
4.30	3.5C x 50 mm2 (Al)	400.00	Mtrs.	319.00	127600
4.31	3.5C x 35 mm2 (Al)	1000.00	Mtrs.	237.00	237000
4.32	3.5C x 25 mm2 (Al)	400.00	Mtrs.	192.00	76800
4.33	4C x 35 mm2 (Al)	400.00	Mtrs.	267.00	106800
4.34	4C x 25 mm2 (Al)	400.00	Mtrs.	205.00	82000
4.35	4C x 16 mm2 (Al)	4200.00	Mtrs.	162.00	680400
4.36	3C x 120 mm2 (Al)	300.00	Mtrs.	577.00	173100
4.37	3C x 70 mm2 (Al)	100.00	Mtrs.	370.00	37000



*Signature*

## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
4.38	3C x 50 mm2 (Al)	50.00	Mtrs.	277.00	13850
4.39	3C x 35 mm2 (Al)	200.00	Mtrs.	213.00	42600
4.40	3C x 25 mm2 (Al)	1000.00	Mtrs.	176.00	176000
4.41	3C x 10 mm2 (Cu)	100.00	Mtrs.	714.00	71400
4.42	3C x 6 mm2 (Cu)	600.00	Mtrs.	263.00	157800
4.43	3C x 4 mm2 (Cu)	600.00	Mtrs.	217.00	130200
4.44	3C x 2.5 mm2 (Cu)	3000.00	Mtrs.	136.00	408000
4.45	5C x 2.5 mm2 (Cu)	200.00	Mtrs.	363.00	72600
4.46	7C x 2.5 mm2 (Cu)	200.00	Mtrs.	434.00	86800
4.47	12C x 2.5 mm2 (Cu)	1200.00	Mtrs.	412.00	494400
4.48	19C x 2.5 mm2 (Cu)	600.00	Mtrs.	705.00	423000
4.49	1Cx185 mm2 (Al) Unarmoured	400.00	Mtrs.	298.00	119200
4.50	1Cx16 mm2 (Al) Unarmoured	500.00	Mtrs.	37.00	18500
4.51	Supply of 6 Fiber multi mode FO Cable suitable for relay to relay distance of approx 2 km for line differential protection with all accessories for termination , this also include splicing , jointing as per requirement etc.	600.00	Mtrs.	213.00	127800
4.52	CABLE TRAYS:				
4.53	Supply of prefabricated ladder type GI cable trays and their accessories i.e. supply of all hardware required i.e. J-hooks, GI Nut, Bolt, Washers, coupling plate etc. of following sizes as per Technical specification - Electrical, Technical Specification - Cables (Doc. No. PC183-TS-0816) etc.				
4.54	Straight Run Cable Trays				
4.55	600 mm wide	1900.00	Mtrs.	1655.00	3144500

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TALKER FERTILIZERS LIMITED

## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
4.56	450 mm wide	300.00	Mtrs.	1415.00	424500
4.57	300 mm wide	700.00	Mtrs.	909.00	636300
4.58	150 mm wide	200.00	Mtrs.	664.00	132800
4.59	Horizontal Bends				
4.60	600 mm wide, 700 mm radius	20.00	Nos.	9044.00	180880
4.61	450 mm wide, 700 mm radius	15.00	Nos.	7448.00	111720
4.62	300 mm wide, 700 mm radius	60.00	Nos.	6584.00	395040
4.63	150 mm wide	20.00	Nos.	3578.00	71560
4.64	Vertical Inside Bends				
4.65	600mm wide, 1000mm radius	10.00	Nos.	9044.00	90440
4.66	450 mm wide, 1000mm radius	10.00	Nos.	7448.00	74480
4.67	300 mm wide, 1000mm radius	30.00	Nos.	6584.00	197520
4.68	150 mm wide	20.00	Nos.	3578.00	71560
4.69	Vertical Outside Bends				
4.70	600 mm wide, 1000 mm radius	10.00	Nos.	9044.00	90440
4.71	450 mm wide, 1000 mm radius	10.00	Nos.	7448.00	74480
4.72	300 mm wide, 1000 mm radius	35.00	Nos.	6584.00	230440
4.73	150 mm wide	20.00	Nos.	3578.00	71560
4.74	Reducer				
4.75	600 mm / 450 mm wide	10.00	Nos.	9044.00	90440
4.76	450/300mm wide	10.00	Nos.	7448.00	74480

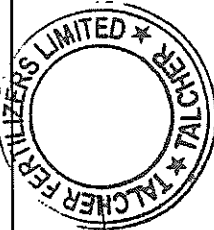


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## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS		
4.77	300/150mm wide	10.00	Nos.	6584.00	65840
4.78	Regular Tees				
4.79	600 mm wide , 700 mm radius	5.00	Nos.	10640.00	53200
4.80	450 mm wide, 700 mm radius	8.00	Nos.	7980.00	63840
4.81	Cross				
4.82	600 mm wide , 700 mm radius	10.00	Nos.	9044.00	90440
4.83	450 mm wide, 700 mm radius	5.00	Nos.	7448.00	37240
4.84	EARTHING AND LIGHTNING PROTECTION				
4.85	Supply of GI earth strip / Wire conductors of following sizes as per PDS attached with TS (with min. coating 610 gm / sq. m) of following sizes: -				
4.86	75 mm x 10 mm	1000.00	Mtrs.	595.00	595000
4.87	50 mm x 6 mm	800.00	Mtrs.	255.00	204000
4.88	35mm x 6mm	100.00	Mtrs.	194.00	19400
4.89	GI wire Rope (8 SWG)	30.00	Kg	115.00	3450
4.90	Spares for Two Years Operation (Mandatory)				
4.91	Supply of spares of following equipments				
4.92	Capacitor Bank				
4.93	Supporting insulators	1.00	Set	16000.00	16000
4.94	Unit capacitor bank of each type & rating	1.00	Set	160000.00	160000
4.95	PA system				
4.96	Electronic card for central exchange	1.00	Nos.	152000.00	152000
4.97	Electronic Amplifier card for FCS	1.00	Nos.	184000.00	184000



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## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C/P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
4.98	WP speaker of each type	5.00	Nos.	8800.00	44000
4.99	FLP speaker	1.00	Nos.	57600.00	57600
5.00	Transformer (2000 KVA, 11/0.433 kV Transformer)				
5.01	Bushings complete with accessories for all 3 phase & neutral for all voltage grades.	1.00	Set	64000.00	64000
5.02	Complete set of gaskets	1.00	No.	6400.00	6400
5.03	Equaliser pipe and Explosion vent diaphragm	1.00	Set	24000.00	24000
5.04	PRV with alarm and trip	1.00	Set	16000.00	16000
5.05	Oil Level Gauge	1.00	No.	12800.00	12800
5.06	Complete charge of Silica gel with breather	1.00	Set	12480.00	12480
5.07	Gland packing / O-rings for every valve	1.00	Set	8000.00	8000
5.08	Buchholz Relay	1.00	No.	80000.00	80000
5.09	Analogue type OTI	1.00	No.	24000.00	24000
5.10	Analogue type WTI	1.00	No.	24000.00	24000
5.11	Radiator(one set of each type)	1.00	Set	64000.00	64000
5.12	Complite set of valve(1 no. of each type)	1.00	Set	64000.00	64000
5.13	Support insulator( HV Side)	1.00	Nos.	24000.00	24000
5.14	Support insulator( LV Side)	1.00	Nos.	8000.00	8000
5.15	Conservator gauge Glass/Sealing	1.00	No.	16000.00	16000
5.16	Thermisier with space heater for M.B	1.00	No.	8000.00	8000
5.17	3 Pin switch & socket	1.00	No.	800.00	800
5.18	CT for REF	1.00	No.	12000.00	12000



*Adhishwari*

## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
5.19	CT for SBEF	1.00	No.	12000.00	12000
5.20	Transformer (1600 KVA, 11/0.433 kV Transformer)				
5.21	Bushings complete with accessories for all 3 phase & neutral for all voltage grades.	1.00	Set	64000.00	64000
5.22	Complete set of gaskets	1.00	No.	6400.00	6400
5.23	Equaliser pipe and Explosion vent diaphragm	1.00	Set	24000.00	24000
5.24	PRV with alarm and trip	1.00	Set	16000.00	16000
5.25	Oil Level Gauge	1.00	No.	12800.00	12800
5.26	Complete charge of Silica gel with breather	1.00	Set	12480.00	12480
5.27	Gland packing / O-rings for every valve	1.00	Set	8000.00	8000
5.28	Buchholz Relay	1.00	No.	80000.00	80000
5.29	Analogue type OTI	1.00	No.	24000.00	24000
5.30	Analogue type WTI	1.00	No.	24000.00	24000
5.31	Radiator(One set of each type)	1.00	Set	64000.00	64000
5.32	Complite set of valve(1 no. of each type)	1.00	Set	64000.00	64000
5.33	Support insulator( HV Side)	1.00	Nos.	24000.00	24000
5.34	Support insulator( LV Side)	1.00	Nos.	8000.00	8000
5.35	Conservator gauge Glass/Sealing	1.00	No.	16000.00	16000
5.36	Thermister with space heater for M.B	1.00	No.	8000.00	8000
5.37	3 Pin switch & socket	1.00	No.	800.00	800
5.38	CT for REF	1.00	No.	12000.00	12000
5.39	CT for SBEF	1.00	No.	12000.00	12000

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TALCHER FERTILIZERS LIMITED.



## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DESCRIPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	
				TOTAL AMOUNT EXCLUDING GST	
5.40	Transformer. (1250 KVA, 11/0.433 kV Transformer)	1.00	Set	64000.00	64000
5.41	Bushings complete with accessories for all 3 phase & neutral for all voltage grades.	1.00	No.	6400.00	6400
5.42	Complete set of gaskets	1.00	Set	24000.00	24000
5.43	Equaliser pipe and Explosion vent diaphragm	1.00	Set	16000.00	16000
5.44	PRV with alarm and trip	1.00	No.	12800.00	12800
5.45	Oil Level Gauge	1.00	Set	12480.00	12480
5.46	Complete charge of Silica gel with breather	1.00	Set	8000.00	8000
5.47	Gland packing / O-rings for every valve	1.00	No.	80000.00	80000
5.48	Buchholz Relay	1.00	No.	24000.00	24000
5.49	Analogue type OTI	1.00	No.	24000.00	24000
5.50	Analogue type WTI	1.00	Set	64000.00	64000
5.51	Radiator(one set of each type)	1.00	Set	64000.00	64000
5.52	Complite set of valve(1 no. of each type)	1.00	Nos.	24000.00	24000
5.53	Support insulator( HV Side)	1.00	Nos.	8000.00	8000
5.54	Support insulator( LV Side)	1.00	No.	16000.00	16000
5.55	Conservator gauge Glass/Sealing	1.00	No.	8000.00	8000
5.56	Thermister with space heater for M/B	1.00	No.	800.00	800
5.57	3 Pin switch & socket	1.00	No.	12000.00	12000
5.58	CT for REF	1.00	No.	12000.00	12000
5.59	CT for SBEF	1.00	No.	12000.00	12000
5.60	415V LV SWITCHBOARD -				



## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	
				TOTAL AMOUNT EXCLUDING GST	
5.61	2500A, 50KA for 1 sec ACB / 800 A , 50KA for 1 sec ACB				
5.62	Arc Chute assembly	2.00	Set	12000.00	24000
5.63	Shunt trip coil.	2.00	Set	10400.00	20800
5.64	Closing coil	2.00	Set	10400.00	20800
5.65	Secondary isolating contact blocks.	2.00	Set	9600.00	19200
5.66	CONTROL SWITCHES				
5.67	Trip-Neutral-Close Control Switch	1.00	No.	5600.00	5600
5.68	Ammeter Selector Switch	1.00	No.	800.00	800
5.69	Voltmeter Selector Switch	1.00	No.	800.00	800
5.70	Push Button Element	1.00	Set	240.00	240
5.71	Push Button Actuator of each type	1.00	Set	5600.00	5600
5.72	Control Fuse				
5.73	Fuse Link	1.00	No.	5600.00	5600
5.74	Fuse Fitting	1.00	No.	6400.00	6400
5.75	Microprocessor based numerical relay used in incomer ACB feeder	1.00	No.	120000.00	120000
5.76	Microprocessor based numerical relay used in Motor / Outgoing ACB feeder	1.00	No.	88000.00	88000
5.77	MCB of each type & rating)	1.00	Set	24000.00	24000
5.78	CONTACTOR (of each type & rating )	1.00	Set	96000.00	96000
5.79	Overload RELAYS (of each type & rating)	1.00	Set	48000.00	48000
5.80	CT for breaker feeders (Each Rating)	1.00	Set (3 nos.)	180000.00	180000
5.81	CT for other outgoing feeders (Each Rating)	1.00	Set (3 nos.)	360000.00	360000



## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	
				TOTAL AMOUNT EXCLUDING GST	
5.82	MCCB / ELCB MCB				
5.83	4P/TPN MCCB 400 A	2.00	Nos.	44800.00	89600
5.84	4P/TPN MCCB 250 A	2.00	Nos.	38400.00	76800
5.85	4P/TPN MCCB 160 A	2.00	Nos.	30400.00	60800
5.86	4P/TPN MCCB 125 A	2.00	Nos.	24000.00	48000
5.87	4 P/TPN MCCB 63 A	4.00	Nos.	20000.00	80000
5.88	DP RCBO 63 A	6.00	Nos.	9600.00	57600
5.89	DP MCB, 16 A	6.00	Nos.	960.00	5760
5.90	DP MCB, 32 A	4.00	Nos.	960.00	3840
5.91	LIGHTING FIXTURE				
5.92	Reflector of each type	5.00	Set	3200.00	16000
5.93	Heat resistant toughened glass cover of each type	5.00	Set	3200.00	16000
5.94	Cable glands of each type	5.00	Set	960.00	4800
5.95	Allen keys of different sizes as applicable.	3.00	Nos.	4800.00	14400
5.96	45W LED street light fixture	2.00	Nos.	4800.00	9600
5.97	60W LED street light fixture	10.00	Nos.	6400.00	64000
5.98	90 W LED street light fixture	10.00	Nos.	8800.00	88000
5.99	INTERLOCKING SWITCH SOCKET & PLUG				
6.00	Switch of each rating	2.00	Set	4000.00	8000
6.01	Fuse base of each rating	2.00	Set	1920.00	3840
6.02	Fuse of each rating	2.00	Set	2880.00	5760

*Admission*

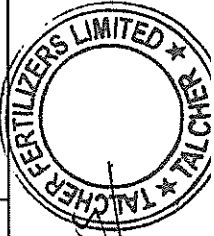


TALCHER FERTILIZERS LIMITED

ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C/P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
6.03	Plug Top	2.00	Nos.	2400.00	4800
6.04	11 V ICOG Breaker Panel :BREAKER 11 kv - Trip bar spring and any other spring used in the circuit breaker mechanism	1.00	Set	120000.00	120000
6.05	11 V ICOG Breaker Panel :BREAKER 11 kv - Shunt trip coil	1.00	Set	64000.00	64000
6.06	11 V ICOG Breaker Panel :BREAKER 11 kv - Closing coil	1.00	Set	64000.00	64000
6.07	11 V ICOG Breaker Panel :BREAKER 11 kv - Secondary Isolating contact blocks	1.00	Set	24000.00	24000
6.08	11 V ICOG Breaker Panel :BREAKER 11 kv - Micro Switch for Spring Charging	1.00	Set	8000.00	8000
6.09	11 V ICOG Breaker Panel :BREAKER 11 kv - Micro Switch for Service/Test position	1.00	Set	8000.00	8000
6.10	11 V ICOG Breaker Panel :BREAKER 11 kv - Rack in/Rack out handle	1.00	No.	19200.00	19200
6.11	11 V ICOG Breaker Panel :BREAKER 11 kv - Spring Charging handle	1.00	No.	19200.00	19200
6.12	11 V ICOG Breaker Panel :BREAKER 11 kv - Door panel key	1.00	Set	800.00	800
6.13	11 V ICOG Breaker Panel : CONTROL SWITCHES- Trip-Neutral-Close Control Switch	1.00	No.	32000.00	32000
6.14	11 V ICOG Breaker Panel : CONTROL SWITCHES- Local-Remote or Auto-Manual Selector Switch	1.00	No.	8000.00	8000
6.15	11 V ICOG Breaker Panel : CONTROL SWITCHES- Ammeter Selector Switch	1.00	No.	2400.00	2400
6.16	11 V ICOG Breaker Panel : CONTROL SWITCHES- Voltmeter Selector Switch	1.00	No.	2400.00	2400
6.17	11 V ICOG Breaker Panel : Push Buttons-Push Button Element of each type	1.00	Set	800.00	800
6.18	11 V ICOG Breaker Panel : Push Buttons- Push Button Actuator of each type	1.00	Set	800.00	800
6.19	Indication Lamps (1 no. of each type)	1.00	Set	192.00	192
6.20	Thermostat	1.00	No.	4000.00	4000
6.21	MINIATURE CIRCUIT BREAKER (OF EACH RATING)	1.00	Set	4800.00	4800
6.22	METERS: Ammeter	1.00	Set	16000.00	16000
6.23	METERS: Voltmeter	1.00	No.	16000.00	16000



ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&PIE&I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES	
		QUANTITY	UNIT PRICE
7.00	PART-B : ERECTION, TESTING & COMMISSIONING OF ELECTRICAL ITEMS		
7.11	415V Switchboard		
7.12	Handling, installation including transportation from store to site of installation, erection, testing and commissioning of 415V power-control-centres and bus duct, motor control centres, soft starters, APFC panel etc. assembling as required, unpacking, inspection, fabrication and erection of foundation channel, installation on the foundation channels, welding, aligning, leveling, grouting, assembling, fitting of all accessories / instruments / relays, relay coordination, CT, PT, Numerical Relay, interconnection of shipping sections and inter panel wiring as necessary, inter bus bar jointing, bus bar connection, installation, erection, testing and commissioning of bus duct, as per drawing, specifications and directions of the Site Engineer/ Engineer-in-Charge including cost of all materials, tools labour etc. complete in all respect including supply of WP double compression rolled aluminium cable glands & lugs (Al/Cu/Bimetallic), termination of all power, control cables, installation of thermistor controller, internal wiring, earthing of LT panels & bus duct, making holes for cable entries as required, shrouding, plugging/sealing of all unused cable entries and other holes for making the same dust and vermin proof etc. complete as per drawings, specification and directions of Site Engineer / Engineer-in-Charge. This shall also include assembling as required; unpacking, inspection, fabrication and erection of foundation channel, installation on the foundation channels, welding, aligning, leveling, grouting, assembling, fitting of all accessories / instruments / relays, relay coordination, CT, PT, Numerical Relay, interconnection of shipping sections and inter panel wiring as necessary, inter bus bar jointing, bus bar connection, installation, as per drawing, specifications and directions of the Site Engineer/ Engineer-in-Charge including cost of all materials; tools labour etc. complete in all respect including supply of WP double compression rolled aluminium cable glands & lugs (Al/Cu/Bimetallic), termination of all power, thermistor controller, internal wiring, earthing of LT panels , making holes for cable entries as required, shrouding, plugging/sealing of all unused cable entries and other holes for making the same dust and vermin proof etc. complete as per drawings, specification and directions of Site Engineer / Engineer-in-Charge.		
7.13	415V, 3 Ph & N, upto 3200 A, 50kA for 1 sec., Draw out type, Double front, indoor type Low Voltage switchboard (Power & Motor Control Centre, PMCC) approximately 14 Bay	1.00	80000.00
7.14	415V, 3 Ph & N, upto 2500 A, 50kA for 1 sec., Draw out type, Double front, indoor type Low Voltage switchboard ( Power & Motor Control Centre, PMCC) approximately 12 Bay	1.00	64000.00
7.15	415V, 3 Ph & N, upto 2500 A, 50kA for 1 sec., Draw out type, Double front, indoor type Low Voltage switchboard (Erection, Power & Motor Control Centre, EPMCC) approximately 10 Bay	1.00	64000.00

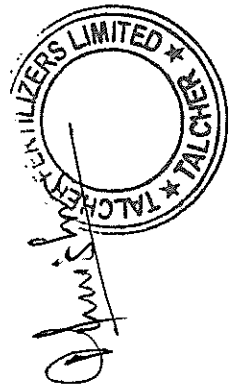
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## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

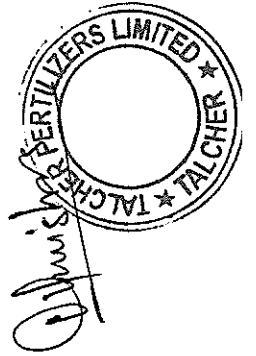
SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES		TOTAL AMOUNT EXCLUDING GST	
		QUANTITY	UNITS		UNIT PRICE
7.16	TRANSFORMER  Handling, storage at site, transportation from store to site of installation, erection, installation, testing and commissioning of (outdoor type - ONAN cooled) transformer, erection of transformer over the rail and foundation channels, including transporting, unpacking, rigging, aligning, levelling, grouting, assembling, fitting and fixing all accessories/instruments/relays etc. supplied separately if any, etc., supply of WP double compression rolled aluminium cable glands & suitable lugs (Al/Cu/Bimetallic), making all the interconnections & termination of all power (HT/LT) cables, control cables / busbar etc. as per drawings, including earthing/grounding of transformer neutral as per drawing, equipments needed to completely install and commission the transformer Job complete in all respect including cost of all labour, tools and materials and all services rendered complete. installation of thermostat controller, internal wiring, earthing of LT panel etc. complete as per drawings and directions of the Site Engineer / engineer-in-Charge. Note: Commissioning assistance shall be provided by the supplier of the Transformer as and when required at site.				
7.17					
7.18	2000 KVA, 11/0.433 kV Transformer (ONAN), 50 Hz, Dyn11 with off load tap changer	2.00	Nos.	120000.00	240000
7.19	1600 KVA, 11/0.433 kV Transformer (ONAN), 50 Hz, Dyn11 with off load tap changer	2.00	Nos.	96000.00	192000
7.20	1250 KVA, 11/0.433 kV Transformer (ONAN), 50 Hz, Dyn11 with off load tap changer	2.00	Nos.	96000.00	192000
7.21	TRANSFORMER OIL :				
7.22	Centrifuging, filtering and dehydrating of the transformer oil of transformer to improve insulation level to the value recommended as per the relevant ISS and the manufacturer's recommendations and as per specifications, and directions of the Site Engineer/Engineer-in-Charge including supply of labour, tools and materials and all services rendered complete.				
7.23	Transformer Oil.	10000.00	Ltrs	40.00	400000
7.24	HT CAPACITOR BANK				



## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES		
		QUANTITY	UNITS	UNIT PRICE
		TOTAL AMOUNT EXCLUDING GST		
7.25	Erection, installation within site transportation, testing and commissioning of HT capacitor bank along with all installation of all accessories including termination of all control cables, installation on foundation channels, drilling, cutting, welding, aligning, levelling, gROUTING, assembling and fitting all accessories / instruments / relays connection of 230 V Supply / battery bank 220 V DC supply, earthing of HT capacitor bank, making all the interconnections/ outgoing/incoming LT power & control cable connections including making holes for cable entries as required with materials i.e. WP double compression Cable glands, end lugs, labour, tools and tackles, consumables etc , as per drawings, specification and directions of Site Engineer / Engineer-in-Charge.  Note: Commissioning assistance shall be provided by the supplier of the HT capacitor bank as and when required at site.			
7.26	300 KVAR Capacitor bank (2 Steps of 100KVAR,200KVAR each), 3.3 KV Voltage Level	2.00	Nos.	32000.00
7.27	500 KVAR Capacitor bank (3 Steps of 100KVAR,200KVAR each), 11 KV Voltage Level	2.00	Nos.	48000.00
7.28	ELECTRIC HEATER WITH THYRISTOR CONTROL PANEL:			
7.29	Handling, installation including transportation from owner's store to site of installation, erection, testing and commissioning of 690V/415 V, owner supplied electric heater alongwith thyristor control panels, J.B., LCS, etc. assembling as required, installation on the already made foundation channel, aligning, levelling, gROUTING, assembling, making all the inter connections / outgoing / incoming power & control cable / connection including making holes for cable entries as required as per drawing, specifications and directions of the Site Engineer/Engineer-in-Charge including cost of all materials, tools labour etc. complete in all respect including termination of all power, control cables, installation of thermistor controller, internal wiring, earthing of control panels, supply of FLP cable glands and suitable cable lugs (Al/Cu/Bimetallic) etc. complete as drawings, specification and directions of Site Engineer / Engineer-in-Charge etc.	1.00	Nos.	32000.00
7.30	TESTING & COMMISSIONING of MOTORS			
7.31	HT MOTOR (11KV/3.3KV):			



## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;PIE&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
7.32	Testing & commissioning of owner supplied, 3-Phase Squirrel Cage, HT induction Motors. The job includes dehydration of motors, execution of terminal connections with HT power, LT power and control cables, earthing of Motor / Local speed controller, armour of all the cables etc., with materials i.e. FLP double compression rolled aluminium cable glands, Suitable end lugs(Aluminum/copper/Bi metallic), labour, tools and tackles, consumables etc. including dehydration of the following motors to improve the insulation resistance value of the winding to the required level as per direction of the site in-charge, as per drawings, specification and directions of Site Engineer / Engineer-in-Charge.				
7.33	HT Motor rating below 500 KW and greater than 150 KW	1.00	Nos.	30375.00	30375
7.34	HT Motor rating above 500 KW and below 1500 KW	4.00	Nos.	36450.00	145800
7.35	HT Motor rating 1500 KW and above	1.00	Nos.	48600.00	48600
7.36	Testing and commissioning of 3-Phase, 415V, Squirrel Cage, Hoseproof/Flameproof Induction Motors of following ratings excluding cable glanding, cable termination, dehydration of windings but including checking & replenishment/ replacement of bearing grease/ lubricant; checking of IR values between each winding & motor frame & checking of continuity of rotation, if required, by changing supply connections; trial runs on NO LOAD & ON LOAD; supply of approved grease/ lubricant & necessary hardware; all work, labour & materials complete as per specifications, documents, codes & standards & directions of engineer-in-charge. (Contractor to keep proper record of tests on motors for NO LOAD & ON LOAD runs)				
7.37	Rating upto 5.5 KW	15.00	Nos.	2430.00	36450
7.38	Rating above 5.5 KW but upto 11 KW	6.00	Nos.	2430.00	14580
7.39	Rating above 11 KW but upto 22 KW	7.00	Nos.	3645.00	25515
7.40	Rating above 22 KW but upto 45 KW	4.00	Nos.	5468.00	21872
7.41	Rating above 45 KW but upto 75 KW	2.00	Nos.	8505.00	17010
7.42	Rating above 75 KW but upto 150 KW	2.00	Nos.	12150.00	24300
7.43	CABLES (HT & LT)				



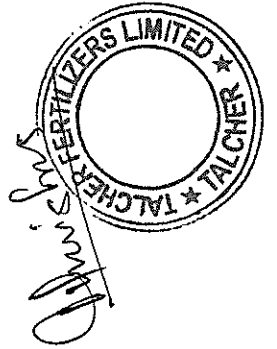
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## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES		
		QUANTITY	UNITS	UNIT PRICE
				TOTAL AMOUNT EXCLUDING GST
7.44	Handling, Laying (horizontal & vertical), testing and commissioning of 11KV(U/E)/ 1.1 KV Grade, XLPE Insulated, PVC inner sheathed, armoured, FRLS PVC outer sheathed cables including its termination in new & readymade trenches, on pre-fabricated/ site-fabricated cable trays/ racks, on already installed risers, support, hangers,saddles / directly buried up to 700mm depth etc. pulling through pipes on walls/columns, steel structures including transportation of cable drums from storage yard to site, unrolling the drum, including supply & fixing of cable tags, Al clamps with all labour, consumable materials and necessary hardware to make installation complete in all respect as per direction of Site Engineer / Engineer-in-charge.			
7.45	HT (11KV/3.3 KV) Power cables			
7.46	Power cables HT (11kv/3.3KV) upto 400 sq. mm	3200.00	Mtrs.	146.00
7.47	LT (PVC / XLPE / Armoured / Unarmoured / Power / Control / Signalling) Cables			
7.48	LT cables: OD upto 20 mm	5200.00	Mtrs.	24.00
7.49	LT Power cables: OD above 20 mm and upto 30 mm	10250.00	Mtrs.	30.00
7.50	LT cables: OD above 30 mm and upto 40 mm	600.00	Mtrs.	61.00
7.51	LT cables: OD above 40 mm and upto 60 mm	5650.00	Mtrs.	85.00
7.52	LT cables: OD above 60 mm	1400.00	Mtrs.	109.00
7.53	Handling, laying of 6 Fiber multi mode FO Cable suitable for relay to relay distance of approx 2 km for line differential protection with all accessories for termination , this also include splicing, jointing as per requirement	600.00	Mtrs.	146.00
7.54	EARTH STRIP / WIRE / ROPE / CABLE			



## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES		
		QUANTITY	UNITS	UNIT PRICE
7.55	Earthing strip/wire/rope/cable for completely making the earthing grid system by laying the GI strip / GI Wire enclosed in ready made concrete trenches or in floor slits, on brick / concrete wall under concrete floors, or paved areas, across pipe joints and valves, directly buried under ground at depth of 600 mm, including handling, transportation to erection site, bending, straightening, cutting to size, welding together of earth strips in overlapping manner, chipping in concrete floors / paved areas for laying the earth strips under floors / paved areas and making good by cement plastering concrete after laying of the strips; clamping and supporting of earth strips laid above ground, connecting the strips / wire at both ends to equipment or to earth bus / earth plates or to GI brackets fixed inside earthen chamber, by bolting etc., Hessian tapes, all necessary GI hardware, GI clamps, civil masonry materials, etc. all work, labour as per specifications, codes and standards and directions of Site engineer/Engineer-in-charge, including the cost of all labour, tools, materials, etc. complete in all respect. Note: The conductors shall be laid at a minimum depth of 600 mm from ground level. The excavation for the GI earth conductors / strips shall not be separately measured and the rates quoted to include the same.			
7.56	75 mm x 10 mm	1000.00	Mtrs.	122.00
7.57	50 mm x 6 mm	800.00	Mtrs.	97.00
7.58	GI wire Rope (8 SWG)	30.00	Kg	61.00
7.59	Handling, Installation, Testing and Commissioning of 35x6 GI strip on parapet of surface of wall for lightning conductor as required for vertical run including test link etc & horizontal run along wall, column, parapet etc complete with PVC fasteners, screws, Saddles, and welding/retvetting and painting of joints etc as required.	100.00	Mtr	97.00
7.60	CABLE TRAYS:			
7.61	Handling, installation & fixing of prefabricated ladder GI cable trays and their accessories i.e. supply of all hardware required i.e. J-hooks, GI Nut, Bolt, Washers, coupling plate etc. of width 150 mm, 300 mm, 450 mm & 600 mm as per site requirement for laying of cables with standard rung spacings. Load for support span of 2.5 meter as 30, 60, 75 & 90 (in Kg/Mtr.) respectively with concentric static load as 70 Kg at the centre, with materials, labour, tools and tackles, consumables etc. as per drawings, specification and directions of Site Engineer / Engineer-in-Charge. The rates shall be valid for all mounting heights.			
				TOTAL AMOUNT EXCLUDING GST

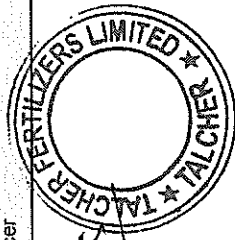
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TALCHER FERTILIZERS LIMITED.

## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
7.62	Straight Run Cable Trays				
7.63	600 mm wide	1900.00	Mtrs.	219.00	416100
7.64	450 mm wide	300.00	Mtrs.	182.00	54600
7.65	300 mm wide	700.00	Mtrs.	158.00	110600
7.66	150 mm wide	200.00	Mtrs.	134.00	26800
7.67	Horizontal Bends				
7.68	600 mm wide, 700 mm radius	20.00	Nos.	608.00	12160
7.69	450 mm wide, 700 mm radius	15.00	Nos.	547.00	8205
7.70	300 mm wide, 700 mm radius	60.00	Nos.	486.00	29160
7.71	150 mm wide	20.00	Nos.	365.00	7300
7.72	Vertical Inside Bends				
7.73	600mm wide, 1000mm radius	10.00	Nos.	608.00	6080
7.74	450 mm wide, 1000mm radius	10.00	Nos.	547.00	5470
7.75	300 mm wide, 1000mm radius	30.00	Nos.	486.00	14580
7.76	150 mm wide	20.00	Nos.	365.00	7300
7.77	Vertical Outside Bends				
7.78	600 mm wide, 1000 mm radius	10.00	Nos.	608.00	6080
7.79	450 mm wide, 1000 mm radius	10.00	Nos.	547.00	5470
7.80	300 mm wide, 1000 mm radius	35.00	Nos.	486.00	17010
7.81	150 mm wide	20.00	Nos.	365.00	7300
7.82	Reducer				



## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
7.83	600 mm / 450 mm wide	10.00	Mtrs.	608.00	6080
7.84	450/300mm wide	10.00	Nos.	547.00	5470
7.85	300/150mm wide	10.00	No.	486.00	4860
7.86	Regular Tees				
7.87	600 mm wide , 700 mm radius	5.00	Mtrs.	608.00	3040
7.88	450 mm wide, 700 mm radius	8.00	Mtrs.	547.00	4376
7.89	Cross				
7.90	600 mm wide , 700 mm radius	10.00	Mtrs.	608.00	6080
7.91	450 mm wide, 700 mm radius	5.00	Mtrs.	547.00	2735
8.00	PART-C : SUPPLY, ERECTION, TESTING & COMMISSIONING OF ELECTRICAL COMPOSITE ITEMS				
8.11	DISTRIBUTION BOARDS:				
8.12	Supply, unloading, Handling, Storage, transportation within site, Erection, Installation, testing and commissioning etc. of following floor / wall mounted Distribution Boards/Sub distribution board having minimum IP-54 protection, Copper Bus Bar with Color Coded Heat Shrinkable Sleeves, storage, handling, site transportation from store to site of installation, including supply and fabrication of epoxy painted MS frame, operational and functional checking, drilling of gland plates with requisite holes, supply & fixing of suitable double compression nickel plated brass/rolled Al cable glands & suitable lugs, termination of all power and control cables, shrouding,plugging of all unused cable entries and other holes found in the boards to make the same dust and vermin proof with all labour and consumable materials to make installation complete of following Distribution Boards as specified in Technical Specification - Electrical, Technical Specification PC183-TS-0805 PC183-TS-0808 and attached SLD, data sheets, drawings, specifications and directions of engineer-in-charge :				





*Signature*

## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;PIE&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
8.13	415 V, 3 Ph & N, IP54 floor mounted sheet steel enclosed Main Lighting Distribution Board (MLDB) consisting of 2 nos. incoming 250 A MCCB incomer with 200/1 CT, 250A contactor, MFM, voltmeter, VSS & RYB indications & 5 nos. 63 A TPN RCCB outgoing feeders on indoor bus and 4 nos. 125A TPN RCCB & 3 nos. 63A TPN RCCB outgoing feeders on outdoor bus with Photocell controlled (125A contactor with MCCB) as indicated in attached SLD enclosed with Technical specification	2.00	Nos.	730080.00	1460160
8.14	415 V, 3 Ph & N, IP54 floor mounted sheet steel enclosed Main Lighting Distribution Board (MLDB) consisting of 2 nos. incoming 630 A MCCB incomer with 600/1 CT, 550A contactor, MFM, voltmeter, VSS & RYB indications & 3 nos. 63 A TPN RCCB /125 A TPN MCCB outgoing feeders on indoor bus and 6 nos. 250A TPN MCCBs & 3 nos. 63 A TPN RCCB /125 A TPN MCCB outgoing feeders on outdoor bus with Photocell controlled (500A contactor with 630 A MCCB) as indicated in attached SLD for MLDB enclosed with Technical specification	1.00	Nos.	1324800.00	1324800
8.15	415 V, 3 Ph & N, IP52, floor mounted sheet steel enclosed Power Distribution board (PCC) consisting of 2 nos. incoming 2500A ACB Incomer & nos. of outgoing feeders as indicated in attached SLD enclosed with Technical specification.	1.00	No.	4497600.00	4497600
8.16	415 V, 3 Ph & N, IP54, floor mounted sheet steel enclosed Power Distribution board (PDB-1 (N1) Workshop) of 1 nos. incoming 800A ACB Incomer & nos. of outgoing feeders as indicated in attached SLD enclosed with Technical specification.	1.00	No.	3166560.00	3166560
8.17	415 V, 3 Ph & N, IP54, floor mounted sheet steel enclosed Power Distribution board (PDB-2 for Small Loads) of 1 nos. incoming 250A MCCB Incomer & nos. of outgoing feeders as indicated in attached SLD enclosed with Technical specification.	1.00	No.	1188000.00	1188000
8.18	415 V, 3 Ph & N, IP54, floor mounted sheet steel enclosed Power Distribution board (PDB-4 for Small Loads) of 1 nos. incoming 250A MCCB Incomer & nos. of outgoing feeders as indicated in attached SLD enclosed with Technical specification.	1.00	No.	1843200.00	1843200
8.19	415 V, 3 Ph & N, IP54, floor mounted sheet steel enclosed Power Distribution board (PDB-1 for Small Loads) of 1 nos. incoming 250A MCCB Incomer & nos. of outgoing feeders as indicated in attached SLD enclosed with Technical specification.	1.00	No.	1843200.00	1843200
8.20	415 V, 3 Ph & N, IP54, floor mounted sheet steel enclosed Power Distribution board (PDB-3 for Small Loads) of 1 nos. incoming 250A MCCB Incomer & nos. of outgoing feeders as indicated in attached SLD enclosed with Technical specification.	1.00	No.	1396800.00	1396800

## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;PIE&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
8.21	415 V, 3 Ph & N, IP54, floor mounted sheet steel enclosed Power Distribution board (PDB-3 for Small Loads) of 1 nos. incoming 250A MCCB Incomer & nos. of outgoing feeders as indicated in attached SLD enclosed with Technical specification.	1.00	No.	1396800.00	1396800
8.22	415 V, 3 Ph & N, IP54, floor mounted sheet steel enclosed Power Distribution board (PDB-2(E) Workshop) of 1 nos. incoming 250A MCCB Incomer & nos. of outgoing feeders as indicated in attached SLD enclosed with Technical specification.	1.00	No.	1188000.00	1188000
8.23	WALL / STRUCTURE MOUNTED SUB DISTRIBUTION BOARDS / FEEDAR PILLAR BOXES				
8.24	Supply, unloading, Handling, Storage, transportation within site, Installation, testing and commissioning of following floor / wall mounted Distribution Boards, including supply and fabrication of epoxy painted MS frame, operational and functional checking, drilling of gland plates with requisite holes, fixing of cable glands, plugging of all unused cable entries and other holes found in the boards to make the same dust and vermin proof with all labour and consumable materials to make installation complete of following wall / structure mounted Distribution Boards as specified in Technical Specification - Electrical, Technical Specification PC-183-TS-0809, Single Line Diagrams, Specification Sheets, Specifications and directions of Engineer-in-Charge. All distribution boards incomers shall have phase indication light with MCB. All Distribution boards shall be provided with Aluminium Busbars.				
8.25	415 V, 12-way, wall / structure mounted Sheet Steel enclosed Industrial Type Hose Proof and weatherproof (IP-55) Lighting Sub Distribution Boards having 1 No. Incoming (100 A 4PMCCB) and 3 nos. feeder circuit of 63A DP RCBO having 12 Nos. outgoing of 32 A DP MCB as indicated in attached SLD along with technical specifications, standards etc. (i.e.4 nos. 32 A DP MCB per circuit).	1.00	Nos.	57600.00	57600
8.26	415 V, 12-way, wall / structure mounted Sheet Steel enclosed Industrial Type Hose Proof and weatherproof (IP-55) Lighting Sub Distribution Boards having 1 No. Incoming (125 A 4PMCCB) and 3 nos. feeder circuit of 63A DP RCBO having 12 Nos. outgoing of 32 A DP MCB as indicated in attached SLD along with technical specifications, standards etc. (i.e.4 nos. 32 A DP MCB per circuit).	1.00	Nos.	57600.00	57600
8.27	415 V, 12-way, wall / structure mounted Sheet Steel enclosed Industrial Type Hose Proof and weatherproof (IP-55) Lighting Sub Distribution Boards having 1 No. Incoming (63 A 4PMCCB) and 3 nos. feeder circuit of 63A DP RCBO having 12 Nos. outgoing of 16 A DP MCB as indicated in attached SLD along with technical specifications, standards etc. (i.e.4 nos. 16 A DP MCB per circuit).	7.00	Nos.	54400.00	380800

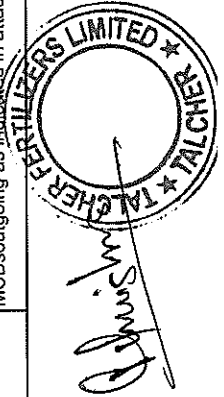
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## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

**SCHEDULE OF RATES (SOR)**

SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
8.28	415 V, 9-way, wall / structure mounted Sheet Steel enclosed Industrial Type Hose Proof and weatherproof (IP-55) Lighting Sub Distribution Boards having 1 No. Incoming (63 A 4PMCCB) and 3 nos. feeder circuit of 63A DP RCBO having 9 Nos. outgoing of 16 A DP MCB as indicated in attached SLD along with technical specifications, standards etc.(i.e.3 nos. 16 A DP MCB per circuit).	7.00	Nos.	52800.00	369600
8.29	415V Hose proof and weatherproof industrial type sheet steel enclosed, 18 way Lighting Distribution Board (LSDB) with IP-55 degree of protection having 1 no.(63 A 4PMCCB) and 3 nos. feeder circuit of 63A DP RCBO having 18 nos.16A DP MCBs outgoing as indicated in attached SLD along with technical specifications, standards etc.	6.00	Nos.	60800.00	364800
8.30	415 V, 3 Ph & N, IP55, wall/structure mounted sheet steel enclosed Feeder pillar box consisting of 1 nos. incoming 125A TPN MCCB incomer with RYB indications and 4 nos. 63A TPN MCCB outgoing feeders as indicated in attached SLD for feeder pillar box enclosed with Technical specification EM251-TS-0803.	1.00	Nos.	120000.00	120000
8.31	110 V, wall / structure mounted Sheet Steel enclosed Industrial Type Hose Proof and weatherproof (IP-55) DC Distribution Boards having 1 No. Incoming (32 A DP MCB and ELCB) and 12 Nos. outgoing feeders of 6 A DP DC MCB.	1.00	Nos.	48000.00	48000
8.32	415V Hose proof and weatherproof industrial type sheet steel enclosed, 18 way Lighting Distribution Board (LSDB) with IP-55 degree of protection having 1 no.(125 A 4PMCCB) and 3 nos. feeder circuit of 63A DP RCBO having 12 nos.16A DP MCBs and 6 Nos. 32 A MCBs outgoing as indicated in attached SLD along with technical specifications, standards etc.	1.00	Nos.	60800.00	60800
8.33	415V Hose proof and weatherproof industrial type sheet steel enclosed, 12 way Distribution Board (DB-D1) with IP-55 degree of protection having 1 no.(100 A 4PMCCB) and 8 nos.32A TPN MCBs & 12 Nos. 32 A SP MCBs outgoing as indicated in attached SLD along with technical specifications, standards etc.	1.00	Nos.	60800.00	60800
8.34	415V Hose proof and weatherproof industrial type sheet steel enclosed, 12 way Distribution Board (DB-D2) with IP-55 degree of protection having 1 no.(100 A 4PMCCB) and 12 nos.32A TPN MCBs outgoing as indicated in attached SLD along with technical specifications, standards etc.	1.00	Nos.	62400.00	62400
8.35	415V Hose proof and weatherproof industrial type sheet steel enclosed, 8 way Distribution Board (DB-D3) with IP-55 degree of protection having 1 no.(100 A 4PMCCB) and 4 nos.32A TPN MCBs & 12 Nos. 32 A SP MCBs outgoing as indicated in attached SLD along with technical specifications, standards etc.	1.00	Nos.	54400.00	54400
8.36	415V Hose proof and weatherproof industrial type sheet steel enclosed, 12 way Distribution Board (DB-D4) with IP-55 degree of protection having 1 no.(100 A 4PMCCB) and 9 nos.32A TPN MCBs & 9 Nos. 32 A SP MCBs outgoing as indicated in attached SLD along with technical specifications, standards etc.	1.00	Nos.	60800.00	60800




## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;PIE&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRIPTION	RATE AND AMOUNT IN INDIAN RUPEES		
		QUANTITY	UNITS	UNIT PRICE
				TOTAL AMOUNT EXCLUDING GST
8.37	415V Hose proof and weatherproof industrial type sheet steel enclosed, 8 way Distribution Board (DB-D5) with IP-55 degree of protection having 1 no.(63 A 4PMCCB) and 2 nos.32A TPN MCBs & 18 Nos. 20/32 A SP MCBs outgoing as indicated in attached SLD along with technical specifications, standards etc.	1.00	Nos.	52800.00
8.38	EMERGENCY PUSH BUTTON STATION FOR TRANSFORMER (Weatherproof)			
8.39	Supply, erection, testing and commissioning of Weather Proof push button(OFF) control station of approved make for emergency transformer tripping at field including connection and termination of copper control cable, fabricating, earthing the supporting structure, termination of cables painting the same, including supply & installation of cable glands & plugs for sealing all spare entries including the cost of all labour, tools, materials etc. complete in every respect as per the specification and directions of the Site Engineer / Engineer-in-charge.	6.00	Nos.	9113.00
9.00	LIGHTING			
9.11	Supply, unloading, storage, handling, transportation within site from store to site of installation, installation, connection, earthing and testing of the following LED fittings, including supply and installation of drop pipes, hooks, JB/TB for looping of fixtures, fittings, nuts, bolts, supports, on walls and all other required materials gland, lugs as required etc. as specified in Technical Specification and all hardware for fixing the lighting fittings with ceiling/wall pole including cable glanding, crimping of lugs on cable conductor & connecting cables at fixtures in looping and from lighting DB, earthing, junction boxes, etc., drawings and directions of the Site Engineer including cost of all labour, tools, materials as well as transportation from store to site of erection with all labour and material to make installation complete in all respect. Make of the fittings shall be as per approved make as mentioned in Technical specification.			
9.12	LED Tube light fitting industrial type of approved make suspension mounting suitable for 240V AC as per Technical specification complete with 2x18 W LED fixture with all accessories such as LED lamp/chip, electronic driver, Reflector, Terminal block etc. The fittings shall be provided with suspension accessory / wall mounting bracket depending upon directions by EIC / Site Engineer. The minimum degree of protection shall be IP 20.	10.00	Nos.	2673.00
9.13	LED Tube light fitting industrial type of approved make suspension mounting/wall mounting suitable for 240V AC as per Technical specification complete with 1x20 W LED fixture with all accessories such as LED lamp/chip, electronic driver, Reflector Terminal block etc etc. The fittings shall be provided with suspension accessory / wall mounting bracket depending upon directions by EIC / Site Engineer. The minimum degree of protection shall be IP 20.	10.00	Nos.	1823.00

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## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;PIE&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
9.14	55 W LED Highbay Light Fixture of approved make suitable for 240V AC as per Technical specification complete with all accessories such as LED lamp/chip, electronic driver, Reflector Terminal block etc etc.. The fittings shall be provided with mounting arrangement as per Site Engineer/ Engineer-in-charge.	110.00	Nos.	4253.00	467830
9.15	180 W LED Highbay Light Fixture of approved make suitable for 240V AC as per Technical specification complete with all accessories such as LED lamp/chip, electronic driver, Reflector Terminal block etc etc.. The fittings shall be provided with mounting arrangement as per Site Engineer/ Engineer-in-charge.	50.00	Nos.	15188.00	759400
9.16	40 W LED Batton 4 Ft of approved make suitable for 240V AC as per Technical specification complete with all accessories such as LED lamp/chip, electronic driver, Reflector Terminal block etc etc.. The fittings shall be provided with mounting arrangement as per Site Engineer/ Engineer-in-charge.	200.00	Nos.	2187.00	437400
9.17	15 W LED Surface Light of approved make suitable for 240V AC as per Technical specification complete with all accessories such as LED lamp/chip, electronic driver, Reflector Terminal block etc etc.. The fittings shall be provided with mounting arrangement as per Site Engineer/ Engineer-in-charge.	40.00	Nos.	3645.00	145800
9.18	10 W LED Baton Mirror Light 2 Ft of approved make suitable for 240V AC as per Technical specification complete with all accessories such as LED lamp/chip, electronic driver, Reflector Terminal block etc etc.. The fittings shall be provided with mounting arrangement as per Site Engineer/ Engineer-in-charge.	20.00	Nos.	1823.00	36450
9.19	34 W x 2 Luminaire of approved make suitable for 240V AC as per Technical specification complete with all accessories such as LED lamp/chip, electronic driver, Reflector Terminal block etc etc.. The fittings shall be provided with mounting arrangement as per Site Engineer/ Engineer-in-charge.	100.00	Nos.	3159.00	315900
9.20	Flame proof Light Fixture 40 W of approved make suitable for 240V AC as per Technical specification complete with all accessories such as LED lamp/chip, electronic driver, Reflector Terminal block etc etc.. The fittings shall be provided with mounting arrangement as per Site Engineer/ Engineer-in-charge.	6.00	Nos.	5468.00	32808
9.21	120 W Flood Light Fixture of approved make suitable for 240V AC as per Technical specification complete with all accessories such as LED lamp/chip, electronic driver, Reflector Terminal block etc etc.. The fittings shall be provided with mounting arrangement as per Site Engineer/ Engineer-in-charge.	40.00	Nos.	9720.00	388800



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SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
9.22	Supply, unloading, storage, handling, transportation within site from store to site of installation, installation, connection, testing and commissioning of pre-wired 240V AC, 1-Ph, WP outdoor, LED Lighting fixtures including LED lamp with driver and JB for looping of cables of following type which shall be suitable for use in safe area having IP-65 degree of protection complete with all accessories, double compression Ni-plated brass cable glangs & plugs, blanking plugs etc. as specified in Technical specification and all hardware for fixing the lighting fittings with structure/ lighting pole including cable glanding, crimping of lugs on cable conductor & connecting cables at fixtures, earthing, junction boxes, etc. including supply of all connecting materials like clamps, supports, conduits, down rods etc. as required as well as transportation from store to site of erection with all labour and material to make installation complete in all respect as per approved drawings, specifications and directions of Site Engineer / Engineer-in-charge. The rates shall be valid for all mounting heights.				
9.23	90 W LED Flood light, WP type lighting fixtures of approve make as per technical specification as per technical specification with led lamp/chip, driver etc. complete with increased safety cable glands, plug suitable for 3 X 2.5mm2 XLPE-A-PVC cable and stopping plug.	5.00	Nos.	11543.00	57715
9.24	60 W LED Flood light, WP type lighting fixtures of approve make as per technical specification as per technical specification with led lamp/chip, driver etc. complete with increased safety cable glands, plug suitable for 3 X 2.5mm2 XLPE-A-PVC cable and stopping plug.	5.00	Nos.	8262.00	41310
9.25	45 W LED Flood light, WP type lighting fixtures of approve make as per technical specification with led lamp/chip, driver etc. complete with increased safety cable glands, plug suitable for 3 X 2.5mm2 XLPE-A-PVC cable and stopping plug.	5.00	Nos.	6683.00	33415
9.26	Bulkhead type LED light fitting type of approved make wall mounting suitable for 110V DC as per Technical specification complete with 1 x 9 W LED fixture with all accessories such as LED lamp/chip, electronic driver, terminal block, Reflector etc.. The fittings shall be provided with suspension accessory / wall mounting bracket depending upon directions by EIC / Site Engineer. The minimum degree of protection shall IP 65.	2.00	Nos.	24300.00	48600
9.27	Wiring				



## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;PIE&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

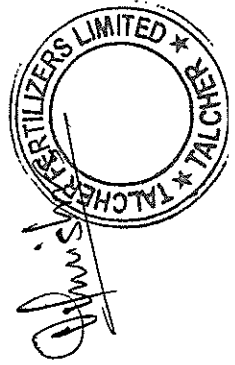
SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES		
		QUANTITY	UNITS	UNIT PRICE
9.28	Point Wiring : One Light / Fan / Exhaust Fan Point shall controlled by one switch. Supply and Providing Point Wiring system for primary light point/ceiling fan point/exhaust fan point/ call bell point/light plug point controlled by 1-6 Ampere modular type switch inclusive of the cost for providing circuit wiring from Distribution board to switch boards with 2x2.5 sq.mm., 1.1 KV grade PVC multi stranded fire resistant insulated copper conductor wire for light in required size of rigid PVC conduit with conduit accessories and 14swg bare copper earth wire continuity conductor including providing/fixing of PVC conduit of required size. Item shall also include wiring from switch board to point/fitting with 2x1.5 sq.mm copper conductor PVC insulated wire of 1100V grade with 14 SWG copper wire as earth continuity conductor for light in appropriate size of PVC conduit including providing & fixing PVC conduit with accessories such as bends,JB,sockets etc.required size of MS zinc passivated modular box with white inner plate and glossy white outer module plate for housing modular switch, sockets, fan regulators (Electronic heavy duty step up type) bell push on modular plate etc.The rates shall include cutting and refilling of chases/Wall etc. including internal connections as required. All switch sockets shall be modular type fixed on modular plate. Make of modular plate, board, switch, socket etc shall be as per approved Make. (Actual nos. shall be decided at site).	60.00	Nos.	1458.00
9.29	Point Wiring : TWO Light / Fan / Exhaust Fan Point shall controlled by one switch. Supply and Providing Point Wiring system for primary light point/ceiling fan point/exhaust fan point/ call bell point/light plug point controlled by 1-6 Ampere modular type switch inclusive of the cost for providing circuit wiring from Distribution board to switch boards with 2x2.5 sq.mm., 1.1 KV grade PVC multi stranded fire resistant insulated copper conductor wire for light in required size of rigid PVC conduit with conduit accessories and 14swg bare copper earth wire continuity conductor including providing/fixing of PVC conduit of required size. Item shall also include wiring from switch board to point/fitting with 2x1.5 sq.mm copper conductor PVC insulated wire of 1100V grade with 14 SWG copper wire as earth continuity conductor for light in appropriate size of PVC conduit including providing & fixing PVC conduit with accessories such as bends,JB,sockets etc.required size of MS zinc passivated modular box with white inner plate and glossy white outer module plate for housing modular switch,sockets,fan regulators (Electronic heavy duty step up type) bell push on modular plate etc.The rates shall include cutting and refilling of chases/wall etc. including internal connections as required. All switch sockets shall be modular type fixed on modular plate. Make of modular plate,board switch, socket etc shall be as per approved Make. (Actual nos. shall be decided at site).	20.00	Nos.	2430.00
				87480
				48600



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SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	
				TOTAL AMOUNT EXCLUDING GST	
9.30	<p>Point Wiring : THREE Light / Fan /Exhaust Fan Point shall controlled by one switch. Supply and Providing Point Wiring system for primary light point/ceiling fan point/exhaust fan point/ call bell point/light plug point controlled by 1-6 Ampere modular type switch inclusive of the cost for providing circuit wiring from Distribution board to switch boards with 2x2.5 sq.mm., 1.1 KV grade PVC multi stranded fire resistant insulated copper conductor wire for light in required size of rigid PVC conduit with conduit accessories and 14swg bare copper earth wire continuity conductor including providing/fixing of PVC conduit of required size. Item shall also include wiring from switch board to point/fitting with 2x1.5 sq.mm copper conductor PVC insulated wire of 1100V grade with 14 SWG copper wire as earth continuity conductor for light in appropriate size of PVC conduit including providing &amp; fixing PVC conduit with accessories such as bends, JB, sockets etc.required size of MS zinc passivated modular box with white inner plate and glossy white outer module plate for housing modular switch, sockets, fan regulators (Electronic heavy duty step up type) bell push on modular plate etc.The rates shall include cutting and refilling of chases/wall etc. including internal connections as required. All switch sockets shall be modular type fixed on modular plate. Make of modular plate,board switch, socket etc shall be as per approved Make. (Actual nos. shall be decided at site).</p>	5.00	Nos.	3402.00	17010
9.31	<p>Point Wiring : TWIN controlled Light Point. Supply and Providing Point Wiring system for twin controlled lighting point controlled by 1-6 Ampere modular type switch inclusive of the cost for providing circuit wiring from Distribution board to switch boards with 2x2.5 sq.mm., 1.1 KV grade PVC multi stranded fire resistant insulated copper conductor wire for light in required size of rigid PVC conduit with conduit accessories and 14swg bare copper earth wire continuity conductor including providing/fixing of PVC conduit of required size.Item shall also include wiring from switch board to point/fitting with 2x1.5 sq.mm copper conductor PVC insulated wire of 1100V grade with 14 SWG copper wire as earth continuity conductor for light in appropriate size of PVC conduit including providing &amp; fixing PVC conduit with accessories such as bends, JB, sockets etc.required size of MS zinc passivated modular box with white inner plate and glossy white outer module plate for housing modular switch, sockets, fan regulators (Electronic heavy duty step up type) bell push on modular plate etc.The rates shall include cutting and refilling of chases/wall etc. including internal connections as required. All switch sockets shall be modular type fixed on modular plate. Make of modular plate, board switch, socket etc shall be as per approved Make. (Actual nos. shall be decided at site).</p>	5.00	Nos.	3888.00	19440




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SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	
				TOTAL AMOUNT EXCLUDING GST	
9.32	<p>Point Wiring : Plug Point Supply and Providing Point Wiring system for 6A Plug points with single core multi stranded PVC insulated unsheathed copper conductor fire retardant wires of 1100V grade in recessed PVC conduit including providing and fixing PVC conduits of required size complete with accessories such as bends, JB, Pull Boxes etc with plate, switches, sockets, screws and covers, Zinc Passivated MS modular boxes (16 gauge sheet construction) of suitable sizes, embedded in wall, concealed and flush with walls including cutting and refilling the chases/ Wall etc and inclusive of 14 SWG bare copper earth conductor for socket outlets as per specifications &amp; direction of Engineer in charge. All Modular type switch &amp; socket shall be of approved make. 6 Amp 6 pin socket outlet with 6A switch mounted side by side with 2x2.5 sq.mm PVC copper wire with 14 SWG bare copper earth wire. (Actual nos. shall be decided at site).</p>	20.00	Nos.	1458.00	29160
9.33	<p>Point Wiring : Secondary Plug Point from Primary Plug Point Supply and Providing Point Wiring system for 6A Plug points with single core multi stranded PVC insulated unsheathed copper conductor fire retardant wires of 1100V grade in recessed PVC conduit including providing and fixing PVC conduits of required size complete with accessories such as bends, JB, Pull Boxes etc with plate, switches, sockets, screws and covers, Zinc Passivated MS modular boxes (16 gauge sheet construction) of suitable sizes, embedded in wall, concealed and flush with walls including cutting and refilling the chases/ Wall etc and inclusive of 14 SWG bare copper earth conductor for socket outlets as per specifications &amp; direction of Engineer in charge. All Modular type switch &amp; socket shall be of approved make. 6 Amp 6 pin socket outlet with 6A switch mounted side by side with 2x2.5 sq.mm PVC copper wire with 14 SWG bare copper earth wire. (Actual nos. shall be decided at site).</p>	40.00	Nos.	2916.00	116640
9.34	<p>Point Wiring : Power Plug Point Supply and Providing Point Wiring system for 16A /6A power plug point with following sizes PVC insulated unsheathed single core multi stranded copper conductor, fire retardant wires of 1100V grade in recessed PVC conduits of required size complete with accessories such as bends, JB, Pull boxes etc with plate switches, sockets, screws and covers, Zinc Passivated MS modular boxes (16 gauge sheet construction) of suitable size, embedded in wall concealed and flush with walls including cutting and refilling the chases/Wall etc, and inclusive of 14SWG bare copper earth conductor for socket outlets as per specifications &amp; direction of Engineer in charge. All modular type switch &amp; socket shall be of approved make. 16A, 6 Pin socket outlet with 16A switch mounted side by side with 2x4 sq.mm PVC copper wire with 14 SWG bare copper earth wire as an independent circuit from DB. (Actual nos. shall be decided at site).</p>	15.00	Nos.	3402.00	51030

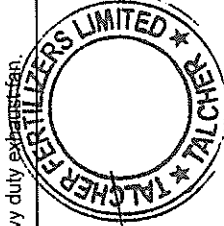
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## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;PIE&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

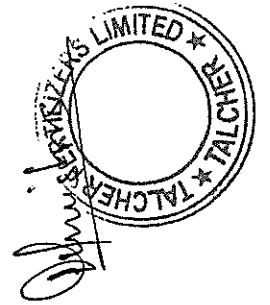
SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES		TOTAL AMOUNT EXCLUDING GST	
		QUANTITY	UNITS		UNIT PRICE
9.35	Point Wiring : Secondary Power Plug Point from Primary Power Plug Point Supply and Providing Point Wiring system for 16A /6A power plug point with following sizes PVC insulated unsheathed single core multi stranded copper conductor, fire retardant wires of 1100V grade in recessed PVC conduits of required size complete with accessories such as bends, JB, Pull boxes etc with plate switches, sockets, screws and covers, Zinc Passivated MS modular boxes (16 gauge sheet construction) of suitable size, embedded in wall concealed and flush with walls including cutting and refilling the chases/Wall etc, and inclusive of 14SWG bare copper earth conductor for socket outlets as per specifications & direction of Engineer in charge. All modular type switch & socket shall be of approved make 16A, 6 Pin socket outlet with 16A switch mounted side by side with 2x4 sq.mm PVC copper wire with 14 SWG bare copper earth wire as an independent circuit from DB. Two nos.power plug point shall be looped from one primary plug point.	30.00	Nos.	3402.00	102060
9.36	Point Wiring : A.C. Point Supply and Providing Point Wiring system for 32A Industrial socket point (A.C. Point) with 2x4 sq.mm PVC insulated copper conductor FRLS cable in recessed PVC conduit along with 1x4 sq.mm. PVC insulated FRLS cable for earthing I/C, Providing & fixing 25A plug & socket unit complete with 32A DP MCB and 32A plug top including GI Box to be mounted on modular plate complete with connections, testing & commissioning etc (separate circuit for each point) : 32A DP MCB with Sockets for 1.5T AC	10.00	Nos.	3645.00	36450
9.37	Supply, hanging, fixing, connecting 3-blade ceiling fan including provision of cable/wire from ceiling rose or connector to fan including supply and fixing hexagonal fan hook with 12 mm dia. MS rod bend to shape as reqd.				
9.38	1400 mm sweep	2.00	Nos.	3038.00	6076
9.39	1200 mm sweep	80.00	Nos.	2430.00	194400
9.40	600 mm sweep	2.00	Nos.	1823.00	3646
9.41	Supply, Installation, Testing & Commissioning of following single phase wall fan and exhaust fan with guards / louvres, along with necessary brackets, all required civil works, making good the walls after fixing the fans etc.				
9.42	380 mm sweep heavy duty exhaust-fan.	24.00	Nos	3645.00	87480



## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;PIE&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES		
		QUANTITY	UNITS	UNIT PRICE
9.43	Corrosion proof, flameproof 300mm sweep heavy duty exhaust fan for battery room	2.00	Nos	11543.00
9.44	WP SWITCH CUM SOCKET :			23086
9.45	Supply, erection, installation, testing and commissioning of flameproof/weatherproof switch cum socket/welding receptacle having IP65 protection of approved makes to be installed on walls, columns, structures, including handling, storage, transportation from store to site of installation, supply & installation of double compression cable glands, suitable lugs & WP/flame proof plugs for sealing all spare entries etc., including connection and termination of all power cables, earthing wire and conduits, etc. complete as per drawings, specifications and direction of the Site Engineer, including the cost of all labour, tools, consumable materials etc. complete in all respect			
9.46	415 V, 125 A switch cum socket with plug (Weatherproof)	35.00	Nos.	9113.00
9.47	415V, 63A, Switch & Socket with Plug (No. of Pins 3P +N+ E), (Weather proof)	10.00	Nos.	6075.00
9.48	415 V, 32 A switch cum socket with plug (Weatherproof)	90.00	Nos.	6075.00
9.49	250 V, 16 A switch cum socket with plug (Weatherproof)	45.00	Nos.	4253.00
9.50	EARTHING AND LIGHTNING PROTECTION			
9.51	Supply, Installation, Testing & Commissioning of 100 NB, 3.8 M long G.I. pipe Earth Electrode in Earth pit as per PDS attached with TS Including handling, transportation to Erection site, Excavation of Earth pit in all types of soil, back filling of pit with common salt, charcoal / coke and loose Earth after installation of Electrode there in, removal of surplus Earth away from Erection site, consolidation of loose Earth on back filled pit, making of bricks work, inspection chamber on back filled pit and cover of RCC, there of complete with lifting hook, fixing & connecting inside the chamber of G.I. Earth bracket and other accessories of the Earth Electrode, painting of Earth pit No. and Earthing symbol on the cover, supply of salt, charcoal / coke, bricks, sand, cement, stone chips, reinforcement rods, lifting hook, necessary stainless steel hardware, paints etc. (Excluding supply of G.I. Earth Electrode & its accessories), all works, labour & materials complete as per Drawings, specifications, code & standards and direction of consultant / owner.	38.00	Nos.	20048.00
				761824



## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;PIE&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
9.52	Supply, Installation & Commissioning of GI Earth Bus bars (size: 390x50x12mm thick) as per PDS attached with TS Including handling, transportation, drilling of necessary holes/enlargement existing holes as required; all associated work for fixing the Bus bars in position e.g. cutting, leveling, aligning, chipping, grouting, welding bolting etc.; making good of broken/chipped portion on walls /columns by cement plastering. Supply of all necessary hardware (GI), paints, civil masonry materials etc. all work, labour complete as per drawings, specifications, codes and standards and directions of consultant /owner. Hot dip galvanized GI earth bus bar of size 390 x 50 x 12 thick (with min. coating 610gm/sq.m of zinc) with fixing materials as per specifications and direction of Site Engineer / Engineer-in-charge	20.00	Nos	1458.00	29160
9.53	Supplying and laying of the stainless steel SS-304 air terminations, base plate & clamping of down Conductor complete with base plate, concrete coping fixing accessories and clamping with down Conductor	10.00	Nos.	14580.00	145800
9.54	HT CABLE JOINT (11 KV)				
9.55	Supply, Making straight-through joint on 11 KV Aluminium XLPE insulated armoured screened cable, including the supply of required materials such as cable jointing kit (of heat shrinkable sleeve type of Raychem, materials, labour, tools and tackles, consumables etc., as per drawings, specification and directions of Site Engineer / Engineer-in-Charge. For cables of size upto 3 core x 400 sq. mm Note: Lugs supplied with HT cable joint shall be Al/Cu/Bimetallic (as per cable/bus bar type).	2.00	Nos.	24300.00	48600
9.56	11KV (UE) grade XLPE insulated, 3Cx240 (Al)				
9.57	HT Cable Termination (11 /3.3KV):				
9.58	Supply, termination and connection of following 11KV(UE) Multicore/single core, XLPE cable termination kit (indoor type), heat shrinkable sleeve type of Raychem make with all accessories, including cutting (tools and accessories for termination should meet the selected standards), stripping of cable insulation providing copper cable end lugs and cable glands as required, restoration of insulation, supplying and providing the cable supporting clamps, straps, cable tags connection to the terminals of HT panel, VFDs, Isolators, transformer, DG etc., earthing of armouring, materials, labour, tools and tackles, consumables etc., as per drawings, specification and directions of Site Engineer / Engineer-in-Charge. Note: Lugs supplied with HT cable termination shall be Al/Cu/Bimetallic (as per cable/bus bar type).				
9.59	11KV (UE) grade XLPE insulated, 3Cx240 (Al)	12.00	Nos.	21870.00	262440
9.60	11KV (UE) grade XLPE insulated, 3Cx400 (Al)	2.00	Nos.	30375.00	60750
9.61	3.3KV (UE) grade XLPE insulated, 3Cx240 (Al)	2.00	Nos.	20048.00	40096

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TALCHER FERTILIZERS LIMITED



## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;PIE&amp; WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

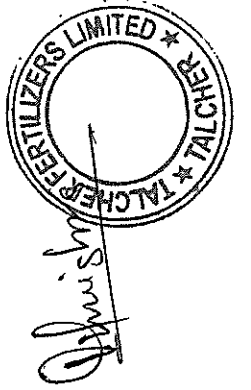
SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES		
		QUANTITY	UNITS	UNIT PRICE
		TOTAL AMOUNT EXCLUDING GST		
9.62	GI PIPE			
9.63	Supply, erection & installation of cable conduits made up of GI pipes of medium class 'B' subject to owner's approval in trenches (already made), on walls, concrete structure etc., including supply and installation of all the necessary pipe fittings such as bends, sockets, elbows, tees etc., bending, threading, binding, clamping, providing, spacers, plugs, packings, bushings etc., as required Job complete in all respects including the cost of all labour, tools, material etc. and as per specifications and directions of site engineer / Engineer-in-Charge.			
9.64	100 mm	100.00	Mtrs.	3645.00
9.65	50 mm	150.00	Mtrs.	1944.00
9.66	HDPE PIPE			
9.67	Supply, laying of HDPE 32mm dia 3mm thick as per IS 7238 grade 80, Pipe in trenches / walls / concrete structure / panels etc. as per specifications and drawings & blowing / laying of Optical Fibre Cable in HDPE pipe, carrying out end to end testing of laid Optical fibre cables by taking OTDR traces and submitting the OTDR trace printouts to Site Engineer / Engineer-in-charge. The job includes the supply and installation of required materials such as fixing clamps, screws, tags etc. as required to complete the job in all respects as per drawings and directions of Site Engineer / Engineer-in-charge including cost of all labour, tools & tackles, test instruments, materials etc. The job includes handing over the tested cables to the Telecom / Control System Works Contractor in commissioning of Local Area Network.	600.00	Mtrs.	304.00
9.68	Supply, fabrication, erection, installation of steel structural works of any type and shape such as cable racks, cable trays, push button control posts etc., as required job complete in all respects including the cost of all labour, tools, material etc., complete and as per specifications and directions of site engineer/Engineer-in-Charge.	15000.00	Kg	208.00
9.69	Supply, Fabrication & installation of 2 mm thick Al sheet for rain protective hood for outdoor equipment e.g. motors, switch sockets, junction boxes etc.	10.00	M2	3038.00
9.70	Supply, Fabrication and Installation of 8mm thick chequered plate in flooring, steps, covers over cable trenches in switch board room, painting with one coats of bitumen paint in the 50% thinner with two coats of black bitumen paints including supply of all consumables and paints.	500.00	Kg	182.00
9.71	WP JUNCTION BOX			

*Signature*  
  
 TALCHER FERTILIZERS LIMITED

## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

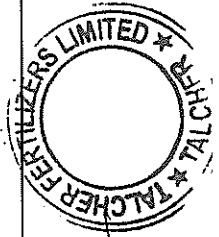
SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	
				TOTAL AMOUNT EXCLUDING GST	
9.72	Supply, erection, installation, testing and commissioning of flameproof & weather proof 240 V, 25A, junction box for providing cable termination, including connection and termination of earthing wire and conduits etc., including supply & installation of double compression cable glands & flame proof plugs for sealing all spare entries complete as per drawings, specifications and direction of the Site Engineer, including the cost of all labour, tools, consumable materials etc., complete in all respect.				
9.73	240V, 16A, 4 way junction box with 4 cable entries (4 x 3/4") at bottom & 20 nos. terminals.	50.00	Nos.	10328.00	516400
9.74	Supplying and spreading of approved quality fine dry river sand in cable trenches including the cost of all material, transport, load and lift charges, labour, tools and tackles, consumables etc., as per drawings, specification and directions of Site Engineer / Engineer-in-Charge.	130.00	M3	2187.00	284310
9.75	Supply laying, spreading of Class B 9"x 4.25" x 3" bricks for cable trenches soling with sand filling in the interstices, in cable trenches for protection including the cost of all brick and sand, labour, load and lift charges, tools and tackles etc., as per drawings, specification and directions of Site Engineer / Engineer-in-Charge.	17000.00	Nos	18.00	306000
9.76	Supply, erection & installation of MS cable markers, including excavation, installation of the markers, cement concrete grouting, backfilling, materials, labour, tools and tackles, consumables etc., as per drawings, specification and directions of Site Engineer / Engineer-in-Charge.	20.00	Nos.	2430.00	48600
9.77	EXCAVATION AND BACK FILLING				
9.78	Excavation of 1700 mtr. length x 400/600 mm wide x 1200 mm deep a for laying of cables including disposal of excavated earth, lead up to 100 mtrs. and lift up to 1.5 mtrs., disposed earth to be levelled and neatly dressed	420.00	M3	608.00	255360
9.79	Back filling with excavated earth in trench including consolidating each deposited layer by ramming, dressing etc.	280.00	M3	243.00	68040
9.80	TERMINATION OF CABLES (LT)				



## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES		
		QUANTITY	UNITS	UNIT PRICE
9.81	End termination and subsequent testing of XLPE insulated single core/ multi core armoured cables of 1.1KV grade, Al/Cu cable, including supply of double compression rolled aluminium cable glands, suitable lugs (Al/Cu/Bimetallic) and lugs of all phases & neutral, all labour and consumable materials to make installation complete in all respect. Modification in existing switch board for accommodating the proposed cables. The rate shall include drilling, taping of cable insulation, crimping of lugs to the conductor, connection of the lugs to equipment terminal, supply and fixing of supports & clamps for cables, G.I. nuts, screws, bolts, washers and other necessary hardware, PVC tape of required grade for taping, making cable entries dust and vermin proof, earthing etc. as per instruction of manufacturer, approved drawings, specifications and directions of engineer-in-charge.			
9.82	3.5C x 630 mm2 (Al)	22.00	Nos.	5468.00
9.83	3.5C x 400 mm2 (Al)	4.00	Nos.	5468.00
9.84	3.5C x 300 mm2 (Al)	4.00	Nos.	4860.00
9.85	3.5C x 240 mm2 (Al)	6.00	Nos.	3645.00
9.86	3.5C x 150 mm2 (Al)	16.00	Nos.	3645.00
9.87	3.5C x 120 mm2 (Al)	4.00	Nos.	2430.00
9.88	3.5C x 70 mm2 (Al)	4.00	Nos.	2430.00
9.89	3.5C x 50 mm2 (Al)	6.00	Nos.	2066.00
9.90	3.5C x 35 mm2 (Al)	16.00	Nos.	1823.00
9.91	3.5C x 25 mm2 (Al)	4.00	Nos.	1823.00
9.92	4C x 35 mm2 (Al)	6.00	Nos.	1215.00
9.93	4C x 25 mm2 (Al)	8.00	Nos.	1215.00
9.94	4C x 16 mm2 (Al)	80.00	Nos.	911.00
9.95	3C x 120 mm2 (Al)	2.00	Nos.	2430.00
9.96	3C x 70 mm2 (Al)	2.00	Nos.	2430.00

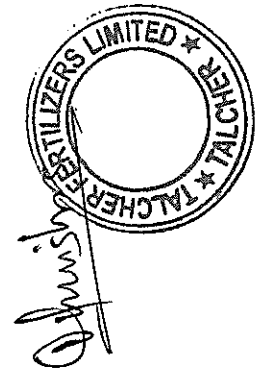


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## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
9.97	3C x 50 mm2 (Al)	2.00	Nos.	911.00	1822
9.98	3C x 35 mm2 (Al)	4.00	Nos.	911.00	3644
9.99	3C x 25 mm2 (Al)	8.00	Nos.	608.00	4864
10.00	3C x 10 mm2 (Cu)	2.00	Nos.	608.00	1216
10.01	3C x 6 mm2 (Cu)	4.00	Nos.	608.00	2432
10.02	3C x 4 mm2 (Cu)	4.00	Nos.	608.00	2432
10.03	3C x 2.5 mm2 (Cu)	100.00	Nos.	486.00	48600
10.04	5C x 2.5 mm2 (Cu)	2.00	Nos.	486.00	972
10.05	7C x 2.5 mm2 (Cu)	2.00	Nos.	1094.00	2188
10.06	12C x 2.5 mm2 (Cu)	6.00	Nos.	1823.00	10938
10.07	19C x 2.5 mm2 (Cu)	6.00	Nos.	2430.00	14580
10.08	1Cx185 mm2 (Al) Unarmoured	8.00	Nos.	1823.00	14584
10.09	1Cx16 mm2 (Al) Unarmoured	12.00	Nos.	486.00	5832
10.10	6 fiber, multi mode optical fiber cable along with all accessories like reciever, converter, transmitter, patch card etc	4.00	Nos.	3038.00	12152
10.11	Supply, installation, testing and commissioning of 240V, 1-Ph, Wall Mounting Fans / Ceiling Fans (with Electronic Regulator) / Man Cooler Fans etc on wall / Ceiling / Steel Structure including supply, fabricating and grouting of MS Frame / Hooks and other hardware etc.				
10.12	400 mm sweep heavy duty wall fan with siring controlled regulator & rotation.	4.00	Nos.	6075.00	24300
10.13	PUBLIC ADDRESS SYSTEM				



## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;PIE&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	
				TOTAL AMOUNT EXCLUDING GST	
10.14	Design, engineering, manufacture, procurement of materials and bought out components, assembly at shop, inspection, testing at manufacturer's works, packing, delivery at site, Unloading, Handling, Storage, transportation within site, Assembly and Erection,testing, Commissioning & guarantee test for final acceptance of Public Address System of the following, including supply of commissioning spares, special tools and tackles, all required installation material, & Testing and commissioning at site ,documentation as per the enclosed Technical specification and other codes and standards attached or referred. Note:Installation & Commissioning shall be executed by PA system OEM.				
10.15	WP (IP-65) Wall mounted/structure mounted FCS with 2 dual positions key with keypad and built-in 25W booster amplifier.	35.00	Nos.	51638.00	1807330
10.16	FLP & WP (IP-65) FCS with 2 dual positions key with keypad and built-in 25W booster amplifier for Gas Gr. IIC	1.00	Nos.	115425.00	115425
10.17	WP (IP-65) 25W/12.5 paging loud speaker for FCS.	35.00	Nos.	8505.00	297675
10.18	WP (IP-65) 15W paging loud speaker for FCS box type for installation in Substation/Building	2.00	Nos.	10935.00	21870
10.19	FLP, WP (IP-65) 25W paging loud speaker for FCS suitable for Gas Gr. IIC .	1.00	Nos.	78975.00	78975
10.20	FRP Acoustic Hood for Sound Protection.	15.00	Nos.	23085.00	346275
10.21	FRP Glass Moulded Full Canopy for rain protection.	20.00	Nos.	12029.00	240580
10.22	Cat-06 LAN cable in 16mm / 25mm / 32mm PVC conduit etc	100.00	Mtrs.	147.00	14700
10.23	Outdoor WP IP65 Junction box for PA system with all accessories	5.00	Nos.	9113.00	45565
10.24	50 Pair X 0.8 mm Armored Cable with FRLS outer sheath overall un-screened cable from owner's exchange to PA Junction box	2500.00	Mtrs.	826.00	2065000
10.25	5 Pair X 0.8 mm Armored Cable with FRLS outer sheath overall un-screened cable for both Loudspeaker and Field call stations	3000.00	Mtrs.	140.00	420000
10.26	Erection, testing and commissioning of complete PA system including MCS, FCS, Hooters, canopy, acoustic hood, paging speaker, laying and termination of all power and signal cables including supply of consumable, glands, etc and interface and seamless integration with other PA system of plant.	1.00	Lot	243000.00	243000



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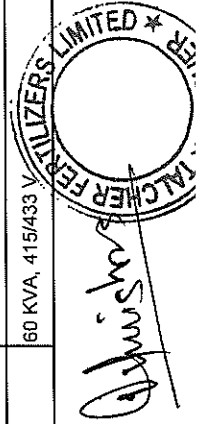
SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
10.27	WBM ROAD / CONCRETE BREAKING : WBM Road/concrete breaking for cable trenches including required shoring strutting etc., and repairing of the road/dyke to original condition and disposing off excess materials (within the work site) job complete in all respects including the cost of labour, tools, materials, load, lift hire charges of equipments, if any, complete as per drawings, specification and directions of Site Engineer / Engineer-in-Charge.	10.00	M3	4253.00	42550
10.28	415 V MV BUS DUCT				
10.29	Supply of 415 V Bus Duct as perspecified in data sheets, Technical Specification - Electrical, Technical Specification Doc. No. PC183-TS-0807, etc. attached with the NIT.				
10.30	3200 A, 415 V, 50 Hz, 50kA for 1 second, Non-Segregated High Conductivity Copper TPN Bus Duct of 12.5 Mtr. length (From Transformer Flange Centre Line to Panel Flange Centre Line) including 2 nos. horizontal bends and 3 nos. vertical bends between 11 kV / 0.433 kV, 2 MVA Transformers and PMCC-1 with associated equipments and all other accessories as per enclosed Main Substation Equipment Layout, Technical Specification - Electrical, Technical Specification Doc. No. PC183-TS-0807, etc. attached with the NIT.	2.00	Sets	1813995.00	3627990
10.31	Supply, installation, testing and commissioning of 240V room lighting boards along with required wiring (concealed in PVC conduit / on wall) having following features:-				
10.32	1 no. Switch & Socket for 6 / 16 Amp 2 nos. 6 Amp switches with regulators for ceiling Fan 2 nos. 6 Amp switches for lighting	50.00	Nos.	1823.00	91150
10.33	1 no. Switch & Socket for 6 / 16 Amp 5 nos. 6 Amp switches for lighting	15.00	Nos.	1458.00	21870
10.34	1 no. Switch & Socket for 6 / 16 Amp	70.00	Nos.	608.00	42560
11.00	MISCELLANEOUS ITEMS				
11.11	Supply and Fixing of Caution boards / dangers boards written in ENGLISH & HINDI of the following voltages.				
11.12	11KV	2.00	Nos	608.00	1216
11.13	415 V	10.00	Nos	608.00	6080
11.14	Supply and Fixing of shock treatment chart written in English and Local language duly framed and approved by engineer-in-charge.	1.00	Nos	2430.00	2430
11.15	Supply and Fixing of Do & Don't chart as per Indian Electricity Rules in Aluminum frame with glass	1.00	Nos.	2430.00	2430



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## SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	
				TOTAL AMOUNT EXCLUDING GST	
11.16	Supply and Fixing of S/S Single Line Diagram in Aluminum frame with glass.	1.00	Nos.	12150.00	12150
11.17	Supply and Fixing of CPR (CARDIO PULMONARY RESUSCITATION) Charts.	1.00	Nos.	2430.00	2430
11.18	Supply and Fixing of High Voltage danger signage (Skull & bones).	2.00	Nos.	608.00	1216
11.19	Supply and Fixing of Exit Route / Emergency Exit Route Signage.	2.00	Nos.	1823.00	3646
11.20	Supply and Fixing of First aid boxes.	1.00	Nos.	4253.00	4253
11.21	Supplying the following Equipment as per directions of Site Engineer / Engineer-in-Charge				
11.22	RUBBER HAND GLOVES : Rubber hand gloves suitable for 11/3.3 KV operation with ISI mark.	2.00	SET	2430.00	4860
11.23	Supply of 11 KV Discharge Rod	1.00	SET	7898.00	7898
11.24	INSULATING MATS:				
11.25	Supply & installation of 2000 mm X 1000 mm and of thickness as mentioned below, approved quality insulating Elastomer mats as per specifications.				
11.26	Insulating Elastomer mats conforming to IS 15662:2006 of thickness 2 mm (Class A)	25.00	EA	1094.00	27350
11.27	Insulating Elastomer mats conforming to IS 15662:2006 of thickness 2.5 mm (Class B)	8.00	EA	1458.00	11664
11.28	Supply and fixing of fully charged portable CO2 fire extinguishers as per specifications (4.5 kg capacity as per IS: 2878 latest)	3.00	Nos.	7290.00	21870
11.29	DRY TYPE LIGHTING TRANSFORMER				
11.30	Supply, storage at site, Transportation from store to site of installation, Handling, Installation, Testing and Commissioning of Dry Type Lighting Transformers including power and control cable termination, fabrication of base foundation, placing in fabrication of base foundation channel, position on MS base channel/flat, assembly of all accessories, supply & fixing of required no. & size of double compression nickelplated brass/rolled Al cable glands & suitable lugs (Aluminium/copper/BI metallic), connection and termination of all power and control cables all labour and material complete as per drawings/specification and direction of the lighting transformer manufacturer with all accessories, as specified in Technical Specification PC183-TS-0829				
11.31	300 KVA, 415/433 V	2.00	Nos.	798000.00	1596000
11.32	60 KVA, 415/433 V	2.00	Nos.	266000.00	532000



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SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
11.33	11 kV PANEL : Supply, Handling, Installation, Testing and Commissioning of Incoming cum Outgoing 11kV 3Ph 50Hz 31.5kA 1250 A VCB Panel complete with metering and protection system free standing floor mounting cubical type as per SLD & Specification Sheet and Technical specification - Electrical System (Doc No. PC183-TS-0805) and SLD No. PC183-7411-0985E including transportation from owner's stores, dressing of foundation, placing in position on MS base channel/flat, assembly of all accessories supplied loose, all labour and material complete as per drawings/specification and direction of the manufacturer.	2.00	Nos.	1408000.00	2816000
12.00	SECTION A : INSTRUMENT WORKS (SUPPLY)				
12.11	CCTV for OSBL facilities and Surveillance Purpose of TFL Fertilizer complex : Design , Engineering & Supply				
12.12	CCTV Complete system for whole fertilizer complex as per attached specification - Bidder shall engineering , supply, install, test and commissioning the ONVIF-IP based Closed circuit television (CCTV) Surveillance System, Complete CCTV System with all accessories like Cameras, power supply , JB , LIU, media converter, OFC convertor, 22" LED workstation , server, VMS ,NAS for 365 days storage , one LED 72" ceiling mounted with 100 windows , software , license , surveillance software , analytical software , all cables, all mounting accessories , poles , civil works etc. (A at the TFL fertilizer complex . The purpose of the CCTV System is to monitor the facility operations & security surveillance from control room / Security room & Admin building to keep eye on facility covering Main gate entry /exit ,material gate exit / entry and other area of importance to the daily running of the complex by installing cameras to monitor resulting to enhancement in the Operational & Safety needs. It is intended to install CCTV system to track the Material movement, Recognition of persons and objects including vehicles through high quality images in and outside the plant by Security. The recording of the scene can be used in investigation, recreating the scene and establishing the truth.	1.00	LOT	1812780.00	1812780
12.13	Fixed Perimeter 1080p HD IP outdoor Cameras IP66 housing with Day/night fixed camera with advanced video analytics, Min 75 Mtrs IR range, Camera with 1/3" or better CMOS , 1920 (H) X 1080 (V); 2 MP or better, Inbuilt Min 128 GB or higher GB SD Card Storage for local recording etc. as per attached specification	60.00	NOS	26001.00	1560060
12.14	1080p HD IP Indoor / outdoor PTZ Cameras with 1/3" or better progressive scan Exmor CMOS , 1920 (H) X 1080 (V); 2 MP or better Optical Zoom (4.3 mm -129 mm) , 4X Digital Zoom,	9.00	NOS	172530.00	1552770



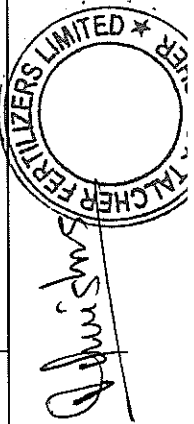
*Adhish*



## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C/PIE&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
12.15	Supply of Intelligent video operation, control, management, recording, processing software & Advanced Analytics Software for Perimeter Surveillance as per specifications and instructions of Engineer in charge. This shall include 128 camera recording license and 128 viewing license per site.	1.00	LOT	834705.00	834705
12.16	Supply of all erection and installation material like Industrial grade layer ethernet Switch . OFC accessories like 12/24 port LIU, splice trays, loaded adaptor and blank plates, UTP and optical patch cords, pigtails, FRP junction box, FRP cable trays, FRP canopy, steel structure for installation, Octagonal pole ( 10/8/6 meter) power supply , media convertor, armoured power cables , communication cable , 12 core single mode steel armoured optical fibre cable etc. in all respect as per specifications and instructions of Engineer in charge. Its bidder responsibility to consider BOQ as per best engineering practice and complete in all respect to full fill tender specification mentioned elsewhere .	1.00	LOT	4299861.00	4299861
12.17	Complete EPBAX system, telephone network with telephone set , LAN Network and LAN system of Buildings of Fertiliser complex : Design , Engineering, Supply & Interface with other exchanges including main exchange				
13.00	EPBAX exchange with 200 extensions lines and all the equipment shall conform with all relevant and the latest edition of Indian, International, OISD and CCITT/ITU standards using field proven microprocessor based design techniques for all processing and control functions. The exchange shall be based on a robust, reliable, virus protected, IP based platform for connecting IP phones, Digital phones as well as Analog extensions as specified in technical specification	1.00	LOT	1518750.00	1518750
13.11	IP Phone with built in camera & TFT LCD display for video conferencing as well as capable to connect an external IP camera	12.00	NOS	34020.00	408240
13.12	Standard IP Phone with TFT LCD display with optional expansion module	67.00	NOS	38880.00	2604960
13.13	IP Based Basic desktop phones	128.00	NOS	5468.00	699904
13.14	Telephone Cables 20 pair	5000.00	MTR	152.00	760000
13.15	Telephone Cables 5 pair	2500.00	MTR	45.00	112500
13.16	LAN cable	30000.00	MTR	33.00	990000
13.17	LAN items as per specification as used mentioned	1.00	LOT	60750.00	60750



## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	
				TOTAL AMOUNT EXCLUDING GST	
14.00	SUPPLY of impulse piping inclusive of pipe fittings, flanges, gasket, nut & bolts, Tube & tube fittings, Instrument valves, condensate pot, Syphon, Gauge valve, Gauge saver, Snubber etc. as per attached Hook-Ups drawing.				
14.11	2480-MALE CONNECTOR, 3/4"NPTM x 1/2" OD, A182 F316	60.00	Nos	317.00	19020
14.12	2464-MALE CONNECTOR, 1/2" NPTM x 1/2" OD, A182 F316	60.00	Nos	270.00	16200
14.13	2467-MALE CONNECTOR, 1/2"NPTM X 1/4" OD, A182 F316	60.00	Nos	168.00	10080
14.14	2466-MALE CONNECTOR, 1/4" NPTM X 1/4" OD, A182 F316	60.00	Nos	104.00	6240
14.15	2473-FEMALE CONNECTOR, 1/2" NPTF X 1/2" OD, A182 F316	60.00	Nos	322.00	19320
14.16	2563-LOCK NUT WITH PLUG, 1/2" OD,6000#, A182 F316	60.00	Nos	471.00	28260
14.17	2506-STRAIGHT CONNECTOR, 1/2"OD x 1/2"OD, A182 F316	60.00	Nos	318.00	19080
14.18	2501-STRAIGHT CONNECTOR, 1/4" OD X 1/4" OD, A182 F316	60.00	Nos	145.00	8700
14.19	2460-SEAMLESS TUBE, 1 1/2" x 0.065" THK, A182 F316	240.00	MTR	637.00	152880
14.20	2457-SEAMLESS TUBE, 1/2" OD X 1MM THK, A269 TP316	240.00	MTR	463.00	111120
14.21	2446-SEAMLESS TUBE, 1/4" OD X 1MM THK, A269 TP316	240.00	MTR	258.00	61920
14.22	2266-GLOBE VALVE, 1/2" NPTFx1/2" NPTF, 6000#, A182 F316	60.00	Nos	3912.00	234720
14.23	2515-UNION TEE, 1/2" x 1/2" x 1/2" OD, A182 F316	60.00	Nos	617.00	37020
15.00	SUPPLY MATERIAL FOR STRUCTURAL WORK & FEBRICATION FOR INSTRUMENT ITEMS LIKE TRAY SUPPORT, MOUNTING FRAMES FOR INSTRUMENTS, BASE FRAMES,CANOPY FOR JB, CANOPY FOR INSTRUMENT, ANY OTHER REQUIRED FOR SUPPORTING INSTRUMENT ITEMS ALONGWITH CANOPY				
15.11	50 x 50 x 6THK ANGLE MS	7000.00	kg	146.00	1022000
15.12	100 x 50 x 6THK CHANNEL MS	22000.00	kg	146.00	3212000
15.13	FOUNDATION BOLTS, WASHER 10MM X 150L MS	1200.00	Nos	333.00	399600



## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;PIE&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
15.14	COVER PLATE 4 MMTHK MS	120.00	kg	146.00	17520
15.15	RIBS (PLATE) 250 X 250 X 6 THK MS PLATE	1700.00	kg	146.00	248200
15.16	BASE PLATE 250 X 250 X 6 THK MS PLATE	1700.00	kg	146.00	248200
15.17	2" MS PIPE FOR STAND PIPE, MEDIUM, AS PER IS:1239	360.00	Mtr	931.00	335160
16.00	SUPPLY OF FRP JUNCTION BOX, CABLE GLANDS, PLUG AS PER TECHNICAL SPECIFICATION AND AS MENTIONED IN TENDER ELSEWHERE				
16.11	Junction Box, Please refer attached spec sheet for details	12.00	Nos	13365.00	160380
16.12	Cable Glands, M20 SS316 Cable Gland Double Compression Exd suitable for Cable OD "14.5+/- 2mm" with locknut & PVC Hoods(All JBs shall be plugged with SS Plug)	169.00	Nos	425.00	71825
16.13	Cable Glands, M32 SS316 Cable Gland Double Compression Exd suitable for Cable OD "28.8+/- 2mm" with locknut & PVC Hoods (Both end JB & Control Room) (All JBs shall be plugged with SS Plug)	120.00	Nos	547.00	65640
16.14	Cable Glands, M32 SS316 Cable Gland Double Compression Exd suitable for Cable OD "28.8+/- 2mm" with locknut & PVC Hoods (LCP & Control Room) (All JBs shall be plugged with SS Plug By Default.)	34.00	Nos	437.00	14858
16.15	Cable Glands, M32 SS316 Cable Gland Double Compression Exd suitable for Cable OD "28.8+/- 2mm" with locknut & PVC Hoods (MCC & Control Room) ((All JBs shall be plugged with SS Plug By Default.)	72.00	Nos	437.00	31464
17.00	SUPPLY of FRP PERFORATED CABLE TRAY with cover and SS installation accessories including joining, cutting, bending, supporting etc. (Pls refer annex for details)				
17.11	FRP Cable Tray ( Perforated) with flat Cover , 2500 x 600 x 150 mm,4mm thk	4080.00	Mtr	2321.00	9469680
17.12	FRP CableTray (Perforated) with Cover, 2500 x 300 x 55 mm,4mm thk	600.00	Mtr	1075.00	645000
17.13	FRP CableTray (Perforated), 2500 x 200 x 55 mm,4mm thk	2400.00	Mtr	812.00	1948800
17.14	FRP CableTray (Perforated), 2500 x 100 x 55 mm,4mm thk	600.00	Mtr	548.00	328800
17.15	FRP CableTray (Perforated), 2500 x 50 x 55 mm,4mm thk	1200.00	Mtr	471.00	565200
17.16	FRP Inside 90 Degree Bend with Cover ( for 600mm ladder), 600 mm (Bending Radius 600mm)	28.00	Nos	4186.00	117208



## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;PIE&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

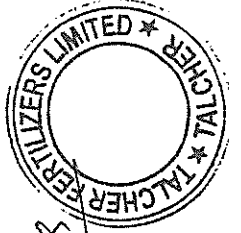
SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	
				TOTAL AMOUNT EXCLUDING GST	
17.17	FRP Outside 90 Deg Vertical Bend with Cover ( for 600mm ). 600 mm(Bending Radius 600mm)	28.00	Nos	4186.00	117208
17.18	FRPHorizontal 90 Deg Bend with cover ( for 600mm ). 600 mm(Bending Radius 600mm)	12.00	Nos	4186.00	50232
17.19	FRP Horizontal TEE ladder fitting with Cover ( for 600mm ). 600 mm(Bending Radius 600mm)	12.00	Nos	5622.00	67464
17.20	FRP Horizontal Cross fitting with Cover ( for 600mm ). 600 mm(Bending Radius 600mm)	12.00	Nos	8088.00	97056
17.21	Reducer 600 to 300,	12.00	Nos	5907.00	70884
17.22	All SS mounting & installation material and other items to complete above cable tray laying ,	1.00	Lot	332500.00	332500
17.23	Canopy & Accessories ( Complete Canopy to cover instrument items properly), Pls refer Attached Spec Sheet	120.00	Nos	2926.00	351120
18.00	Supply of Instrumentation cable, Signal & Control, Power cable,OFC and T/c extension Cables data sheets/technical specification. cover requirement for design, engineering, manufacturing, assembly, and supply, documentation, testing at manufacture's works, packing and shipping of the Signal & Control , Power cable and T/c extension Cables .				
18.11	12P x 1.5 SQMM	41280.00	Mtr	608.00	25098240
18.12	01P x 1.5 SQMM	1000.00	Mtr	100.00	100000
18.13	06P x 1.5 SQMM	1000.00	Mtr	355.00	355000
18.14	08T x 1.5 SQMM	1000.00	Mtr	600.00	600000
18.15	01T x 1.5 SQMM	1000.00	Mtr	126.00	126000
18.16	01P X 16 AWG	1000.00	Mtr	112.00	112000
18.17	03C X 2.5 SQMM	1000.00	Mtr	186.00	186000
18.18	02C X 1.5 SQMM shielded Modbus cable	500.00	Mtr	149.00	74500
18.19	OFC- Single Mode 8 Fiber	16000.00	Mtr	45.00	720000
18.20	1C x 10 SQMM, Tinned Cu conductors min 10 sq.mm, Green outer sheath	240.00	Mtr	665.00	159600

*Advisory*

TALCHER FERTILIZERS LIMITED

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
18.21	SUPPLY of AIR DISTRIBUTION POT SS304	6.00	Nos.	37240.00	223440
18.22	ADP - 10 TAKE OFFS				
19.00	Deleted				
19.11	Deleted				
19.12	Deleted				
19.13	Supply of instruments with all mounting accessories and license /software including Third Party Inspection				
19.14	Supply of Pressure Gauge (PG) as per the technical specifications attached in the Tender.	4.00	Nos	7898.00	31592
19.15	Supply of Pressure Gauge (PG) as per the technical specifications attached in the Tender.	4.00	Nos	9113.00	36452
19.16	Pressure Transmitters with 2 way manifolds and Cable glands ; Smart type; accuracy 0.05% or better Installation: 2" Pipe Mounted including spares as Per Detailed Spec., 0-1 KG/CM2	6.00	Nos	61965.00	371790
19.17	Pressure Transmitters with 2 way manifolds and Cable glands , Smart type; accuracy 0.05% or better Installation: 2" Pipe Mounted including spares as Per Detailed Spec., 0-10 KG/CM2	6.00	Nos	54675.00	328050
19.18	Pressure Transmitters with 2 way manifolds and Cable glands, Smart type; accuracy 0.05% or better Installation: 2" Pipe Mounted including spares as Per Detailed Spec., 0-50 KG/CM2	7.00	Nos	54675.00	382725
19.19	Pressure Transmitters with 2 way manifolds and Cable glands , Smart type; accuracy 0.05% or better Installation: 2" Pipe Mounted including spares as Per Detailed Spec., 0-250 KG/CM2	6.00	Nos	60750.00	364500



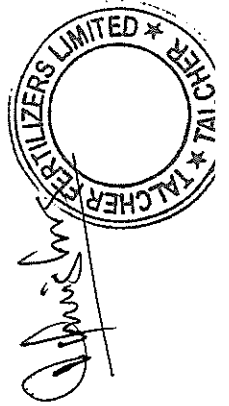
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## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

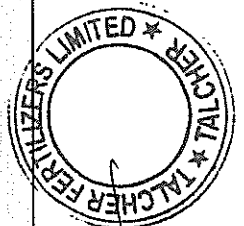
SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
19.20	Differential Pressure Transmitter with 3 way manifold valves and Cable Glands, Smart type; accuracy 0.050% or better including spares as Per Detailed Spec., 0-500 MMH2O	6.00	Nos	72900.00	437400
19.21	Differential Pressure Transmitter with 3 way manifold valves and Cable Glands, Smart type; accuracy 0.050% or better including spares as Per Detailed Spec., 0-2500MMH2O	5.00	Nos	72900.00	364500
19.22	Differential Pressure Transmitter with 3 way manifold valves and Cable Glands, Smart type; accuracy 0.050% or better including spares as Per Detailed Spec., 0-1200 MMH2O	6.00	Nos	72900.00	437400
19.23	Differential Pressure Transmitter with 3 way manifold valves and Cable Glands, Smart type; accuracy 0.050% or better including spares as Per Detailed Spec., 0-2000 MMH2O	6.00	Nos	72900.00	437400
19.24	FE-101,Flow Orifice , tappings 1set +1 set spare , flange Size , rating & matl. 8" 300#RF, A105, plate material SS 316 ,2 Nos Gasket as Spare as per detailed Spec., 0-300 m3/hr	2.00	Nos	70470.00	140940
19.25	FE-102,Flow Orifice , tappings 1set +1 set spare , flange Size , rating & matl. 8" 300#RF, A105, plate material SS 316 ,2 Nos Gasket as Spare as per detailed Spec., 0-300 m3/hr	2.00	Nos	70470.00	140940
19.26	FE-001,Flow Orifice , tappings 1set +1 set spare , flange Size , rating & matl. 3" 300#RF, A105, plate material SS 316 ,2 Nos Gasket as Spare as per detailed Spec., 0-300 m3/hr	2.00	Nos	42525.00	85050
19.27	PCV-01 Spring loaded Self actuating pressure regulating globe valve for 3" ,150# RF line with its seat ,plug material SS316+Stelited,along with gasket ,spring set and packing seat as pares,	3.00	Nos	255150.00	765450



ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C/P/E&I WORKS/LOA-25/23-24 dated 23.02.2024

**SCHEDULE OF RATES (SOR)**

SL.NO.	ITEM DIScription	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
20.00	<p>SECTION B 1 - INSTRUMENT WORKS (ERECTION)INSTALLATION OF INSTRUMENTS AS PER ATTACHED HOOK-UP DRAWING INSTALLATION DRAWING. CABLE LAYING AND CABLE TRAY LAYING, INSTALLATION OF JUNCTION BOX , LOCAL CONTROL PANEL, SIGNAL TERMINATION GLANDING FOR ELECTROHYDRAULIC CONTROL VALVES ETC. ; LOOP CHECKING , TESTING OF TRANSMITTERS / INSTRUMENTS ETC AS BELOW.</p> <p>BRIEF SCOPE OF INST WORK AND SERVICES BUT NOT TO LIMITED</p> <p>1) The BIDDER shall be responsible for the calibration &amp; testing, installation, glancing , termination, commissioning of the complete instrumentation and controls as defined in this Tender.</p> <p>a). Taking delivery from the warehouse or from the places of storage OR BIDDER's allotted yard , transportation, handling, storage, unpacking, assorting physical checking and testing of instruments, panels / cabinets, instrument accessories cables, junction boxes, cable glands, cable trays ducts and erection materials etc.</p> <p>b). Scope includes raising of store requisitions to OWNER/PDIL (if required) on prescribed formats for issue of free-issue-materials (FIMs)if any and maintaining record of the material issued at its site office. All works including Field fabrication / erection shall be done strictly in accordance with OWNER/PDIL specifications and standards.</p> <p>c) Scope includes return of Leftover free issue material to OWNER/PDIL with suitable return notes.</p> <p>d). BIDDER shall supply all required tools, tackle, equipment, skilled &amp; unskilled manpower, managerial staff, consumables &amp; whatever else may be necessary for competing the job within the project schedule.</p> <p>e) If it is necessary to maintain the project schedule, BIDDER shall extend the working hours, working days &amp; whatever else may be necessary for maintaining the project schedule without any cost &amp; time implication to purchaser/end user.</p> <p>f). BIDDER will be responsible for the protection &amp; maintenance (both at BIDDER's stores and/or in the field) of instruments &amp; accessories issued to him. Supply of the materials necessary for the said protection and/or maintenance is in BIDDER's scope.</p> <p>g). BIDDER shall inform site incharge for any material damaged and/or missing during erection. if it is proved that said material is damaged and/or missing by the BIDDER, the cost of the same shall be charged to him.</p> <p>h). Transportation of unserviceable instrument Scrap as defined in this tender.</p> <p>i). All the instruments &amp; systems installed by the BIDDER as per contract shall be subject to inspection, checking, calibration &amp; testing to prove their operational fitness. Testing &amp; calibration shall be done by the BIDDER, all the required tools, tackle, calibration instruments, LAB, qualified skilled manpower for conducting these tests shall be provided by the BIDDER.</p> <p>j). Testing &amp; calibration may be witnessed by representative OWNER/PDIL and/or manufacturer's representative.</p>				
20.11					



## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C/P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES		
		QUANTITY	UNITS	UNIT PRICE
				TOTAL AMOUNT EXCLUDING GST
20.12	<p>2) LETTER WRITING : LETTER WRITING FOR ALPHA-NUMERIC TAGGING ( WITH SYNTHETIC ENAMEL). :- Letter writing of different sizes on Instrument Panels/misc. Instruments/ Equipments with synthetic enamel paints (Asian/ Jonson &amp; Nicolson/ Berger /Nerolac Make) suitable for a temp. of 100 degree Celsius for writing of letters, figures etc. Job includes cleaning of surface on panels/instruments/misc. instruments etc. All complete with labour and materials as per drawings, specifications, Name plate schedule and directions of Engineer-in-Charge. (Supply of paints is in BIDDER scope).</p> <p>3) PAINTING :- SPRAY PAINTING (PAINT IS IN BIDDER'S SCOPE) :- Cleaning of surface, rust, removing of foreign matter, rubbing down thoroughly with emery paper, wire brush, washing with degreasing solvent (white spirit) to remove grease etc. and preparation of surface for application of enamel paint by spray painting on instrumentation panels/instruments or any other metallic surface with one coat of ready mixed primer and two coats of approved quality/ apcolite Asian synthetic enamel paint including supply of paint suitable for a temp. of 100 degree C. All complete with labour and materials as per drawings, specifications and directions of Engineer-in-Charge.</p> <p>4) bidder has to make necessary arrangements for cable entry to control room all the civil, welding works, consumables, tools &amp; tackles, manpower etc shall be in bidders scope. no separate rate shall be allowed.</p>			
21.00	Erection/installation of electronic transmitter including unpacking, pre checking, calibration, termination, loop checking & commissioning. : [Erection material shall be supplied by BIDDER]. As installation drawing.			
21.11	The job includes the following: Shifting of new instrument with its accessories from store to work site. Installation of pressure transmitters ( Drilling of blind flanges of Vessels if required) Shall also be in the scope of BIDDER) with its accessories. Glanding, ferruling and termination of the signal cable of the instruments wherever required, including aluminium tagging, supply of ferrule, lugs and aluminium tag is in BIDDER'S scope of supply			
21.12	Fabrication, installation and grouting of small supports for instrument . Laying and erection of perforated tray / angle iron for neatly laying of impulse line of the instrument.			
21.13	All above jobs are inclusive of supply of all sorts of erection materials (including clamps, nuts bolts etc.) grouting material (cement, concrete, sand etc.) and consumables excepting the supply of Pipes, Pipe Fittings, Perforated tray, Structural Material and Instruments. Hydraulic testing of manifold.			

*Admissions*



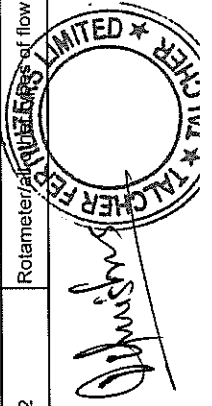




## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

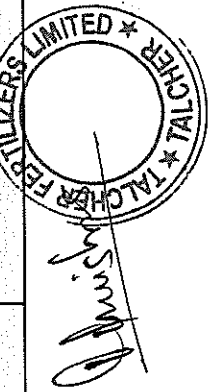
SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
21.28	Differential pressure transmitter (LT) erection / installation (including impulse piping including steam tracing, glanding, and termination, erection of Station & Supports Canopy etc)	10.00	Nos.	2430.00	24300
21.29	Differential Pressure transmitter (LT)-Hydrotest, PMI, DP tests	10.00	Nos.	1823.00	18230
21.30	Differential pressure transmitter (LT) functional check, loop checking	10.00	Nos.	1215.00	12150
21.31	Differential pressure transmitter (LT) calibration	10.00	Nos.	1215.00	12150
21.32	Temperature transmitter Erection / installation( including glanding, and termination, erection of Station & supports Canopy etc)	10.00	Nos.	2430.00	24300
21.33	Temperature transmitter Functional check, loop checking	10.00	Nos.	1215.00	12150
21.34	Temperature transmitter Calibration	10.00	Nos.	1215.00	12150
21.35	Installation of level transmitter of all types (LT) ( except DP type)- Erection / installation (glanding, and termination, erection of Station & Supports Canopy etc if any)	5.00	Nos.	2430.00	12150
21.36	Installation of level transmitter of all types (LT) ( except DP type)- Functional check, loop checking	5.00	Nos.	1215.00	6075
21.37	Installation of level transmitter of all types (LT) ( except DP type)- Calibration	5.00	Nos.	1215.00	6075
21.38	Level Switch (LS)- Erection / installation (glanding, and termination, erection of Station & Supports Canopy etc if any)	5.00	Nos.	1215.00	6075
21.39	Level Switch (LS)- Functional check, loop checking	5.00	Nos.	608.00	3040
21.40	Level Switch (LS)- Calibration	5.00	Nos.	972.00	4860
21.41	Rotameter/all other types of flow meters except Mag flow meter -Erection / installation (glanding, and termination, erection of Station & Supports Canopy etc if any)	5.00	Nos.	4253.00	21265
21.42	Rotameter/all other types of flow meters except Mag flow meter - Functional check, loop checking	5.00	Nos.	1215.00	6075



## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DESCRIPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
21.43	Rotameter/all other types of flow meters except Mag flow meter - Calibration	5.00	Nos.	1215.00	6075
21.44	Glanding/Termination/ferruling of instrument /switches etc already erected by package vendor ( this covers skid mounted instruments/instruments already erected by vendor and provided at site )	10.00	Nos.	1458.00	14580
21.45	Loop Checking of Package items which are not erected by bidder( this covers skid mounted instruments/instruments already erected by vendor and provided at site )	10.00	Nos.	1215.00	12150
21.46	Erection / installation of pressure gauge on pipe line/ vessel/stand/ frame including small welding as per hookup diagram (preparation of gauge board if required). [as per attached hook-ups & installation drawing.]				
21.47	The job includes the following: Shifting of new instrument with its accessories from store to work site .Installation of pressure gauge / vacuum gauge / draught gauge with its accessories like snubber /gauge saver/ syphon etc.Fabrication and installation of manifold, syphon . Fabrication and installation of stanctions, canopy for instrument etc wherever necessary.				
21.48	All above jobs are inclusive of supply of all sorts of erection materials (including clamps, nut bolt etc.) and consumables excepting the supply of Pipes, Pipe Fittings, Structural Material, and Instruments. providing Holes in Blind flange for vessee related tags, Hydraulic testing of manifold. impulse pipe, DP test, PMI test Painting of all erected structural items (excluding impulse line) inclusive supply of paint (Paint make shall be Asian/Berger/Nerolac). The installation shall be as per typical installation diagram.				
21.49	Necessary skilled & unskilled manpower, supervision, tools & tackles, transporting vehicle, supply of all sorts of consumables shall be in BIDDER'S scope. The job shall be carried out as per specification and direction of Engineer-in-charge.				
21.50	All types Pressure gauge erection / installation (includes impulse piping and necessary support fabrication & installation)	15.00	NOS.	3038.00	45570
21.51	All types Pressure gauge calibration	15.00	NOS.	1215.00	18225
21.52	The job includes the following: Receiving & shifting of Temperature instrument with Thermowell with its accessories from store/any other place inside OWNER' campus . & transport to work site.Fixing of thermowell with all accessories at any height. this includes impulse tubing, Glanding, ferruling, termination Installation of Analyzers at any height after taking proper clearance.				



## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DIScription	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	
				TOTAL AMOUNT EXCLUDING GST	
21.53	All above jobs are inclusive of supply of all erection materials, grouting material (cement, concrete, sand etc.) and consumables.				
21.54	Necessary skilled & unskilled manpower, supervision, & tackles, transporting vehicle, consumables including Teflon tape etc. will be in BIDDER'S scope.				
21.55	OWNER/PDIL/Others will be providing Analyzer system , The job shall be carried out as per specification and direction of Engineer-in-charge.				
21.56	Dial type thermometers with thermowell erection / installation	15.00	NOS.	1823.00	27345
21.57	Dial type thermometers with thermowell calibration	15.00	NOS.	1823.00	27345
21.58	Temperature elements (Thermocouple / RTD) with thermowell erection / installation, Glanding ferruling & termination	30.00	NOS.	1823.00	54690
21.59	Temperature elements (thermocouple / RTD) with thermowell functional check, loop checking	30.00	NOS.	1823.00	54690
21.60	Temperature elements (thermocouple / RTD) with thermowell -calibration	30.00	NOS.	1823.00	54690
21.61	Erection / installation / fixing of online PH & Conductivity/dew point/silical O2/CO Analyzers.				
21.62	The job includes the following: Receiving & shifting of PH & Conductivity Analyzer its accessories from store/any other place inside OWNER campus & transport to work site.Fixing of PH & Conductivity and other Analyzers with all accessories on at any height after taking proper clearance.				
21.63	All above jobs are inclusive of supply of all erection materials, grouting material (cement, concrete, sand etc.) and consumables.				
21.64	Necessary skilled & unskilled manpower, supervision, & tackles, transporting vehicle, consumables including Teflon tape etc. will be in BIDDER'S scope.				
21.65	OWNER/PDIL/Others will provide gasket sheet, however all gasket cutting for completing the job will be in BIDDER'S scope. The job shall be carried out as per specification and direction of Engineer-in-charge.				
21.66	PH/Conductivity Analyzer Installation/erection ( includes Tubing, Glanding ,Ferruling &Termination)	1.00	NOS.	30375.00	30375
21.67	Calibration of PH / Conductivity Analyzer System	1.00	NOS.	6075.00	6075
21.68	PH/Conductivity Analyzer functional check, loop checking etc	1.00	NOS.	6075.00	6075
21.69	Dew Point Analyzer Installation/erection ( includes Tubing, Glanding ,Ferruling &Termination)	1.00	NOS.	30375.00	30375
21.70	Calibration of DewPoint Analyzer System	1.00	NOS.	6075.00	6075

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TALCHER FERROUS INDUSTRIES LIMITED

## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
21.71	Dew Point Analyzer functional check, loop checking etc	1.00	NOS.	6075.00	6075
21.72	O2 Analyzer Installation/erection ( includes Tubing, Glanding ,Ferruling & Termination)	1.00	NOS.	24300.00	24300
21.73	O2 Analyzer System	1.00	NOS.	24300.00	24300
21.74	O2 Analyzer functional check, loop checking etc	1.00	NOS.	6075.00	6075
21.75	CO Analyzer Installation/erection ( includes Tubing, Glanding ,Ferruling & Termination)	1.00	NOS.	24300.00	24300
21.76	CO Analyzer System	1.00	NOS.	24300.00	24300
21.77	CO Analyzer functional check, loop checking etc	1.00	NOS.	6075.00	6075
22.00	Erection of Control Valves /on-off/MOV valves shall be part of Mechanical Erection Tender and laying , glanding , Termination of cables etc shall be bidders scope; bidder to note that necessary tubing from ADP to control valve shall be in bidders scope, there shall not be any seprate rate for tube works				
22.11	Glanding, ferruling and termination of the cable wherever required, including supply of ferrule and lugs is in BIDDER's scope of supply. Supplied lugs shall be Dowel make only (Applicable for any electrical device like limit switch, SOV, continuous position feedback etc. mounted on the control valve/MOV.) Fabrication, installation and grouting of support, if required. Grouting material (cement, concrete, sand etc.) shall be in BIDDER's scope. Erection supervision of Electrohydraulic control valves/on-off valves/MOV is also in BIDDER's scope. (the job aalso includes but not limited to tubing from ADP to control valves including necessary structural support)				
22.12	Hot bolting of the flanges after charging of line, if required. Leakage testing, stroke checking and calibration of the control valve/MOV will be in BIDDER's scope. Painting of all erected structural items with one coat of ready mixed primer and two coats of approved quality synthetic enamel paint inclusive supply of paint and primer. (Paint and Primer make shall be Asian/Berger/Nerolac).				
22.13	The installation shall be as per typical installation diagram as enclosed. Necessary skilled & unskilled manpower, supervision, tools & tackles, transporting vehicle, consumables including Teflon tape etc. required for the job will be in BIDDER's scope. The job shall be carried out as per specification, direction of Engineer-in-charge.				
22.14	Size of control valve: up to 2" Erection supervision Glanding , ferruling termination of Signal cables ( includes continuous position fband sov)	5.00	NOS.	26600.00	133000

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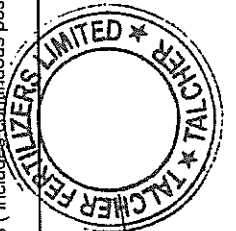
TALCHER FERTILIZERS LIMITED

## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
22.15	Size of control valve : up to 2" functional check, loop checking ( includes continuous position f/band sov)	5.00	NOS.	6650.00	33250
22.16	Size of Control Valve : Up to 2" Calibration ( includes continuous position f/band sov)	5.00	NOS.	6650.00	33250
22.17	Size of Control Valve : Above 2" and up to 4" Errction supervision Glanding , ferruling termination of Signal cables ( includes continuous position f/band sov)	5.00	NOS.	26600.00	133000
22.18	Size of Control Valve : Above 2" and up to 4" functional check, loop checking ( includes continuous position f/band sov)	5.00	NOS.	6650.00	33250
22.19	Size of Control Valve : Above 2" and up to 4" Calibration ( includes continuous position f/band sov)	5.00	NOS.	6650.00	33250
22.20	Size of Control Valve : Above 4" and up to 6"Errction supervision Glanding , ferruling termination of Signal cables ( includes continuous position f/band sov)	5.00	NOS.	33250.00	166250
22.21	Size of Control Valve : Above 4" and up to 6" functional check, loop checking ( includes continuous position f/band sov)	5.00	NOS.	13300.00	66500
22.22	Size of Control Valve : Above 4" and up to 6" Calibration ( includes continuous position f/band sov)	5.00	NOS.	6650.00	33250
22.23	Size of Control Valve : Above 6" and up to 12"Errction supervision Glanding , ferruling termination of Signal cables ( includes continuous position f/band sov)	5.00	NOS.	39900.00	199500

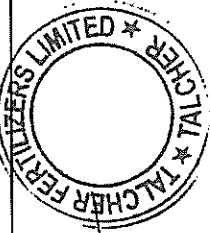
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## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

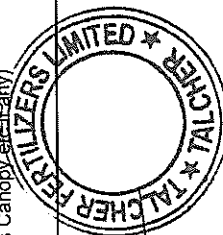
SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
22.24	Size of Control Valve : Above 6" and up to 12" functional check, loop checking ( includes continuous position f/band sov)	5.00	NOS.	19950.00	99750
22.25	Size of Control Valve : Above 6" and up to 12" Calibration ( includes continuous position f/band sov)	5.00	NOS.	6650.00	33250
22.26	Size of MOV :above 8" and upto 10: Erection supervision Glanding ,ferruling termination of Signal cables ( includes continuous position f/band sov)	5.00	NOS.	39900.00	199500
22.27	Size of MOV :above 8" and upto 10: functional check, loop checking ( includes continuous position f/band sov)	5.00	NOS.	19950.00	99750
22.28	Size of MOV :above 8" and upto 10: Calibration ( includes continuous position f/band sov)	5.00	NOS.	6650.00	33250
22.29	Size of MOV :above 10: Erection supervision Glanding ,ferruling termination of Signal cables ( includes continuous position f/band sov)	5.00	NOS.	46550.00	232750
22.30	Size of MOV :above 10: functional check, loop checking ( includes continuous position f/band sov)	5.00	NOS.	19950.00	99750
22.31	Size of MOV :above 10: Calibration ( includes continuous position f/band sov)	5.00	NOS.	6650.00	33250
22.32	Erection supervision of flow element (orifice assembly with flanged connection).				
22.33	Erection is a Part of Mechanical Tender				
22.34	Orifice assembly with Flanged Connection up to 3"	5.00	NOS.	6650.00	33250



## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRIPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
22.35	Orifice assembly with Flanged Connection above 3" to 12"	5.00	NOS.	19950.00	99750
22.36	The job includes the following: Receiving & shifting of LG & its accessories from store/any other place inside OWNER/PDIL campus & transport to work site.Fixing of LG with all accessories on vessel/standpipe at any height. taking proper clearance.				
22.37	Fabrication, installation and grouting of small supports for instrument if necessary. All above jobs are inclusive of supply of all sorts of erection materials (including clamps, nut bolt etc.) and consumables excepting the supply of Pipes, Pipe Fittings, Structural Material, and Instruments. providing Holes in Blind flange for vesseel related tags. Hydraulic testing of manifold. impulse pipe, DP test,PMI test Painting of all erected structural items (excluding impulse line) inclusive supply of paint (Paint make shall be Asian/Berger/Nerolac). The installation shall be as per typical installation diagram.				
22.38	Necessary skilled & unskilled manpower, supervision, & tackles, transporting vehicle, consumables including Teflon tape etc. will be in BIDDER'S scope.				
22.39	calibration/Erection of level Gauges( ALL TYPES) on vessel/Stand pipe	10.00	NOS.	1215.00	12150
23.00	Erection and Installation of Inline flowmeter (all types) on pipe as per attached hook-ups & installation drawing.				
23.11	The job includes the following: Erection and installation, Glandng, ferruling and termination of the cable wherever required, including supply of ferrule and lugs is in BIDDER'S scope of supply Supplied lugs shall be Dowel make only Fabrication, installation and grouting of support, if required. Grouting material (cement, concrete, sand etc if required.) shall be in BIDDER'S scope.				
23.12	Fabrication, instalation and grouting of small supports for instrument if necessary, All above jobs are inclusive of supply of all sorts of erection materials (including clamps, nut bolt etc.) and consumables excepting the supply of Pipes, Pipe Fittings, Structural Material, and Instruments. providing Holes in Blind flange for vesseel related tags, Hydraulic testing of manifold. impulse pipe, DP test,PMI test Painting of all erected structural items (excluding impulse line) inclusive supply of paint (Paint make shall be Asian/Berger/Nerolac). The installation shall be as per typical installation diagram.				
23.13	Necessary skilled & unskilled manpower, supervision, & tackles, transporting vehicle, consumables including Teflon tape etc. will be in BIDDER'S scope.				
23.14	Inline Flow Meter all types (FT)- Erection / Installation (glandng, and termination, erection of Station & Supports Canopy,etc-if any)	3.00	NOS.	19950.00	59850





## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C/P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRIPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
23.15	Inline Flow Meter all types (FT)- Functional check, loop checking	3.00	NOS.	13300.00	39900
23.16	Inline Flow Meter all types (FT)- Calibration	3.00	NOS.	6650.00	19950
23.17	Calibration,Erection supervision of TSV/Safety/Vaccum Relief Valves/Self Actuating Valve				
24.00	Erection of TSV/Safety relief valves/Vaccum rlief valves/Self Actuating Valve shall be part of Mechanical Erection Tender				
24.11	The job includes the following: Shifting of new instrument with its accessories from store to work site Calibration of Pressure safety/Pressure regulating Valve as per the instructions of Engineer incharge , bidder to note that necessary washing connection tubing & steam tracing tubing shall be included in this quote. there is no separate price for tubing works				
24.12	Necessary skilled & unskilled manpower, supervision, & tackles,PSV/PCV calibration bench, transporting vehicle, consumables including Teflon tape etc. will be in BIDDER'S scope.				
24.13	PSV/TSV/VRV/PCV- Calibration	20.00	NOS.	12150.00	243000
24.14	PSV/TSV/VRV/PCV- steam tracing , flushing connection tubing works	20.00	NOS.	6075.00	121500
25.00	SECTION B-2- INSTRUMENT WORKS (ERECTION OF CABLE DUCT , CABLE LAYING AND CABLE TRAY LAYING,CABLE DUCT LAYING, INSTALLATION OF JUNCTION BOX , LOCAL CONTROL PANEL , AIR DISTRIBUTION POT ETC. , AS PER INSTALLATION DRAWING)				
25.11	Cable laying in Cable tray of instrumentation cable inclusive of unpacking, Transportation from store, primary checking, testing, etc.				
25.12	Horizontal and vertical laying of different instrument cables (Signal / Power / Control / Alarm / Thermocouple / RTD /OFC/CO-AXIALetc.) of different sizes and types (armoured/unarmoured) in Cable tray, including routing through MCT blocks, fixing of galvanized clamps and screws for fixing cables on to the supports in theTray/ structure etc., providing aluminium cable tags at both the ends of the cable, line testing and transportation from stores to site, unpacking, straightening, dressing of cable & returning the empty drums with unused cable, if any to stores complete with labour and materials as per the drawings, specifications and directions of the engineer-in-charge, Bidder to note that this work shall include price for Glandng at both sides ie; JB side and Panel side, there will not be any separate Price ( Sand removal and filling for cable laying shall be in bidders scope , there wont be any separate price for the same bidder to quote accodngly)				
25.13	SOR (cable Laying)				

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FALCHER FERTILIZERS LIMITED

## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRIPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
25.14	Cable Size: Overall diameter upto 20 mm	7800.00	Mtr	24.00	187200
25.15	Cable Size: Overall diameter > 20 mm upto 40 mm	42000.00	Mtr	36.00	1512000
25.16	CABLE GLANDING & TERMINATION WITH DOUBLE COMPRESSION SS316 GLANDS				
25.17	Glinding & termination of signal/ control/triad/T/C and power cables with double compression type SS316 cable glands, restoration of insulation, clamping of the cable including supply of clamps. Tagging with aluminium tags, earthing of armour, connection to the equipment terminals etc. excluding supply of double compression brass / SS316 cable glands. All complete with labour and materials as per drawings, specifications and directions of Engineer-In-Charge.				
25.18	Cable gland size 1/2" & 3/4"	240.00	NOS	182.00	43680
25.19	Cable gland size 1" & 1.5"	154.00	NOS	304.00	46816
25.20	Supply & laying of perforated FRP cable tray including joining, cutting, bending, supporting etc. Laying of MS/ GI / FRP Perforated cable trays / Cable duct (supply of tray, cable duct & structural steel in BIDDER's scope) - refer layout.				
25.21	The job includes the following: Shifting of tray /duct material from store to work site, fabrication and laying of perforated trays as per specifications & direction of Engineer in charge Supply of Perforated Trays & structural steel shall be in BIDDER's scope.				
25.22	All other material including grouting material (cement, concrete, sand etc.), clamps, bolts, nuts etc. required to complete the job shall be in BIDDER's scope. Fabrication, installation and grouting of support wherever required, cutting and modification of existing support if required inclusive of supply of erection consumable materials.				
25.23	Painting of all erected structural items with one coat of ready mixed primer and two coats of approved quality synthetic enamel paint inclusive of supply of paint and primer. (Paint and Primer make shall be Asian/Berger/Nerolac). Necessary skill & unskill manpower, supervision, tools & tackles, transporting vehicle, consumables will be in BIDDER's scope. The job shall be carried out as per specification and direction of Engineer-in-charge. ( Sand removal and filling for cable laying shall be in bidders scope , there wont be any seprate price for the same bidder to quote accodingly)				
25.24	Cable Tray (Perforated ) 2500 x 600 x 100 ( including bends/cross/tees and all other fittings and accessories)	4080.00	MTR	194.00	791520

*Admission*



## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
25.25	Cable Tray (Perforated) 2500 x 300 x 55 ( including bends/cross/tees and all other fittings and accessories)	600.00	MTR	170.00	102000
25.26	Cable Trays (Perforated) 2500 x 200 x 55 ( including bends/cross/tees and all other fittings and accessories)	2400.00	MTR	146.00	350400
25.27	Cable Trays (Perforated) 2500 x 100 x 55 ( including bends/cross/tees and all other fittings and accessories)	600.00	MTR	122.00	73200
25.28	Cable Trays (Perforated) 2500 x 50 x 55 ( including bends/cross/tees and all other fittings and accessories)	1200.00	MTR	97.00	116400
25.29	Installation of junction box with canopy / local control panel/emergency push button etc including structural welding, clamping etc. (supply of junction box & local control panel with push buttons in OWNER/PDIL's scope)				
25.30	The job includes the following: Shifting of new Junction Box/LCP with pushbuttons (for reset,start stop at grade level ) with its accessories from store to work site. Fabrication and installation of supports and installation of junction box.Screwing, plugging of unused entries of Junction Box. Fabrication, installation with canopy and grouting of support. Grouting material (cement, concrete, sand etc.) shall be in BIDDER's scope. Cutting and modification of existing support, if required.				
25.31	Glanding of multicore & branch cables, aluminium tagging of the glands, supply of aluminium tag is in BIDDER's scope of supply but cable gland shall be supplied free of cost by owner.				
25.32	Painting of all erected structural items with one coat of ready mixed primer and two coats of approved quality synthetic enamel paint inclusive supply of paint and primer. (Paint and Primer make shall be Asian/Berger/Nerolac).				
25.33	Necessary skilled & unskilled manpower, supervision, tools & tackles, transporting vehicle, consumables will be in BIDDER's scope. The job shall be carried out as per specification and direction of Engineer-in-charge.				

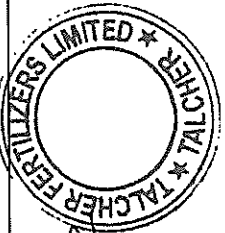


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## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C/P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## SCHEDULE OF RATES (SOR)

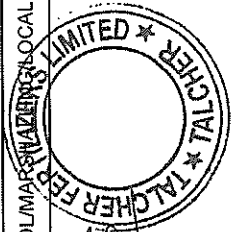
SL.NO.	ITEM DISCRIPTION	RATE AND AMOUNT IN INDIAN RUPEES			
		QUANTITY	UNITS	UNIT PRICE	
				TOTAL AMOUNT EXCLUDING GST	
25.34	Bidder to note that Suitable earthing using 10MMSQ eathing cable as per drawings or direction form engineer incharge from panel to Earth Busbar shall be provided. there wont be any special rate for the same.	30.00	NOS	3645.00	109350
25.35	Explosion proof junction box suitable for 12 pair cable.	10.00	NOS	1458.00	14580
25.36	Installation of Pushbuttons				
25.37	Structural work & fabrication for instrument items like tray support, mounting frames for instruments, base frames, canopy for jb & transmitters, any other required for supporting instrument items. (Structural & pipe material is in BIDDER's scope)				
25.38	The job includes the following: Fabrication of yoke supports as per drawing for instruments of flow, pressure, level, temperature etc.as per installation drawing. Installation of the same on supports / wall / ground by welding / clamping / grouting as per requirement. Any other material if required shall be in BIDDER's scope.				
25.39	Grouting material (cement, concrete, sand etc.) / welding material / clamping material shall be in BIDDER's scope.Cutting and modification of existing support if required.				
25.40	Painting of all erected structural items with one coat of ready mixed primer and two coats of approved quality synthetic enamel paint inclusive supply of paint and primer. (Paint and Primer make shall be Asian/Berger/Nerolac).Necessary skilled & unskilled manpower, supervision, tools & tackles, transporting vehicle, consumables will be in BIDDER's scope. The job shall be carried out as per specification and direction of Engineer-in-charge.bidder to note that there is no seprate rate is allowed for stancion supports.				
25.41	50 x 50 x 6THK ANGLE MS	7000.00	kg	40.00	280000
25.42	100 x 50 x 6THK CHANNEL MS	22000.00	kg	40.00	880000
25.43	FOUNDATION BOLTS, NUTS & WASHER 10MM X 150L MS	1200.00	Nos	133.00	159600
25.44	COVER PLATE 4 MMTHK MS	120.00	kg	40.00	4800
25.45	RIBS (PLATE) 250 X 250 X 6 THK MS PLATE	1700.00	kg	40.00	68000
25.46	BASE PLATE 250 X 250 X 6 THK MS PLATE	1700.00	kg	40.00	68000
25.47	2" MS PIPE FOR STAND PIPE, MEDIUM, AS PER IS:1239	360.00	Mtr	266.00	95760



## ANNEXURE 'C' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/ILOA-25/23-24 dated 23.02.2024

SCHEDULE OF RATES (SOR)


SL.NO.	ITEM DESCRIPTION	RATE AND AMOUNT IN INDIAN RUPEES		
		QUANTITY	UNITS	UNIT PRICE
				TOTAL AMOUNT EXCLUDING GST
25.48	Erection/installation of Air Distribution Port as per AP layout ( will be provided later) any structural supports ,skilled manpower and consumables, tools & tackles for completion of Job shall be in bidders scope.			
25.49	The job includes the following: Ferruling, Glanding, termination, Fabrication of supports, installation of the same on supports / wall / ground by welding / clamping / grouting as per requirement. Any other material if required shall be in BIDDER's scope. Grouting material (cement, concrete, sand etc.) / welding material / clamping material shall be in BIDDER's scope. Cutting and modification of existing support if required. Painting of all erected structural items with one coat of ready mixed primer and two coats of approved quality synthetic enamel paint inclusive supply of paint and primer. (Paint and Primer make shall be Asian/Berger/Nerolac). Necessary skilled & unskilled manpower, supervision, tools & tackles, transporting vehicle, consumables will be in BIDDER's scope. The job shall be carried out as per specification and direction of Engineer-in-charge. Bidder to note that Suitable earthing using 10MMSQ earthing cable as per drawings or direction form engineer incharge from panel to Earth Busbar shall be provided. there wont be any special rate for the same.	5.00	Nos	6075.00
25.50	AIR DISTRIBUTION PORT (AS PER ATTACHED DWNG)			30375
26.00	Erection/installation of local control panel/ DCS/PLC panels			
26.11	The job includes the following: Glanding , termination, Fabrication of supports, installation of the same on supports / wall / ground by welding / clamping / grouting as per requirement. Any other material if required shall be in BIDDER's scope. Grouting material (cement, concrete, sand etc.) / welding material / clamping material shall be in BIDDER's scope. Cutting and modification of existing support if required. Painting of all erected structural items with one coat of ready mixed primer and two coats of approved quality synthetic enamel paint inclusive supply of paint and primer. (Paint and Primer make shall be Asian/Berger/Nerolac). Necessary skilled & unskilled manpower, supervision, tools & tackles, transporting vehicle, consumables will be in BIDDER's scope. The job shall be carried out as per specification and direction of Engineer-in-charge. ( Sand removal and filling for cable laying shall be in bidders scope , there wont be any separate price for the same bidder to quote accordingly) Bidder to note that Suitable earthing using 10MMSQ earthing cable as per drawings or direction form engineer incharge from panel to Earth Busbar shall be provided. there wont be any special rate for the same.	10.00	Nos	6075.00
26.12	CONTROL PANELS/LOCAL PANELS			60750



*Advising*

**SCHEDULE OF RATES (SOR)**

SL.NO.	ITEM DISCRIPTION	RATE AND AMOUNT IN INDIAN RUPEES		
		QUANTITY	UNITS	UNIT PRICE
		TOTAL AMOUNT EXCLUDING GST		
27.00	Erection/Installation & commissioning of Telephone network The job includes the following: Glanding , termination,Fabrication of supports,Installation of the same on supports / wall / ground by welding / clamping / grouting as per requirement. Any other material if required shall be in BIDDER's scope. Grouting material (cement, concrete, sand etc.) / welding material / clamping material shall be in BIDDER's scope.Cutting and modification of existing support if required.Painting of all erected structural items with one coat of ready mixed primer and two coats of approved quality synthetic enamel paint inclusive supply of paint and primer. (Paint and Primer make shall be Asian/Berger/Nerolac). Necessary skilled & unskilled manpower, supervision,Machines, tools & tackles; transporting vehicle, consumables will be in BIDDER's scope.The job shall be carried out as per specification and direction of Engineer-in-charge.( Sand removal and filling for cable laying shall be in bidders scope , there wont be any seprate price for the same bidder to quote accoddingly)			
27.11	SOR for Erection/Installation-Erection/Installation of CCTV system as Section--A INSTRUMENT WORKS (SUPPLY) - CCTV for OSBL facilities and Surveillance Purpose of TFL Fertilizer complex : Design , Engineering & Supply	8.00	Nos	24300.00
27.12	Installation of Telephone system as Per detailed Specification including JB/Terminal Box( no special rate for terminal box)	5000.00	Mtr	43.00
27.13	Cable laying (20 Pair & 5 Pair)			
28.00	Deleted			
28.11	Deleted			

*Prakash*  


001264

## ANNEXURE 'C' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

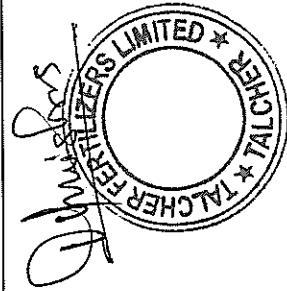
SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES		
		QUANTITY	UNITS	UNIT PRICE
29.00	<p>Erection/installation &amp; commissioning CCTV System</p> <p>The job includes the following:</p> <p>This Job includes installation of GPS system in Urea bagging unit with associated electronics, softwares and hooking up the same with the urea network.</p> <p>Glandng , termination,Fabrication of supports,Installation of the same on supports / wall / ground by welding / clamping / grouting as per requirement. Any other material if required shall be in BIDDER's scope.</p> <p>Grouting material (cement, concrete, sand etc.) / welding material / clamping material shall be in BIDDER's scope.</p> <p>Cutting and modification of existing support if required.Painting of all erected structural items with one coat of ready mixed primer and two coats of approved quality synthetic enamel paint inclusive supply of paint and primer. (Paint and Primer make shall be Asian/Berger/Nerolac).Necessary skilled &amp; unskilled manpower, supervision,Machines, tools &amp; tackles; transporting vehicle, consumables will be in BIDDER's scope.The job shall be carried out as per specification and direction of Engineer-in-charge,</p>			
29.11	<p>Erection/installation commissioning of CCTV system as Section--A INSTRUMENT WORKS (SUPPLY ) -</p> <p>CCTV Complete system for whole fertiliser complex as per attached specification -</p> <p>Bidder shall engineering , supply, install, test and commissioning the ONVIF-IP based Closed circuit television</p> <p>(CCTV) Surveillance System,Complete CCTV System with all accessories like Cameras, power supply , JB , LIU , media convertor,</p> <p>OFC convertor, 22" LED workstation , server, VMS ,NAS for 365 days storage , one LED 72" ceiling mounted with 100 windows , software , license , surveillance software , analytical software , all cables, all mounting accessories , poles , civil works etc. (A</p> <p>at the TFL fertilizer complex . The purpose of the CCTV System is to monitor the facility operations &amp; security surveillance from control room / Security room &amp; Admin building to keep eye on facility covering Main gate entry /exit ,material gate exit / entry and other area of importance to the daily running of the complex by installing cameras to monitor resulting to enhancement in the Operational &amp; Safety needs.</p> <p>It is intended to install CCTV system to track the Material movement, Recognition of persons and objects including vehicles through high quality images in and outside the plant by Security. The recording of the scene can be used in investigation, recreating the scene and establishing the truth.</p>	1.00	Nos	1579500.00
				1579500



SCHEDULE OF RATES (SOR)

SL.NO.	ITEM DISCRPTION	RATE AND AMOUNT IN INDIAN RUPEES		
		QUANTITY	UNITS	UNIT PRICE
29.12	Erection/installation commissioning Fixed Camera Section--A INSTRUMENT WORKS (SUPPLY ) - Fixed Perimeter 1080p HD IP outdoor Cameras IP66 housing with Day/night fixed camera with advanced video analytics, Min 75 Mtrs IR range , Camera with 1/3" or better CMOS , 1920 (H) X 1080 (V); 2 MP or better , Inbuilt Min 128 GB or higher GB SD Card Storage for local recording etc. as per attached specification	60.00	Nos	1458.00
29.13	Erection/installation commissioning PTZ Camera Section--A INSTRUMENT WORKS (SUPPLY ) - 1080p HD IP Indoor / outdoor PTZ Cameras with 1/3" or better progressive scan Exmor CMOS , 1920 (H) X 1080 (V); 2 MP or better, 30 X optical Zoom (4.3 mm -129 mm) , 4X Digital Zoom	9.00	Nos	1823.00
30.00	Supply , Erection/installation & commissioning MISCELLANEOUS The job includes the following: Supply, erection/installation & commissioning , interface, all residual engineering to complete the Instrumentation works as per scope shall be in Bidder's scope			
30.11	Supply, erection/installation & commissioning , interface, all residual engineering to complete the Instrumentation works as per scope shall be in Bidder's scope	1.00	LOT	900000.00
		TOTAL CONTRACT AMOUNT (in INR) excluding GST		
		Rate of GST (presently @ 18%) in INR		
		TOTAL CONTRACT AMOUNT (in INR) including GST		
		210452143.00		
		37881386.00		
		248333529.00		



001262



**ANNEXURE-D**

**LIST OF AHR ITEMS**

ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&P/E&I WORKS/LOA-25/23-24 dated 23.02.2024					
LIST OF AHR ITEMS					
Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
1.00	SUPPLY OF ELECTRICAL ITEMS (SUPPLY: PART-A)				
1.10	TRANSFORMERS				
1.11	Supply of Transformers with all accessories, as specified in data sheets, Technical Specification - Electrical, Technical Specification Doc. No. PC183-TS-0802, etc. attached with the NIT.				
1.12	2000 KVA, 11/0.433 KV, ONAN, Dyn11, 3 phase, 50 Hz, Oil immersed type transformer with externally operated off circuit tap changer with tapping range of + 5% in steps of 2.5% and Z=7.25% (zero negative tolerance) with all applicable fittings and accessories.	2	Nos.	6274000	12548000
1.13	1600 KVA, 11/0.433 KV, ONAN, Dyn11, 3 phase, 50 Hz, Oil immersed type transformer with externally operated off circuit tap changer with tapping range of + 5% in steps of 2.5% and Z=6% (zero negative tolerance) with all applicable fittings and accessories.	2	Nos.	5424000	10848000
1.14	1250 KVA, 11/0.433 KV, ONAN, Dyn11, 3 phase, 50 Hz, Oil immersed type transformer with externally operated off circuit tap changer with tapping range of + 5% in steps of 2.5% and Z=6% (zero negative tolerance) with all applicable fittings and accessories.	2	Nos.	4506000	9012000
4.00	CABLES (HT & LT)				
4.52	CABLE TRAYS:				
4.53	Supply of prefabricated ladder type GI cable trays and their accessories i.e. supply of all hardware required i.e. J-hooks, GI Nut, Bolt, Washers, coupling plate etc. of following sizes as per Technical specification - Electrical, Technical Specification - Cables (Doc. No. PC183-TS-0816) etc.				
4.59	Horizontal Bends				
4.60	600 mm wide, 700 mm radius	20	Nos.	9044	180880
4.61	450 mm wide, 560 mm radius	15	Nos.	7448	111720

*Advisories*



## ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
4.62	300 mm wide, 700 mm radius	60	Nos.	6584	395040
4.63	150 mm wide	20	Nos.	3578	71560
4.64	Vertical Inside Bends				
4.65	600mm wide, 1000mm radius	10	Nos.	9044	90440
4.66	450 mm wide, 1000mm radius	10	Nos.	7448	74480
4.67	300 mm wide, 1000mm radius	30	Nos.	6584	197520
4.68	150 mm wide	20	Nos.	3578	71560
4.69	Vertical Outside Bends				
4.70	600 mm wide, 1000 mm radius	10	Nos.	9044	90440
4.71	450 mm wide, 1000 mm radius	10	Nos.	7448	74480
4.72	300 mm wide, 1000 mm radius	35	Nos.	6584	230440
4.73	150 mm wide	20	Nos.	3578	71560
4.74	Reducer				
4.75	600 mm / 450 mm wide	10	Nos.	9044	90440
4.76	450/300mm wide	10	Nos.	7448	74480
4.77	300/150mm wide	10	Nos.	6584	65840
4.78	Regular Tees				
4.79	600 mm wide , 700 mm radius	5	Nos.	10640	53200
4.80	450 mm wide, 700 mm radius	8	Nos.	7980	63840
4.81	Cross				

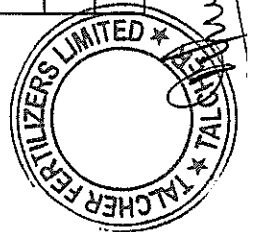
Advisors



## ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

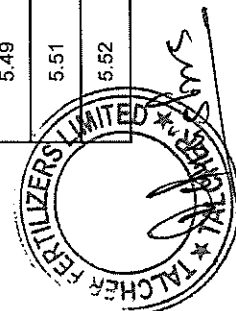
Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
4.82	600 mm wide , 700 mm radius	10	Nos.	9044	90440
4.83	450 mm wide, 700 mm radius	5	Nos.	7448	37240
4.90	Spares for Two Years Operation (Mandatory)				
4.91	Supply of spares of following equipments				
4.92	Capacitor Bank				
4.93	Supporting insulators	1	Set	16000	16000
4.95	PA system				
4.96	Electronic card for central exchange	1	Nos.	152000	152000
4.97	Electronic Amplifier card for FCS	1	Nos.	184000	184000
4.99	FLP speaker	1	Nos.	57600	57600
5.00	Transformer (2000 KVA, 11/0.433 kV Transformer)				
5.03	Equaliser pipe and Explosion vent diaphragm	1	Set	24000	24000
5.05	Oil Level Gauge	1	No.	12800	12800
5.06	Complete charge of Silica gel with breather	1	Set	12480	12480
5.08	Buchholz Relay	1	No.	80000	80000
5.09	Analogue type OTI	1	No.	24000	24000
5.11	Radiator(one set of each type)	1	Set	64000	64000
5.12	Complite set of valve(1 no. of each type)	1	Set	64000	64000
5.15	Conservator gauge Glass/Sealing	1	No.	16000	16000
5.16	Thermister with space heater for M.I.B	1	No.	8000	8000



## ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

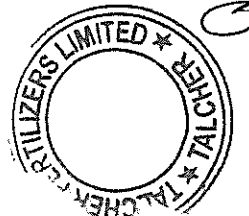
Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
5.17	3 Pin switch & socket	1	No.	800	800
5.20	Transformer (1600 KVA, 11/0.433 kV Transformer)				
5.23	Equaliser pipe and Explosion vent diaphragm	1	Set	24000	24000
5.25	Oil Level Gauge	1	No.	12800	12800
5.26	Complete charge of Silica gel with breather	1	Set	12480	12480
5.28	Buchholz Relay	1	No.	80000	80000
5.29	Analogue type OTI	1	No.	24000	24000
5.31	Radiator(one set of each type)	1	Set	64000	64000
5.32	Complete set of valve(1 no. of each type)	1	Set	64000	64000
5.35	Conservator gauge Glass/Sealing	1	No.	16000	16000
5.36	Thermister with space heater for M.B	1	No.	8000	8000
5.37	3 Pin switch & socket	1	No.	800	800
5.40	Transformer (1250 KVA, 11/0.433 kV Transformer)				
5.43	Equaliser pipe and Explosion vent diaphragm	1	Set	24000	24000
5.45	Oil Level Gauge	1	No.	12800	12800
5.46	Complete charge of Silica gel with breather	1	Set	12480	12480
5.48	Buchholz Relay	1	No.	80000	80000
5.49	Analogue type OTI	1	No.	24000	24000
5.51	Radiator(one set of each type)	1	Set	64000	64000
5.52	Complete set of valve(1 no. of each type)	1	Set	64000	64000



## ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
5.55	Conservator gauge Glass/Sealing	1	No.	16000	16000
5.56	Thermister with space heater for M.B	1	No.	8000	8000
5.57	3 Pin switch & socket	1	No.	800	800
5.60	415V LV SWITCHBOARD -				
5.61	2500A, 50KA for 1 sec ACB / 800 A , 50KA for 1 sec ACB				
5.62	Arc Chute assembly	2	Set	12000	24000
5.63	Shunt trip coil.	2	Set	10400	20800
5.64	Closing coil	2	Set	10400	20800
5.66	CONTROL SWITCHES				
5.67	Trip-Neutral-Close Control Switch	1	No.	5600	5600
5.71	Push Button Actuator of each type	1	Set	5600	5600
5.72	Control Fuse				
5.73	Fuse Link	1	No.	5600	5600
5.74	Fuse Fitting	1	No.	6400	6400
5.77	MCB of each type & rating)	1	Set	24000	24000
5.78	CONTACTOR (of each type & rating )	1	Set	96000	96000
5.79	Overload RELAYS (of each type & rating)	1	Set	48000	48000
5.80	CT for breaker feeders (Each Rating)	1	Set (3 nos.)	180000	180000
5.81	CT for other outgoing feeders (Each Rating)	1	Set (3 nos.)	360000	360000
5.82	MCCB / ELCB MCB				

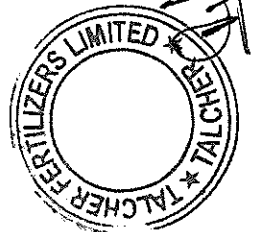


*Alfons*

## ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
5.83	4P/TPN MCCB 400 A	2	Nos.	44800	89600
5.84	4P/TPN MCCB 250 A	2	Nos.	38400	76800
5.85	4P/TPN MCCB 160 A	2	Nos.	30400	60800
5.86	4P/TPN MCCB 125 A	2	Nos.	24000	48000
5.87	4 P/TPN MCCB 63 A	4	Nos.	20000	80000
5.88	DP RCBO 63 A	6	Nos.	9600	57600
5.89	DP MCB, 16 A	6	Nos.	960	5760
5.91	LIGHTING FIXTURE				
5.92	Reflector of each type	5	Set	3200	16000
5.95	Allen keys of different sizes as applicable.	3	Nos.	4800	14400
5.99	INTERLOCKING SWITCH SOCKET & PLUG				
6.00	Switch of each rating	2	Set	4000	8000
6.01	Fuse base of each rating	2	Set	1920	3840
6.02	Fuse of each rating	2	Set	2880	5760
6.03	Plug Top	2	Nos.	2400	4800
6.04	11 V ICOG Breaker Panel :BREAKER 11 kV - Trip bar spring and any other spring used in the circuit breaker mechanism	1	Set	120000	120000
6.05	11 V ICOG Breaker Panel :BREAKER 11 kV - Shunt trip coil	1	Set	64000	64000
6.06	11 V ICOG Breaker Panel :BREAKER 11 kV - Closing coil	1	Set	64000	64000
6.07	11 V ICOG Breaker Panel :BREAKER 11 kV - Secondary Isolating contact blocks	1	Set	24000	24000



## ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&amp;P/EI WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
6.08	11 V ICOG Breaker Panel :BREAKER 11 kv - Micro Switch for Spring Charging	1	Set	8000	8000
6.09	11 V ICOG Breaker Panel :BREAKER 11 kv - Micro Switch for Service/Test position	1	Set	8000	8000
6.10	11 V ICOG Breaker Panel :BREAKER 11 kv - Rack in/Rack out handle	1	No.	19200	19200
6.11	11 V ICOG Breaker Panel :BREAKER 11 kv - Spring Charging handle	1	No.	19200	19200
6.13	11 V ICOG Breaker Panel : CONTROL SWITCHES- Trip-Neutral-Close Control Switch	1	No.	32000	32000
6.14	11 V ICOG Breaker Panel : CONTROL SWITCHES- Local-Remote or Auto-Manual Selector Switch	1	No.	8000	8000
6.15	11 V ICOG Breaker Panel : CONTROL SWITCHES- Ammeter Selector Switch	1	No.	2400	2400
6.16	11 V ICOG Breaker Panel : CONTROL SWITCHES- Voltmeter Selector Switch	1	No.	2400	2400
6.21	MINIATURE CIRCUIT BREAKER (OF EACH RATING)	1	Set	4800	4800
6.22	METERS: Ammeter	1	Set	16000	16000
6.23	METERS: Voltmeter	1	No.	16000	16000
7.00	PART-B : ERECTION, TESTING & COMMISSIONING OF ELECTRICAL ITEMS				
7.16	TRANSFORMER				





## ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

Sl.No	Description of Work./ Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
7.17	Handling, storage at site, transportation from store to site of installation, erection, installation, testing and commissioning of (outdoor type - ONAN cooled) transformer, erection of transformer over the rail and foundation channels, including transporting, unpacking, rigging, aligning, levelling, grouting, assembling, fitting and fixing all accessories/instruments/relays etc. supplied separately if any, etc., supply of WP double compression rolled aluminium cable glands & suitable lugs (Al/Cu/Bimetalic), making all the interconnections & termination of all power (HT/LT) cables, control cables / busbar etc. as per drawings, including earthing/grounding of transformer neutral as per drawing, equipments needed to completely install and commission the transformer Job complete in all respect including cost of all labour, tools and materials and all services rendered complete, installation of thermistor controller, internal wiring, earthing of LT panel etc. complete as per drawings and directions of the Site Engineer / engineer-in-Charge. Note: Commissioning assistance shall be provided by the supplier of the Transformer as and when required at site.				
7.18	2000 KVA, 11/0.433 kV Transformer (ONAN), 50 Hz, Dyn11 with off load tap changer	2	Nos.	120000	240000
7.19	1600 KVA, 11/0.433 kV Transformer (ONAN), 50 Hz, Dyn11 with off load tap changer	2	Nos.	96000	192000
7.20	1250 KVA, 11/0.433 kV Transformer (ONAN), 50 Hz, Dyn11 with off load tap changer	2	Nos.	96000	192000
7.30	TESTING & COMMISSIONING of MOTORS				
7.31	HT MOTOR (11KV/3.3KV):				

*Admission*



ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&P/E&I WORKS/LOA-25/23-24 dated 23.02.2024					
LIST OF AHR ITEMS					
Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
7.32	Testing & commissioning of owner supplied, 3-Phase Squirrel Cage, HT induction Motors. The job includes dehydration of motors; execution of terminal connections with HT power, LT power and control cables, earthing of Motor / Local speed controller, armour of all the cables etc., with materials i.e. FLP double compression rolled aluminium cable glands, Suitable end lugs(Aluminum/copper/Bi metallic), labour, tools and tackles, consumables etc. including dehydration of the following motors to improve the insulation resistance value of the winding to the required level as per direction of the site in-charge, as per drawings, specification and directions of Site Engineer / Engineer-in-Charge.				
7.33	HT Motor rating below 500 KW and greater than 150 KW	1	Nos.	30375	30375
7.35	HT Motor rating 1500 KW and above	1	Nos.	48600	48600
7.43	CABLES (HT & LT)				
7.44	Handling, Laying (horizontal & vertical), testing and commissioning of 11KV(Ue)/ 1.1 KV Grade, XLPE Insulated, PVC inner sheathed, armoured, FRLS PVC outer sheathed cables including its termination in new & readymade trenches, on pre-fabricated/ site-fabricated cable trays/ racks, on already installed risers, support, hangers,saddles / directly buried up to 700mm depth etc. pulling through pipes on walls/columns, steel structures including transportation of cable drums from storage yard to site, unrolling the drum, including supply & fixing of cable tags, Al clamps with all labour, consumable materials and necessary hardware to make installation complete in all respect as per direction of Site Engineer / Engineer-in-charge.				
7.45	HT (11KV/3.3 KV) Power cables				
7.47	LT (PVC / XLPE / Armoured / Unarmoured / Power / Control / Signalling) Cables				

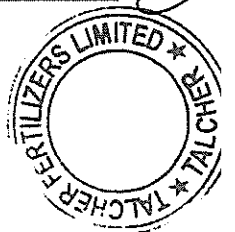


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## ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

S.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
7.53	Handling, laying of 6 Fiber multi mode FO Cable suitable for relay to relay distance of approx 2 km for line differential protection with all accessories for termination, this also include splicing, jointing as per requirement	600	Mtrs.	146	87600
7.54	EARTH STRIP / WIRE / ROPE / CABLE				
7.55	Earthing strip/wire/rope/cable for completely making the earthing grid system by laying the GI strip / GI Wire enclosed in ready made concrete trenches or in floor sills, on brick / concrete wall under concrete floors, or paved areas, across pipe joints and valves, directly buried under ground at depth of 600 mm, including handling, transportation to erection site, bending, straightening, cutting to size, welding together of earth strips in overlapping manner, chipping in concrete floors / paved areas for laying the earth strips under floors / paved areas and making good by cement plastering concrete after laying of the strips; clamping and supporting of earth strips laid above ground, connecting the strips / wire at both ends to equipment or to earth bus / earth plates or to GI brackets fixed inside earthen chamber, by bolting etc., Hessian tapes, all necessary GI hardware, GI clamps, civil masonry materials, etc. all work, labour as per specifications, codes and standards and directions of Site engineer/Engineer-in-charge, including the cost of all labour, tools, materials, etc. complete in all respect. Note: The conductors shall be laid at a minimum depth of 600 mm from ground level. The excavation for the GI earth conductors / strips shall not be separately measured and the rates quoted to include the same.				
7.58	GI wire Rope (8 SWG)	30	Kg	61	1830
8.00	PART-C : SUPPLY, ERECTION, TESTING & COMMISSIONING OF ELECTRICAL COMPOSITE ITEMS				
8.38	EMERGENCY PUSH BUTTON STATION FOR TRANSFORMER (Weatherproof)				



## ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

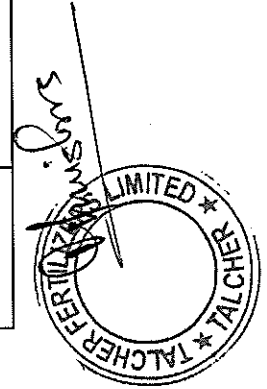
Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
8.39	Supply ,erection,testing and commissioning of Weather Proof push button(OFF) control station of approved make for emergency transformer tripping at field including connection and termination of copper control cable, fabricating, earthing the supporting structure,termination of cables painting the same, including supply & installation of cable glands & plugs for sealing all spare entries including the cost of all labour,tools, materials etc. complete in every respect as per the specification and directions of the Site Engineer / Engineer-in-charge.	6	Nos.	9113	54678
9.00	LIGHTING				
9.11	Supply, unloading, storage, handling, transportation within site from store to site of installation, installation, connection, earthing and testing of the following LED fittings, including supply and installation of drop pipes, hooks, JB/TB for looping of fixtures, fittings, nuts, bolts, supports, on walls and all other required materials gland, lugs as required etc. as specified in Technical Specification and all hardware for fixing the lighting fittings with ceiling/wall pole including cable glanding, crimping of lugs on cable conductor & connecting cables at fixtures in looping and from lighting DB, earthing, junction boxes, etc., drawings and directions of the Site Engineer including cost of all labour, tools, materials as well as transportation from store to site of erection with all labour and material to make installation complete in all respect. Make of the fittings shall be as per approved make as mentioned in Technical specification.				
9.17	15 W LED Surface Light of approved make suitable for 240V AC as per Technical specification complete with all accessories such as LED lamp/chip, electronic driver, Reflector Terminal block etc etc.. The fittings shall be provided with mounting arrangement as per Site Engineer/ Engineer-in-charge.	40	Nos.	3645	145800
9.18	10 W LED Baton Mirror Light 2 Ft of approved make suitable for 240V AC as per Technical specification complete with all accessories such as LED lamp/chip, electronic driver, Reflector Terminal block etc etc.. The fittings shall be provided with mounting arrangement as per Site Engineer/ Engineer-in-charge.	20	Nos.	1823	36460



## ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
9.22	Supply unloading, storage, handling, transportation within site from store to site of installation, installation, connection, testing and commissioning of pre-wired 240V AC, 1-Ph, WP outdoor, LED Lighting fixtures including LED lamp with driver and JB for looping of cables of following type which shall be suitable for use in safe area having IP-65 degree of protection complete with all accessories, double compression Ni-plated brass cable glangs & plugs, blanking plugs etc. as specified in Technical specification and all hardware for fixing the lighting fittings with structure/ lighting pole including cable glanding, crimping of lugs on cable conductor & connecting cables at fixtures, earthing, junction boxes, etc. including supply of all connecting materials like clamps, supports, conduits, down rods etc. as required as well as transportation from store to site of erection with all labour and material to make installation complete in all respect as per approved drawings, specifications and directions of Site Engineer / Engineer-in-charge. The rates shall be valid for all mounting heights.				
9.26	Bulkhead type LED light fitting type of approved make wall mounting suitable for 110V DC as per Technical specification complete with 1 x 9 W LED fixture with all accessories such as LED lamp/chip, electronic driver, terminal block, Reflector etc.. The fittings shall be provided with suspension accessory / wall mounting bracket depending upon directions by EIC / Site Engineer. The minimum degree of protection shall IP 65.	2	Nos.	24300	48600
9.27	Wiring				



## ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
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9.33	Point Wiring : Secondary Plug Point from Primary Plug Point Supply and Providing Point Wiring system for 6A Plug points with single core multi stranded PVC insulated unsheathed copper conductor fire retardant wires of 1100V grade in recessed PVC conduit including providing and fixing PVC conduits of required size complete with accessories such as bends,JB, Pull Boxes etc with plate, switches,sockets,screws and covers, Zinc Passivated MS modular boxes (16 gauge sheet construction) of suitable sizes, embedded in wall, concealed and flush with walls including cutting and refilling the chases/ Wall etc and inclusive of 14 SWG bare copper earth conductor for socket outlets as per specifications & direction of Engineer in charge. All Modular type switch & socket shall be of approved make.6 Amp 6 pin socket outlet with 6A switch mounted side by side with 2x2.5 sq.mm PVC copper wire with 14 SWG bare copper earth wire.(Actual nos. shall be decided at site).	40	Nos.	2916	116640
9.34	Point Wiring : Power Plug Point Supply and Providing Point Wiring system for 16A /6A power plug point with following sizes PVC insulated unsheathed single core multi stranded copper conductor, fire retardant wires of 1100V grade in recessed PVC conduits of required size complete with accessories such as bends,JB,Pull boxes etc with plate switches,sockets,screws and covers, Zinc Passivated MS modular boxes (16 gauge sheet construction) of suitable size, embedded in wall concealed and flush with walls including cutting and refilling the chases/Wall etc, and inclusive of 14SWG bare copper earth conductor for socket outlets as per specifications & direction of Engineer in charge. All modular type switch & socket shall be of approved make.16A, 6 Pin socket outlet with 16A switch mounted side by side with 2x4 sq.mm PVC copper wire with 14 SWG bare copper earth wire as an independent circuit from DB. (Actual nos. shall be decided at site).	15	Nos.	3402	51030



*Admission*

## ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
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9.35	Point Wiring : Secondary Power Plug Point from Primary Power Plug Point Supply and Providing Point Wiring system for 16A /6A power plug point with following sizes PVC insulated unsheathed single core multi stranded copper conductor, fire retardant wires of 1100V grade in recessed PVC conduits of required size complete with accessories such as bends, JB, Pull boxes etc with plate switches, sockets, screws and covers, Zinc Passivated MS modular boxes (16 gauge sheet construction) of suitable size, embedded in wall concealed and flush with walls including cutting and refilling the chases/Wall etc, and inclusive of 14SWG bare copper earth conductor for socket outlets as per specifications & direction of Engineer in charge. All modular type switch & socket shall be of approved make.16A, 6 Pin socket outlet with 16A switch mounted side by side with 2x4 sq.mm PVC copper wire with 14 SWG bare copper earth wire as an independent circuit from DB. Two nos.power plug point shall be looped from one primary plug point.	30	Nos.	3402	102060
9.50	EARTHING AND LIGHTNING PROTECTION				
9.52	Supply, Installation & Commissioning of GI Earth Bus bars (size: 390x50x12mm thick) as per PDS attached with TS including handling, transportation, drilling of necessary holes/enlargement existing holes as required; all associated work for fixing the Bus bars in position e.g. cutting, leveling, aligning, chipping, grouting, welding bolting etc.; making good of broken/chipped portion on walls /columns by cement plastering. Supply of all necessary hardware (GI), paints, civil masonry materials etc. all work,labour complete as per drawings, specifications, codes and standards and directions of consultant /owner.Hot dip galvanized GI earth bus bar of size 390 x 50 x 12 thick (with min. coating 610gm/sq.m of zinc) with fixing materials as per specifications and direction of Site Engineer / Engineer-in-charge	20	Nos	1458	29160

*Adviser*

TALCHER FERTILIZERS LIMITED

## ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
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9.53	Supplying and laying of the stainless steel SS-304 air terminations, base plate & clamping of down Conductor complete with base plate, concrete coping fixing accessories and clamping with down Conductor	10	Nos.	14580	145800
9.62	GI PIPE				
9.63	Supply, erection & installation of cable conduits made up of GI pipes of medium class 'B' subject to owner's approval in trenches (already made), on walls, concrete structure etc., including supply and installation of all the necessary pipe fittings such as bends, sockets, elbows, tees etc., bending, threading, binding, clamping, providing, spacers, plugs, packings, bushings etc., as required. Job complete in all respects including the cost of all labour, tools, material etc. and as per specifications and directions of site engineer / Engineer-in-Charge.				
9.64	100 mm	100	Mtrs.	3645	364500
9.65	50 mm	150	Mtrs.	1944	291600
9.66	HDPE PIPE				
9.69	Supply, Fabrication & installation of 2 mm thick Al sheet for rain protective hood for outdoor equipment e.g. motors, switch sockets, junction boxes etc.	10	M2	3038	30380
9.71	WP JUNCTION BOX				
9.72	Supply, erection, installation, testing and commissioning of flameproof & weather proof 240 V, 25A, junction box for providing cable termination, including connection and termination of earthing wire and conduits etc., including supply & installation of double compression cable glands & flame proof plugs for sealing all spare entries -complete as per drawings, specifications and direction of the Site Engineer, including the cost of all labour, tools, consumable materials etc., complete in all respect.				
9.73	240V, 16A, 4 way junction box with 4 cable entries (4 x 3/4") at bottom & 20 nos. terminals	50	Nos.	10328	516400

*Adhish*

TALCHER UTILIZERS LIMITED



## ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

Sl.No	Description of Work/ Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
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9.77	EXCAVATION AND BACK FILLING				
9.78	Excavation of 1700 mtr. length x 400/600 mm wide x 1200 mm deep a for laying of cables including disposal of excavated earth, lead up to 100 mtrs. and lift up to 1.5 mtrs., disposed earth to be levelled and neatly dressed	420	M3	608	255360
9.80	TERMINATION OF CABLES (LT)				
9.81	End termination and subsequent testing of XLPE insulated single core/ multi core armoured cables of 1.1KV grade, Al/ Cu cable.,including supply of double compression rolled aluminium cable glands, suitable lugs (Al/Cu/Bimetallic)and lugs of all phases & neutral , all labour and consumable materials to make installation complete in all respect. Modification in existing switch board for accomodating the proposed cables. The rate shall include drilling, tapping of cable insulation, crimping of lugs to the conductor, connection of the lugs to equipment terminal, supply and fixing of supports & clamps for cables, G.I. nuts, screws, bolts, washers and other necessary hardware, PVC tape of required grade for taping, making cable entries dust and vermin proof, earthing etc. as per instruction of manufacturer, approved drawings, specifications and directions of engineer-in-charge.				
9.84	3.5C x 300 mm2 (Al)	4	Nos.	4860	19440
9.85	3.5C x 240 mm2 (Al)	6	Nos.	3645	21870
9.86	3.5C x 150 mm2 (Al)	16	Nos.	3645	58320
9.87	3.5C x 120 mm2 (Al)	4	Nos.	2430	9720
9.88	3.5C x 70 mm2 (Al)	4	Nos.	2430	9720
9.89	3.5C x 50 mm2 (Al)	6	Nos.	2066	12396
9.90	3.5C x 35 mm2 (Al)	16	Nos.	1823	29168
9.91	3.5C x 25 mm2 (Al)	4	Nos.	1823	7292



ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&P/E&I WORKS/LOA-25/23-24 dated 23.02.2024					
LIST OF AHR ITEMS					
Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
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9.93	4C x 25 mm2 (Al)	8	Nos.	1215	9720
9.95	3C x 120 mm2 (Al)	2	Nos.	2430	4860
9.96	3C x 70 mm2 (Al)	2	Nos.	2430	4860
10.00	3C x 10 mm2 (Cu)	2	Nos.	608	1216
10.01	3C x 6 mm2 (Cu)	4	Nos.	608	2432
10.02	3C x 4 mm2 (Cu)	4	Nos.	608	2432
10.03	3C x 2.5 mm2 (Cu)	100	Nos.	486	48600
10.05	7C x 2.5 mm2 (Cu)	2	Nos.	1094	2188
10.06	12C x 2.5 mm2 (Cu)	6	Nos.	1823	10938
10.07	19C x 2.5 mm2 (Cu)	6	Nos.	2430	14580
10.08	1Cx185 mm2 (Al) Unarmoured	8	Nos.	1823	14584
10.09	1Cx16 mm2 (Al) Unarmoured	12	Nos.	486	5832
10.10	6 fiber, multi mode optical fiber cable along with all accessories like receiver, converter, transmitter, patch card etc	4	Nos.	3038	12152
10.11	Supply, installation, testing and commissioning of 240V, 1-Ph, Wall Mounting Fans / Ceiling Fans (with Electronic Regulator) / Man Cooler Fans etc on wall / Ceiling / Steel Structure including supply, fabricating and grouting of MS Frame / Hooks and other hardware etc.				
10.12	400 mm sweep heavy duty wall fan with string controlled regulator & rotation.	4	Nos.	6075	24300
10.13	PUBLIC ADDRESS SYSTEM				



ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&P/E&I WORKS/LOA-25/23-24 dated 23.02.2024					
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Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
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10.14	Design, engineering, manufacture, procurement of materials and bought out components, assembly at shop, inspection, testing at manufacturer's works, packing, delivery at site, Unloading, Handling, Storage, transportation within site, Assembly and Erection, testing, Commissioning & guarantee test for final acceptance of Public Address System of the following, including supply of commissioning spares, special tools and tackles, all required installation material & Testing and commissioning at site, documentation as per the enclosed Technical specification and other codes and standards attached or referred. Note: installation & Commissioning shall be executed by PA system OEM.				
10.19	FLP, WP (IP-65) 25W paging loud speaker for FCS suitable for Gas Gr. IIC	1	Nos.	78975	78975
10.22	Cat-06 LAN cable in 16mm / 25mm / 32mm PVC conduit etc	100	Mtrs.	147	14700
11.00	MISCELLANEOUS ITEMS				
11.11	Supply and Fixing of Caution boards / dangers boards written in ENGLISH & HINDI of the following voltages.				
11.14	Supply and Fixing of shock treatment chart written in English and Local language duly framed and approved by engineer-in-charge.	1	Nos	2430	2430
11.15	Supply and Fixing of Do & Don't chart as per Indian Electricity Rules in Aluminum frame with glass	1	Nos.	2430	2430
11.16	Supply and Fixing of S/S Single Line Diagram in Aluminum frame with glass.	1	Nos.	12150	12150
11.29	DRY TYPE LIGHTING TRANSFORMER				

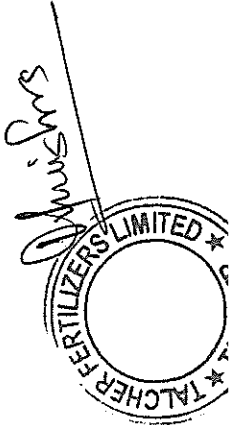
*Admission*



## ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

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11.30	Supply, storage at site, Transportation from store to site of installation, Handling, Installation, Testing and Commissioning of Dry Type Lighting Transformers including power and control cable termination, fabrication of base foundation, placing in fabrication of base foundation channel, position on MS base channel/flat, assembly of all accessories, supply & fixing of required no. & size of double compression nickelplated brass/rolled Al cable glands & suitable lugs (Aluminium/copper/Bi metallic), connection and termination of all power and control cables as per drawings/specification and direction of the lighting transformer manufacturer with all accessories, as specified in Technical Specification PC183-TS-0829				
11.33	11 KV PANEL : Supply, Handling, Installation, Testing and Commissioning of Incoming cum Outgoing 11KV 3Ph 50Hz 31.5kA 1250 A VCB Panel complete with metering and protection system free standing floor mounting cubical type as per SLD & Specification Sheet and Technical specification - Electrical System (Doc No. PC183-TS-0805) and SLD No. PC183-7411-0985E including transportation from owner's stores, dressing of foundation, placing in position on MS base channel/flat, assembly of all accessories supplied loose, all labour and material complete as per drawings/specification and direction of the manufacturer.	2	Nos.	1408000	2816000
12.00	<b>SECTION A : INSTRUMENT WORKS (SUPPLY)</b>				
12.11	CCTV for OSBL facilities and Surveillance Purpose of TFL Fertilizer complex : Design, Engineering & Supply				
12.14	1080p HD IP Indoor / outdoor PTZ Cameras with 1/3" or better progressive scan Exmor CMOS , 1920 (H) X 1080 (V); 2 MP or better, 30 X optical Zoom (4.3 mm -129 mm) , 4X Digital Zoom,	9	NOS	172530	1552770



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12.16	Supply of all erection and installation material like Industrial grade layer ethernet Switch . OFC accessories like 12/24 port LIU, splice trays, loaded adaptor and blank plates, UTP and optical patch cords, pigtails, FRP junction box, FRP cable trays, FRP canopy ,steel structure for installation , Octagonal pole ( 10/8/6 meter) power supply , media convertor, armoured power cables , communication cable , 12 core single mode steel armoured optical fibre cable etc. in all respect as per specifications and instructions of Engineer in charge. Its bidder responsibility to consider BOQ as per best engineering practice and complete in all respect to full fill tender specification mentioned elsewhere .	1	LOT	4299861	4299861
12.17	Complete EPBAX system, telephone network with telephone set , LAN Network and LAN system of Buildings of Fertiliser complex : Design ,Engineering, Supply & interface with other exchanges including main exchange				
13.12	Standard IP Phone with TFT LCD display with optional expansion module	67	NOS	38880	2604960
13.14	Telephone Cables 20 pair	5000	MTR	152	760000
14.00	SUPPLY of impulse piping inclusive of pipe fittings, flanges , gasket , nut & bolts, Tube & tube fittings, Instrument valves, condensate pot,Syphon , Gauge valve , Gauge saver , Snubber etc. as per attached Hook-Ups drawing.				
14.16	2563-LOCK NUT WITH PLUG , 1/2" OD,6000#, A182 F316	60	Nos	471	28260
14.19	2460-SEAMLESS TUBE , 1 1/2" x 0.065" THK, A182 F316	240	MTR	637	152880
14.22	2266-GLOBE VALVE , 1/2" NPTEx1/2" NPTF, 6000#, A182 F316	60	Nos	3912	234720
15.00	SUPPLY MATERIAL FOR STRUCTURAL WORK & FABRICATION FOR INSTRUMENT ITEMS LIKE TRAY SUPPORT, MOUNTING FRAMES FOR INSTRUMENTS, BASE FRAMES,CANOPY FOR JB , CANOPY FOR INSTRUMENT, ANY OTHER REQUIRED FOR SUPPORTING INSTRUMENT ITEMS ALONGWITH CANOPY				
15.11	50 x 50 x 6THK ANGLE MS	7000	kg	146	1022000



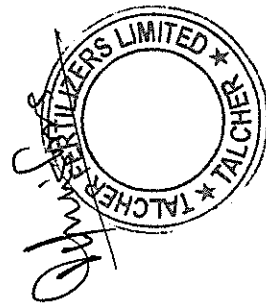
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15.12	100 x 50 x 6THK CHANNEL MS	22000	kg	146	3212000
15.13	FOUNDATION BOLTS, NUTS & WASHER 10MM X 150L MS	1200	Nos	333	399600
17.00	SUPPLY of FRP PERFORATED CABLE TRAY with cover and SS installation accessories including joining, cutting, bending, supporting etc. (Pls refer annex for details)				
17.16	FRP Inside 90 Deg Vertical Bend with Cover ( for 600mm ladder), 600 mm (Bending Radius 600mm)	28	Nos	4186	117208
17.17	FRP Outside 90 Deg Vertical Bend with Cover ( for 600mm ), 600 mm(Bending Radius 600mm)	28	Nos	4186	117208
17.18	FRP Horizontal 90 Deg Bend with cover ( for 600mm ), 600 mm(Bending Radius 600mm)	12	Nos	4186	50232
17.19	FRP Horizontal TEE ladder fitting with Cover ( for 600mm ), 600 mm(Bending Radius 600mm)	12	Nos	5622	67464
17.20	FRP Horizontal Cross fitting with Cover ( for 600mm ), 600 mm(Bending Radius 600mm)	12	Nos	8088	97056
17.21	Reducer 600 to 300.	12	Nos	5907	70884
18.00	Supply of instrumentation cable, Signal & Control, Power cable, OFC and T/c extension Cables data sheets/technical specification cover requirement for design, engineering, manufacturing, assembly, and supply, documentation, testing at manufacture's works, packing and shipping of the Signal & Control, Power cable and T/c extension Cables.				
18.14	08T x 1.5 SQMM	1000	Mtr	600	600000
18.20	1C x 10 SQMM, Tinned Cu conductors min 10 sq.mm, Green outer sheath	240	Mtr	665	159600
18.21	SUPPLY of AIR DISTRIBUTION POT SS304				
18.22	ADP - 10 TAKE OFFS	6	Nos.	37240	223440
19.13	Supply of instruments with all mounting accessories and license /software including Third Party Inspection				

*Advisors*  
TALCHER FERTILIZERS LIMITED

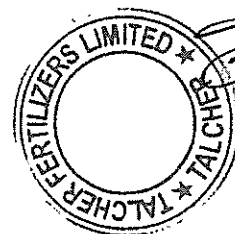
ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&P/E&I WORKS/LOA-25/23-24 dated 23.02.2024					
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19.14	Supply of Pressure Gauge (PG) as per the technical specifications attached in the Tender. . 0 - 10 kg/cm2	4	Nos	7898	31592
19.15	Supply of Pressure Gauge (PG) as per the technical specifications attached in the Tender. . 0 - 20 kg/cm2	4	Nos	9113	36452
19.25	FE-102,Flow Orifice , tappings 1set +1 set spare , flange Size ,rating & matl. 8" 300#RF, A105, plate material SS 316 ,2 Nos Gasket as Spare as per detailed Spec., 0-300 m3/hr	2	Nos	70470	140940
20.00	SECTION B 1 - INSTRUMENT WORKS (ERECTION/INSTALLATION OF INSTRUMENTS AS PER ATTACHED HOOK-UP DRAWING,INSTALLATION DRAWING. CABLE LAYING AND CABLE TRAY LAYING,INSTALLATION OF JUNCTION BOX , LOCAL CONTROL PANEL, SIGNAL TERMINATION GLANDING FOR ELECTROHYDRAULIC CONTROL VALVES ETC. , LOOP CHECKING , TESTING OF TRANSMITTERS / INSTRUMENTS ETC AS BELOW.				



ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&P/E&I WORKS/LOA-25/23-24 dated 23.02.2024

LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
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20.11	<p><b>BRIEF SCOPE OF INST WORK AND SERVICES BUT NOT TO LIMITED</b></p> <p>1) The BIDDER shall be responsible for the calibration &amp; testing, installation, glanding, termination, commissioning of the complete instrumentation and controls as defined in this Tender.</p> <p>In general, the scope of work and services of the BIDDER shall include the but not limited to;</p> <p>a). Taking delivery from the warehouse or from the places of storage OR BIDDER's allotted yard; transportation, handling, storage, unpacking, assorting physical checking and testing of instruments, panels / cabinets, instrument accessories cables, junction boxes, cable glands, cable trays ducts and erection materials etc.</p> <p>b). Scope includes: raising of store requisitions to OWNER/PDIL (if required) on prescribed formats for issue of free-issue-materials (FIMs) if any and maintaining record of the material issued at its site office. All works including Field fabrication / erection shall be done strictly in accordance with OWNER/PDIL specifications and standards.</p> <p>c). Scope includes: return of Leftover free issue material to OWNER/PDIL with suitable return notes.</p> <p>d). BIDDER shall supply all required tools, tacks, equipment, skilled &amp; unskilled manpower, managerial staff, consumables &amp; whatever else may be necessary for competing the job within the project schedule.</p> <p>e) If it is necessary to maintain the project schedule, BIDDER shall extend the working hours, working days &amp; whatever else may be necessary for maintaining the project schedule without any cost &amp; time implication to purchaser/end user.</p> <p>f). BIDDER will be responsible for the protection &amp; maintenance (both at BIDDER's stores and/or in the field) of instruments &amp; accessories issued to him. Supply of the materials necessary for the said protection and/or maintenance is in BIDDER's scope.</p> <p>g). BIDDER shall inform site incharge for any material damaged and/or missing during erection. If it is proved that said material is damaged and/or missing by the BIDDER, the cost of the same shall be charged to him.</p> <p>h). Transportation of unserviceable Instrument. Scrap as defined in this tender.</p> <p>i). All the instruments &amp; systems installed by the BIDDER as per contract shall be subject to inspection, checking, calibration &amp; testing to prove their operational fitness. Testing &amp; calibration shall be done by the BIDDER, all the required tools, tacks, calibration instruments, LAB, qualified skilled manpower for conducting these tests shall be provided by the BIDDER.</p>				






ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&P/E&I WORKS/LOA-25/23-24 dated 23.02.2024

LIST OF AHR ITEMS

SI.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
20.12	<p>2) LETTER WRITING : LETTER WRITING FOR ALPHA-NUMERIC TAGGING ( WITH SYNTHETIC ENAMEL). :- Letter writing of different sizes on Instrument Panels/misc. Instruments/ Equipments with synthetic enamel paints (Asian/ Jonson &amp; Nicolson/ Berger/ Nerolac Make) suitable for a temp. of 100 degree Celsius for writing of letters, figures etc. Job includes cleaning of surface on panels/instruments/misc. instruments etc. All complete with labour and materials as per drawings, specifications, Name plate schedule and directions of Engineer-in-Charge. (Supply of paints is BIDDER scope).</p> <p>3) PAINTING :- SPRAY PAINTING (PAINT IS IN BIDDER'S SCOPE) :- Cleaning of surface, rust, removing of foreign matter, rubbing down thoroughly with emery paper, wire brush, washing with degreasing solvent (white spirit) to remove grease etc. and preparation of surface for application of enamel paint by spray painting on instrumentation panels/instruments or any other metallic surface with one coat of ready mixed primer and two coats of approved quality/ apcolite/ Asian synthetic enamel paint including supply of paint suitable for a temp. of 100 degree C. All complete with labour and materials as per drawings, specifications and directions of Engineer-in-Charge.</p> <p>4) bidder has to make necessary arrangements for cable entry to control room all the civil, welding works, consumables, tools &amp; tackles, manpower etc shall be in bidders scope. no separate rate shall be allowed.</p>				
21.00	Erection/installation of electronic transmitter including unpacking, pre checking, calibration, termination, loop checking & commissioning. :- [Erection material shall be supplied by BIDDER]. As installation drawing.				

*Signature*  


ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&P/E&I WORKS/LOA-25/23-24 dated 23.02.2024					
LIST OF AHR ITEMS					
Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
21.11	The job includes the following: Shifting of new instrument with its accessories from store to work site. Installation of pressure transmitters (Drilling of blind flanges of Vessels if required shall also be in the scope of BIDDER) with its accessories. Glanding, ferruling and termination of the signal cable of the instruments wherever required, including aluminium tagging, supply of ferrule, lugs and aluminium tag is in BIDDER's scope of supply				
21.12	Fabrication, installation and grouting of small supports for instrument. Laying and erection of perforated tray / angle iron for neatly laying of impulse line of the instrument.				
21.13	All above jobs are inclusive of supply of all sorts of erection materials (including clamps, nuts bolts etc.) grouting material (cement, concrete, sand etc.) and consumables excepting the supply of Pipes, Pipe Fittings, Perforated Tray, Structural Material and Instruments. Hydraulic testing of manifold.				
21.14	Painting of all erected structural items (excluding impulse line) inclusive supply of paint (Paint make shall be Asian/Berger/Nerolac).				
21.15	Necessary skilled & unskilled manpower, supervision, tools & tackles. Transporting vehicle, supply of all sorts of consumables shall be in BIDDER's scope. The job shall be carried out as per specification and direction of Engineer-in-charge.				
21.32	Temperature transmitter Erection / installation (including glanding, and termination, erection of Station & supports Canopy etc)	10	Nos.	2430	24300
21.41	Rotameter/all other types of flow meters except Mag flow meter -Erection / installation (glanding, and termination, erection of Station & Supports Canopy etc if any)	5	Nos.	4253	21265
21.44	Glanding/Termination/ferruling of instrument /switches etc already erected by package vendor ( this covers skid mounted instruments/instruments already erected by vendor and provided at site )	10	Nos.	1458	14580

*Advisors*

TALCHER FERTILIZERS LIMITED

## ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
21.45	Loop Checking of Package items which are not erected by bidder (this covers skid mounted instruments/instruments already erected by vendor and provided at site )	10	Nos.	1215	12150
21.46	Erection / installation of pressure gauge on pipe line/ vessel/stand/ frame including small welding as per hookup diagram (preparation of gauge board if required). [as per attached hook-ups & installation drawing.]				
21.47	The job includes the following: Shifting of new instrument with its accessories from store to work site .Installation of pressure gauge / vacuum gauge / draught gauge with its accessories like snubber /gauge saver/ syphon etc.Fabrication and installation of manifold, syphon . Fabrication and installation of stanchions, canopy for instrument etc wherever necessary.				
21.48	All above jobs are inclusive of supply of all sorts of erection materials (including clamps, nut bolt etc.) and consumables excepting the supply of Pipes, Pipe Fittings, Structural Material, and Instruments, providing Holes in Blind flange for vessel related tags, Hydraulic testing of manifold, impulse pipe, DP test, PMI test Painting of all erected structural items (excluding impulse line) inclusive supply of paint (Paint make shall be Asian/Berger/Nerolac). The installation shall be as per typical installation diagram.				
21.49	Necessary skilled & unskilled manpower, supervision, tools & tackles, transporting vehicle, supply of all sorts of consumables shall be in BIDDER'S scope. The job shall be carried out as per specification and direction of Engineer-in-charge.				
21.50	All types Pressure gauge erection / installation (includes impulse piping and necessary support fabrication & installation)	15	NOS.	3038	45570
21.52	The job includes the following: Receiving & shifting of Temperature Instrument with Thermowell with its accessories from store/any other place inside OWNER campus & transport to work site.Fixing of thermowell with all accessories at any height. this includes impulse tubing, Glandring, ferruling,termination installation of Analyzers at any height after taking proper clearance.				



## ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
21.53	All above jobs are inclusive of supply of all erection materials, grouting material (cement, concrete, sand etc.) and consumables.				
21.54	Necessary skilled & unskilled manpower, supervision, & tackles, transporting vehicle, consumables including Teflon tape etc. will be in BIDDER'S scope.				
21.55	OWNER/PDI/Others will be providing Analyzer system , The job shall be carried out as per specification and direction of Engineer-in-charge.				
21.56	Dial type thermometers with thermowell erection / installation	15	NOS.	1823	27345
21.57	Dial type thermometers with thermowell calibration	15	NOS.	1823	27345
21.61	Erection / installation / fixing of online PH & Conductivity/dew point/silica/O2/CO Analyzers.				
21.62	The job includes the following: Receiving & shifting of PH & Conductivity Analyzer its accessories from store/any other place inside OWNER campus & transport to work site.Fixing of PH & Conductivity and other Analyzers with all accessories on at any height after taking proper clearance.				
21.63	All above jobs are inclusive of supply of all erection materials, grouting material (cement, concrete, sand etc.) and consumables.				
21.64	Necessary skilled & unskilled manpower, supervision, & tackles, transporting vehicle, consumables including Teflon tape etc. will be in BIDDER'S scope.				
21.65	OWNER/PDI/Others will provide gasket sheet, however all gasket cutting for completing the job will be in BIDDER'S scope. The job shall be carried out as per specification and direction of Engineer-in-charge.				
21.66	PH/Conductivity Analyzer Installation/erection ( Includes Tubing, Glandring ,Ferruling &Termination)	1	NOS.	30375	30375
21.67	Calibration of PH / Conductivity Analyzer System	1	NOS.	6075	6075
21.68	PH/Conductivity Analyzer functional check, loop checking etc	1	NOS.	6075	6075



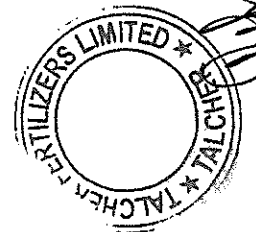
## ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
21.69	Dew Point Analyzer Installation/erection ( includes Tubing, Glanding ,Ferruling &Termination)	1	NOS.	30375	30375
21.70	Calibration of Dew Point Analyzer System	1	NOS.	6075	6075
21.71	Dew Point Analyzer functional check, loop checking etc	1	NOS.	6075	6075
21.72	O2 Analyzer Installation/erection ( includes Tubing, Glanding ,Ferruling &Termination)	1	NOS.	24300	24300
21.73	O2 Analyzer System	1	NOS.	24300	24300
21.74	O2 Analyzer functional check, loop checking etc	1	NOS.	6075	6075
21.75	CO Analyzer Installation/erection ( includes Tubing, Glanding ,Ferruling &Termination)	1	NOS.	24300	24300
21.76	CO Analyzer System	1	NOS.	24300	24300
21.77	CO Analyzer functional check, loop checking etc	1	NOS.	6075	6075
22.00	Erection of Control Valves /on-off/MOV valves shall be part of Mechanical Erection Tender and laying , galnding ,Termination of cables etc shall be bidders' scope;biddr to note that necessary tubing from ADP to control valve shall be in bidders scope, there shall not be any separte rate for tube works				
22.11	Glanding, ferruling and termination of the cable wherever required, including supply of ferrule and lugs is in BIDDER's scope of supply. Supplied lugs shall be Dowel make only (Applicable for any electrical device like limit switch, SOV,continuous position feedback etc. mounted on the control valve/MOV.)Fabrication, installation and grouting of support, if required. Grouting material (cement, concrete, sand etc.) shall be in BIDDER's scope. Erection supervision of Electrohydraulic control valves/on-off valves/MOV is also in BIDDER's scope. (the job also includes but not limited to tubing frm ADP to control valves including snecessary structural support)				



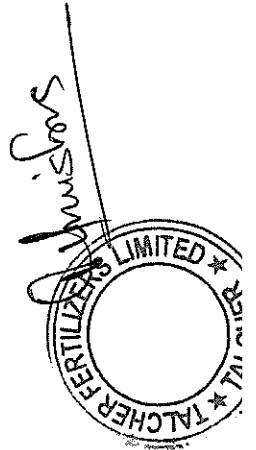
ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&P/E&I WORKS/LOA-25/23-24 dated 23.02.2024					
LIST OF AHR ITEMS					
SI.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
22.12	Hot bolting of the flanges after charging of line, if required. Leakage testing, stroke checking and calibration of the control valve/MOV will be in BIDDER's scope. Painting of all erected structural items with one coat of ready mixed primer and two coats of approved quality synthetic enamel paint inclusive supply of paint and primer. (Paint and Primer make shall be Asian/Berger/Nerolac).				
22.13	The installation shall be as per typical installation diagram as enclosed. Necessary skilled & unskilled manpower, supervision, tools & tackles, transporting vehicle, consumables including Teflon tape etc. required for the job will be in BIDDER's scope. The job shall be carried out as per specification, direction of Engineer-in-charge.				
22.14	Size of control valve: up to 2" Errection supervision Glanding ,ferruling termination of Signal cables ( includes continuous position f/band sov)	5	NOS.	26600	133000
22.15	Size of control valve : up to 2" functional check, loop checking ( includes continuous position f/band sov)	5	NOS.	6650	33250
22.16	Size of Control Valve : Up to 2" Calibration ( includes continuous position f/band sov)	5	NOS.	6650	33250
22.17	Size of Control Valve : Above 2" and up to 4" Errection supervision Glanding ,ferruling termination of Signal cables ( includes continuous position f/band sov)	5	NOS.	26600	133000
22.18	Size of Control Valve : Above 2" and up to 4" functional check, loop checking ( includes continuous position f/band sov)	5	NOS.	6650	33250
22.19	Size of Control Valve : Above 2" and up to 4" Calibration ( includes continuous position f/band sov)	5	NOS.	6650	33250
22.20	Size of Control Valve : Above 4" and up to 6" Errection supervision Glanding ,ferruling termination of Signal cables ( includes continuous position f/band sov)	5	NOS.	33250	166250
22.21	Size of Control Valve : Above 4" and up to 6" functional check, loop checking ( includes continuous position f/band sov)	5	NOS.	13300	66500
22.22	Size of Control Valve : Above 4" and up to 6" Calibration ( includes continuous position f/band sov)	5	NOS.	6650	33250
22.23	Size of Control Valve : Above 6" and up to 12" Errection supervision Glanding ,ferruling termination of Signal cables ( includes continuous position f/band sov)	5	NOS.	39900	199500



## ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

SI.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
22.24	Size of Control Valve : Above 6" and up to 12" functional check, loop checking ( includes continuous position f/band sov)	5	NOS.	19950	99750
22.25	Size of Control Valve : Above 6" and up to 12" Calibration ( includes continuous position f/band sov)	5	NOS.	6650	33250
22.26	Size of MOV :above 8" and upto 10: Erection supervision Glanding ,ferruling termination of Signal cables ( includes continuous position f/band sov)	5	NOS.	39900	199500
22.27	Size of MOV :above 8" and upto 10: functional check, loop checking ( includes continuous position f/band sov)	5	NOS.	19950	99750
22.28	Size of MOV :above 8" and upto 10: Calibration ( includes continuous position f/band sov)	5	NOS.	6650	33250
22.29	Size of MOV :above 10: Erection supervision Glanding ,ferruling termination of Signal cables ( includes continuous position f/band sov)	5	NOS.	46550	232750
22.30	Size of MOV :above 10: functional check, loop checking ( includes continuous position f/band sov)	5	NOS.	19950	99750
22.31	Size of MOV :above 10: Calibration ( includes continuous position f/band sov)	5	NOS.	6650	33250
22.32	Erection supervision of flow element (orifice assembly with flanged connection).				
22.33	Erection Is a Part of Mechanical Tender				
22.34	Orifice assembly with Flanged Connection up to 3"	5	NOS.	6650	33250
22.35	Orifice assembly with Flanged Connection above 3" to 12"	5	NOS.	19950	99750
22.36	The job includes the following: Receiving & shifting of LG & its accessories from store/any other place inside OWNER/PDIL campus & transport to work site.Fixing of LG with all accessories on vessel/standpipe at any height, taking proper clearance.				



## ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

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				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
22.37	Fabrication, installation and grouting of small supports for instrument if necessary. All above jobs are inclusive of supply of all sorts of erection materials (including clamps, nut bolt etc.) and consumables excepting the supply of Pipes, Pipe Fittings, Structural Material, and Instruments. providing Holes in Blind flange for vessel related tags, Hydraulic testing of manifold. impulse pipe, DP test, PMI test Painting of all erected structural items (excluding impulse line) inclusive supply of paint (Paint make shall be Asian/Berger/Nerolac). The installation shall be as per typical installation diagram.				
22.38	Necessary skilled & unskilled manpower, supervision, & tackles, transporting vehicle, consumables including Teflon tape etc. will be in BIDDER's scope.				
23.00	Erection and Installation of Inline flowmeter (all types) on pipe as per attached hook-ups & installation drawing.				
23.11	The job includes the following: Erection and installation. Glanding, ferruling and termination of the cable wherever required, including supply of ferrule and lugs is in BIDDER's scope of supply. Supplied lugs shall be Dowel make only Fabrication, installation and grouting of support, if required. Grouting material (cement, concrete, sand etc if required,) shall be in BIDDER's scope.				
23.12	Fabrication, installation and grouting of small supports for instrument if necessary. All above jobs are inclusive of supply of all sorts of erection materials (including clamps, nut bolt etc.) and consumables excepting the supply of Pipes, Pipe Fittings, Structural Material, and Instruments. providing Holes in Blind flange for vessel related tags, Hydraulic testing of manifold. impulse pipe, DP test, PMI test Painting of all erected structural items (excluding impulse line) inclusive supply of paint (Paint make shall be Asian/Berger/Nerolac). The installation shall be as per typical installation diagram.				
23.13	Necessary skilled & unskilled manpower, supervision, & tackles, transporting vehicle, consumables including Teflon tape etc. will be in BIDDER's scope.				





ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&P/E&I WORKS/LOA-25/23-24 dated 23.02.2024					
LIST OF AHR ITEMS					
Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
23.14	Inline Flow Meter all types (FT)- Erection / installation (glanding, and termination, erection of Statcion & Supports Canopy etc if any)	3	NOS.	19950	59850
23.15	Inline Flow Meter all types (FT)- Functional check, loop checking	3	NOS.	13300	39900
23.16	Inline Flow Meter all types (FT)- Calibration	3	NOS.	6650	19950
23.17	Calibration,Erection supervision of TSV/Safety/Vaccum Relief Valves/Self Actuating Valve				
24.00	Erection of TSV/Safety relief valves/Vaccum rlief valves/Self Actuating Valve shall be part of Mechanical Erection Tender				
24.11	The job includes the following: Shifting of new instrument with its accessories from store to work site Calibration of Pressure safety/Pressure regulating Valve as per the instructions of Engineer incharge , bidder to note that necessary washing connection tubing & steam tracing tubing shall be included in this quote. there is no seperate price for tubing works				
24.12	Necessary skilled & unskilled manpower, supervision, & tackles.PSV/PCV calibration bench, transporting vehicle, consumables including Teflon tape etc. will be in BIDDER's scope.				
24.13	PSV/TSV/RV/PCV- Calibration	20	NOS.	12150	243000
25.00	SECTION B-2 - INSTRUMENT WORKS (ERECTION OF CABLE DUCT , CABLE LAYING AND CABLE TRAY LAYING,CABLE DUCT LAYING, INSTALLATION OF JUNCTION BOX , LOCAL CONTROL PANEL , AIR DISTRIBUTION POT ETC. , AS PER INSTALLATION DRAWING)				
25.11	Cable laying in Cable tray of instrumentation cable inclusive of unpacking, Transportation from store, primary checking, testing, etc.				

*Signature*

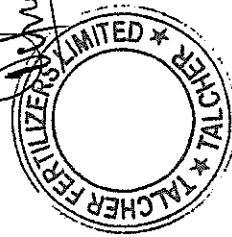




ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&P/E&I WORKS/LOA-25/23-24 dated 23.02.2024

LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
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25.20	Supply & laying of perforated FRP cable tray including joining, cutting, bending, supporting etc. Laying of MS/ GI / FRP Perforated cable trays / Cable duct (supply of tray, cable duct & structural steel in BIDDER's scope) - refer layout.				
25.21	The job includes the following: Shifting of tray /duct material from store to work site, fabrication and laying of perforated trays as per specifications & direction of Engineer in charge Supply of Perforated Trays & structural steel shall be in BIDDER's scope.				
25.22	All other material including grouting material (cement, concrete, sand etc.), clamps, bolts, nuts etc. required to complete the job shall be in BIDDER's scope.Fabrication, installation and grouting of support wherever required, cutting and modification of existing support if required inclusive of supply of erection consumable materials.				
25.23	Painting of all erected structural items with one coat of ready mixed primer and two coats of approved quality synthetic enamel paint inclusive of supply of paint and primer. (Paint and Primer make shall be Asian/Berger/Nerolac).Necessary skill & unskill manpower, supervision, tools & tackles, transporting vehicle, consumables will be in BIDDER's scope. The job shall be carried out as per specification and direction of Engineer-in-charge.( Sand removal and filling for cable laying shall be in bidders scope , there wont be any separate price for the same bidder to quote accordingly)				
25.29	Installation of junction box with canopy / local control panel/emergency push button etc including structural welding, clamping etc. (supply of junction box & local control panel with push buttons in OWNER/PDIL's scope)				

*Adhishas*  


## ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
25.30	The job includes the following: Shifting of new Junction Box/LCP with pushbuttons (for reset,start stop at grade level ) with its accessories from store to work site. Fabrication and installation of supports and installation of junction box.Screwing, plugging of unused entries of Junction Box. Fabrication, installation with canopy and grouting of support. Grouting material (cement, concrete, sand etc.) shall be in BIDDER's scope. Cutting and modification of existing support, if required.				
25.31	Glanding of multicore & branch cables, aluminium tagging of the glands, supply of aluminium tag is in BIDDER's scope of supply but cable gland shall be supplied free of cost by owner.				
25.32	Painting of all erected structural items with one coat of ready mixed primer and two coats of approved quality synthetic enamel paint inclusive supply of paint and primer. (Paint and Primer make shall be Asian/Berger/Nerolac).				
25.33	Necessary skilled & unskilled manpower, supervision, tools & tackles, transporting vehicle, consumables will be in BIDDER's scope.The job shall be carried out as per specification and direction of Engineer-in-charge.				
25.34	Bidder to note that Suitable earthing using 10MMSQ earthing cable as per drawings or direction from engineer incharge from panel to Earth Busbar shall be provided. there wont be any special rate for the same.				
25.37	Structural work & fabrication for instrument items like tray support, mounting frames for instruments, base frames, canopy for pb & transmitters, any other required for supporting instrument items. (Structural & pipe material is in BIDDER's scope)				
25.38	The job includes the following: Fabrication of yoke supports as per drawing for instruments of flow, pressure, level, temperature etc.as per installation drawing .Installation of the same on supports / wall / ground by welding / clamping / grouting as per requirement. Any other material if required shall be in BIDDER's scope.				

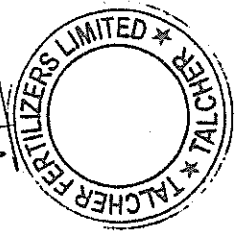


## ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

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25.39	Grouting material (cement, concrete, sand etc.) / welding material / clamping material shall be in BIDDER'S scope.Cutting and modification of existing support if required.				
25.40	Painting of all erected structural items with one coat of ready mixed primer and two coats of approved quality synthetic enamel paint inclusive supply of paint and primer. (Paint and Primer make shall be Asian/Berger/Nerolac).Necessary skilled & unskilled manpower, supervision, tools & tackles, transporting vehicle, consumables will be in BIDDER'S scope.The job shall be carried out as per specification and direction of Engineer-in-charge.bidder to note that there is no separate rate is allowed for stancion supports.				
25.43	FOUNDATION BOLTS, NUTS & WASHER 10MM X 150L MS	1200	Nos	133	159600
25.48	Erection/Installation of Air Distribution Port as per AP layout ( will be provided later) any structural supports ,skilled manpower and consumables, tools & tackles for compleiteon of Job shall be in bidders scope				

*Advisers*

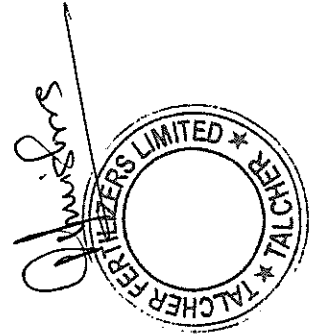


## ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

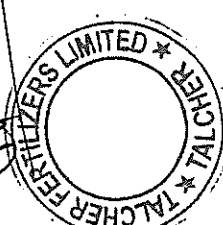
SI.NO	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
25.49	<p>The job includes the following:            Ferruling, Glanding, termination, Fabrication of supports, Installation of the same on supports / wall / ground by welding / clamping / grouting as per requirement. Any other material if required shall be in BIDDER'S scope.            Grouting material (cement, concrete, sand etc.) / welding material / clamping material shall be in BIDDER'S scope. Cutting and modification of existing support if required. Painting of all erected structural items with one coat of ready mixed primer and two coats of approved quality synthetic enamel paint inclusive supply of paint and primer. (Paint and Primer make shall be Asian/Berger/Nerolac). Necessary skilled &amp; unskilled manpower, supervision, tools &amp; tackles, transporting vehicle, consumables will be in BIDDER'S scope. The job shall be carried out as per specification and direction of Engineer-in-charge. Bidder to note that Suitable earthing using 10MMSQ earthing cable as per drawings or direction from engineer incharge from panel to Earth Busbar shall be provided. there wont be any special rate for the same.</p>				
25.50	AIR DISTRIBUTION PORT (AS PER ATTACHED DWNG)	5	Nos	6075	30375
26.00	Erection/Installation of local control panel/ DCS/PLC panels				

*Administrators*



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Sl.No	Description of Work/ Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
26.11	<p>The job includes the following:                      Glanding , termination, Fabrication of supports, Installation of the same on supports / wall / ground by welding / clamping / grouting as per requirement. Any other material if required shall be in BIDDER'S scope.                      Grouting material (cement, concrete, sand etc.) / welding material / clamping material shall be in BIDDER'S scope. Cutting and modification of existing support if required. Painting of all erected structural items with one coat of ready mixed primer and two coats of approved quality synthetic enamel paint inclusive supply of paint and primer. (Paint and Primer make shall be Asian/Berger/Nerolac). Necessary skilled &amp; unskilled manpower, supervision, tools &amp; tackles, transporting vehicle, consumables will be in BIDDER'S scope. The job shall be carried out as per specification and direction of Engineer-in-charge. ( Sand removal and filling for cable laying shall be in bidders scope , there wont be any separate price for the same bidder to quote accordingly) Bidder to note that Suitable earthing using 10MMSQ eathing cable as per drawings or direction form engineer incharge from panel to Earth Busbar shall be provided, there wont be any special rate for the same.</p>				

*Alvins*



## ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
27.00	Erection/installation & commissioning of Telephone network The job includes the following: Glanding , termination,Fabrication of supports,Installation of the same on supports / wall / ground by welding / clamping / grouting as per requirement. Any other material if required shall be in BIDDER's scope. Grouting material (cement, concrete, sand etc.) / welding material / clamping material shall be in BIDDER's scope.Cutting and modification of existing support if required.Painting of all erected structural items with one coat of ready mixed primer and two coats of approved quality synthetic enamel paint inclusive supply of paint and primer. (Paint and Primer make shall be Asian/Berger/Nerolac).Necessary skilled & unskilled manpower, supervision,Machines, tools & tackles, transporting vehicle, consumables will be in BIDDER's scope.The job shall be carried out as per specification and direction of Engineer-in-charge.( Sand removal and filling for cable laying shall be in bidders scope , there wont be any separte price for the same bidder to quote accodingly)				
27.11	SOR for Erection/installion-Erection/installation of CCTV system as Section-A INSTRUMENT WORKS (SUPPLY ) - CCTV for OSBL facilities and Surveillance Purpose of TFL Fertilizer complex : Design , Engineering & Supply				
27.12	Installation of Telephone system as Per detailed Specification including JB/Terminal Box( no special rate for terminal box)	8	Nos	24300	194400

*Administrators*





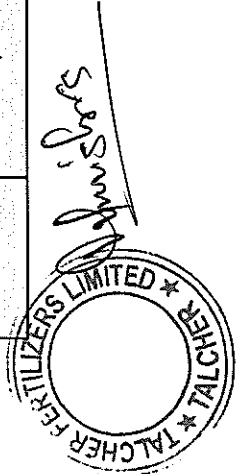
ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&P/E&I WORKS/LOA-25/23-24 dated 23.02.2024					
LIST OF AHR ITEMS					
Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
29.00	<p>Erection/installation &amp; commissioning CCTV System</p> <p>The job includes the following:                      This Job includes installation of GPS system in Urea bagging unit with associated electronics, softwares and hooking up the same with the urea network.</p> <p>Gianding , termination, Fabrication of supports, installation of the same on supports / wall / ground by welding / clamping / grouting as per requirement.</p> <p>Any other material if required shall be in BIDDER's scope.</p> <p>Grouting material (cement, concrete, sand etc.) / welding material / clamping material shall be in BIDDER's scope. Cutting and modification of existing support if required. Painting of all erected structural items with one coat of ready mixed primer and two coats of approved quality synthetic enamel paint inclusive supply of paint and primer. (Paint and Primer make shall be Asian/Berger/Nerolac). Necessary skilled &amp; unskilled manpower, supervision, Machines, tools &amp; tackles, transporting vehicle, consumables will be in BIDDER's scope. The job shall be carried out as per specification and direction of Engineer-in-charge.</p>				



## ANNEXURE 'D' TO DLOA No.TFL/TALCHER/C&amp;P/E&amp;I WORKS/LOA-25/23-24 dated 23.02.2024

## LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
29.11	Erection/installation commissioning of CCTV system as Section-A INSTRUMENT WORKS (SUPPLY) - CCTV Complete system for whole fertiliser complex as per attached specification - Bidder shall engineering , supply, install, test and commissioning the ONVIF-IP based Closed circuit television (CCTV) Surveillance System,Complete CCTV System with all accessories like Cameras, power supply ,JB , LIU, media convertor, OFC convertor, 22" LED workstation , server, VMS ,NAS for 365 days storage , one LED 72" ceiling mounted with 100 windows , software , license , surveillance software , analytical software , all cables, all mounting accessories , poles , civil works etc. (A) at the TFL fertilizer complex . The purpose of the CCTV System is to monitor the facility operations & security surveillance from control room / Security room & Admin building to keep eye on facility covering Main gate entry /exit ,material gate exit / entry and other area of importance to the daily running of the complex by installing cameras to monitor resulting to enhancement in the Operational & Safety needs. It is intended to install CCTV system to track the Material movement, Recognition of persons and objects including vehicles through high quality images in and outside the plant by Security. The recording of the scene can be used in investigation, recreating the scene and establishing the truth.	1	Nos	1579500	1579500
30.00	Supply , Erection/Installation & commissioning MISCELLANEOUS The job includes the following: Supply, erection/installation & commissioning , interface, all residual engineering to complete the Instrumentation works as per scope shall be in Bidder's scope				

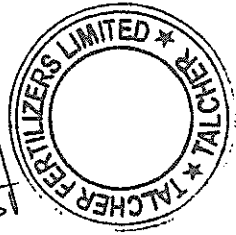


ANNEXURE 'D' TO DLOA No. TFL/TALCHER/C&P/E&I WORKS/LOA-25/23-24 dated 23.02.2024

LIST OF AHR ITEMS

Sl.No	Description of Work / Item(s)	QUANTITY	UNITS	RATE AND AMOUNT IN INDIAN RUPEES	
				UNIT PRICE	TOTAL AMOUNT EXCLUDING GST
30.11	Supply, erection/installation & commissioning , interface, all residual engineering to complete the Instrumentation works as per scope shall be in Bidder's scope	1	LOT	900000	900000

*Administrative*



**ANNEXURE-E**

**PRE-SIGNED INTEGRITY PACT  
AGREEMENT**



## INTEGRITY PACT

### INTRODUCTION:

TFL as one of its endeavour to maintain and foster most ethical and corruption free business environment, have decided to adopt the Integrity Pact, a tool developed by the Transparency International, to ensure that all activities and transactions between the Company (TFL) and its Counterparties (Bidders, Contractors, Vendors, Suppliers, Service Providers/Consultants etc.) are handled in a fair and transparent manner, completely free of corruption.

Considering the above, the details mentioned at attached Annexure-1 are applicable as stated in Instruction to Bidders of Bid Document in addition to the existing stipulation regarding Corrupt and Fraudulent Practices.

The attached copy of the Integrity Pact at Annexure - 2 shall be included in the Bid submitted by the bidder (to be executed by the bidder for all tenders of value Rs. 1 (One) crore and above). In case a bidder does not sign the Integrity Pact, his bid shall be liable for rejection.

## ANNEXURE-1

Bidder is required to sign the Integrity Pact with TFL as per format & terms and conditions enclosed with tender. In case a bidder does not sign the Integrity Pact, his bid shall be liable for rejection.


**I COMMITMENTS AND OBLIGATIONS OF THE "COUNTERPARTY"**

- a) The Counterparty, directly or indirectly (through agent, consultant, advisor, etc.), shall not pay any bribe/ influence or give undue/ unlawful benefit to anyone to gain undue advantage in dealing with TFL.
- b) The Counterparty will not engage in collusion of any kind including price fixation etc. with other Counterparts.
- c) The counterparty will not pass TFL's confidential information to any third party unless specifically authorized by TFL in writing.
- d) The Counterparties shall promote and observe best ethical practices within their respective organizations.
- e) The Counterparty shall inform the Independent External Monitor.
  - i) If it received any demand, directly or indirectly, for a bribe/ favour or any illegal gratification/ payment / benefit;
  - ii) If it comes to know of any unethical or illegal payment / benefit;
  - iii) If it makes any payment to any TFL associate.
- f) The Counterparty shall not make any false or misleading allegations against TFL or its associates.

**II VIOLATIONS & CONSEQUENCES:**

- a) If a Counterparty commits a violation of its Commitments and Obligations under the Integrity Pact Programme during bidding process, their entire Earnest Money Deposit/ Bid Security, would be forfeited and in addition, action shall be taken as per "Procedure for action in case Corrupt /Fraudulent/ Collusive/Coercive Practices"
- b) In case of violation of the Integrity pact by Counterparty after award of the Contract, TFL shall be entitled to terminate the Contract. Further, TFL would forfeit the security deposits/ Contract Performance Bank Guarantee and in addition, action shall be taken as per "Procedure for action in case Corrupt /Fraudulent/ Collusive/Coercive Practices"

*Amish*



**INDEPENDENT EXTERNAL MONITORS (IEMS)**

Presently the panel consisting of the following Independent External Monitors (IEMs) have been appointed by TFL, in terms of Integrity Pact (IP) which forms part of TFL Tenders / Contracts.

- i) Shri Sanjeev Prasad Narain Singh (Email ID: [spns108@gmail.com](mailto:spns108@gmail.com))
- ii) Shri Anil Kumar Sharma (Email ID: [aksharma1512@gmail.com](mailto:aksharma1512@gmail.com))

This panel is authorised to examine / consider all references made to it under this tender/ contract. "The bidder(s), in case of any dispute(s) / complaint(s) pertaining to this tender falling under provisions of Integrity Pact may raise the same either directly with the IEMs on the panel viz Shri Sanjeev Prasad Narain Singh (Email ID: [spns108@gmail.com](mailto:spns108@gmail.com)) & Shri Anil Kumar Sharma (Email ID: [aksharma1512@gmail.com](mailto:aksharma1512@gmail.com)) or with CC to them through their Nodal Officer - Sh. Vivek Mishra, Sr. Mgr. (C&P) - Email: [vivekmishra@tflonline.co.in](mailto:vivekmishra@tflonline.co.in), Address: Talcher Fertilizers Limited, Administrative Building, Post - Vikrampur, Dist. Angul, Odisha - 759106. On receipt of such complaints/representations, Nodal Officer shall coordinate with IEM Panel and TFL authorities concerned for their disposal as per extant guidelines."

*Vivek Mishra*



**INTEGRITY PACT**

(To be executed on plain paper)

Between Talcher Fertilizers Limited (TFL) [here-in-after referred to as "Principal"].

**AND**\_\_\_\_\_ (here-in-after referred to as "The Bidder/  
Contractor").

(Principal and the Bidder / Contractor are here-in-after are referred to individually as "Party" or collectively as "Parties").

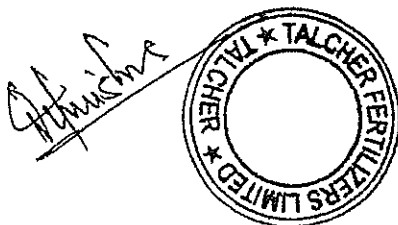
**PREAMBLE**

The Principal intends to award under laid down organizational procedures, contract/s for \_\_\_\_\_. The Principal values full compliance with all relevant laws of land rules, regulations, and economic use of resources and of fairness /transparency in its relations with its Bidder (s) and/or Contractor (s).

In order to achieve these goals, the Principal will appoint Independent External Monitors (IEMs) who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

**Section 1 – Commitments of the Principal**

1. The Principal commits itself to take all measures necessary to prevent corruption and to observe the following Principles:-
  - i) No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or for a third person, any material or immaterial benefit which the person is not legally entitled to.
  - ii) The Principal will, during the tender process treat all Bidder(s) with equity and reasons. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.







brokers or any other intermediaries in connection with the award of the contract.

- vi) Bidder(s) / Contractor(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision in the matter.
2. The Bidder(s)/ Contractor(s) shall not instigate third person to commit offences outlined above or be an accessory to such offences.

**Section 3 – Disqualification from tender process and exclusion from future contracts**

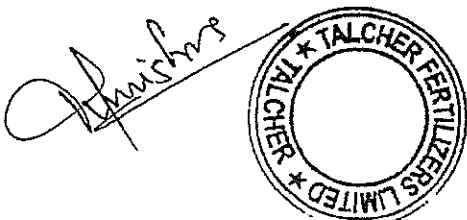
If the Bidder (s) / Contractor (s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put their reliability or credibility in question, the Principal is entitled to disqualify the Bidder (s) / Contractor (s) from the tender process or take action as per provisions of "Procedure for action in case Corrupt /Fraudulent/ Collusive/Coercive Practices".

**Section 4 – Compensation for Damages**

1. If the Principal has disqualified the Bidder (s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit / Bid Security.
2. If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equal to the Contract Value or the amount equivalent to Performance Bank Guarantee.

**Section 5 – Previous transgression**

1. The Bidder declares that no previous transgression occurred in the last three years, with any other Company in any country conforming to the anti-corruption approach or with any Public Sector Enterprise in India that could justify his exclusion from the tender process.
2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or actions can be taken as per provisions of "Procedure for action in case Corrupt /Fraudulent/ Collusive/Coercive Practices"



**Section 6 – Equal treatment to all Bidders / Contractors / Subcontractors**

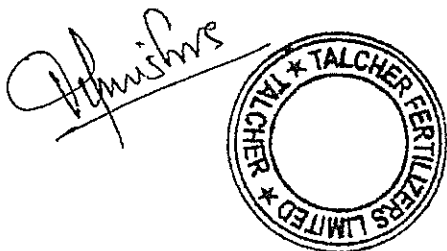
1. In case of sub-contracting, the Principal contractor shall take the responsibility of the adoption of IP by the sub-contractor. It is to be ensured by him that all sub-contractors also sign the IP.
2. The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.
3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

**Section 7 – Criminal charges against violating Bidder (s) / Contractor (s) / Sub-contractor (s)**

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

**Section 8 –Independent External Monitor / Monitors**

1. The Principal appoints competent and credible Independent External Monitor for this Pact after approval by Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
2. The Monitor is not subject to instructions by the representatives of the parties and performs his/her functions neutrally and independently. The Monitor would have access to all documents / records pertaining to the contract for which a complaint or issue is raised before them, as and when warranted. However, the documents / records / information having National Security implications and those documents which have been classified as Secret/Top Secret are not to be disclosed. It will be obligatory for him/her to treat the information and documents of the Bidders / Contractors as confidential. He / she reports to MD, TFL.
3. The Bidder (s)/ Contractor (s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his/her request and demonstration of a valid interest, unrestricted and unconditional access to their project documentation. The same is applicable to Sub-contractors.
4. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an



impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

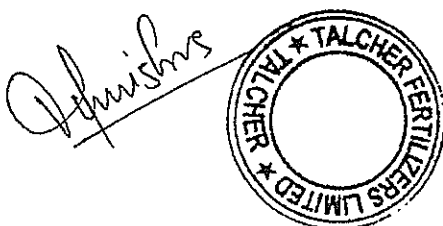
5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he/she will so inform the Management of the Principal and request the Management to discontinue or to take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
6. The Monitor will submit a written report to MD, TFL within 30 days from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.
7. If the Monitor has reported to MD, TFL, a substantiated suspicion of an offence under relevant IPC/PC Act, and MD, TFL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, then, only in case of very serious issue having a specific verifiable Vigilance angle, the matter should be reported directly to the Central Vigilance Commission.
8. The word 'Monitor' would include both singular and plural.
9. In case of any complaints referred under IP Program, the role of IEMs is advisory and would not be legally binding and it is restricted to resolving the issues raised by an intending bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some bidder.
10. After award of contract, the IEMs shall look into any issue relating to execution of contract, if specifically raised before them. As an illustrative example, if a contractor who has been awarded the contract, during the execution of contract, raises issue of delayed payment etc. before the IEMs, the same shall be examined by the panel of IEMs.

#### Section 9 – Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded. Any violation to the same would entail disqualification of the bidders and exclusion from future business dealing.

If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by MD, TFL.

#### Section 10 – Miscellaneous provisions



1. This agreement is subject to Indian Law. Place of performance and exclusive jurisdiction is the Registered Office of the Principal, i.e. New Delhi.
2. Changes and supplements as well as termination notices, if any, need to be made in writing. Side agreements have not been made.
3. If the Contractor/Bidder is a Joint Venture or a partnership concern or a consortium, this agreement must be signed by all partners or consortium members.
4. Should one or several of the provisions of this agreement turn out to be invalid, the remainder of this agreement shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions in such a case.
5. Issues like warranty / guarantee, etc. shall be outside the purview of IEMs.
6. In the event of any contradiction between the Integrity Pact and its Annexure, the Clause in Integrity Pact will prevail.



Vivek Mishra  
Senior Manager (C&P)  
Talcher Fertilizers Limited  
Talcher, Odisha

(For & on Behalf of Principal)


(Office Seal)

(For & on Behalf of Bidder/Contractor)

(Office Seal)

Place -----  
Date -----

Witness 1:  
(Sign, Name & Address)  
[FOR PRINCIPAL]

  
B. SUNIL PATRO, DY. MGR.  
TFL, TALCHER, ANGUL, ORISSA

Witness 2:  
(Sign, Name & Address)  
[FOR BIDDER / CONTRACTOR]

.....  
.....  
.....

## **ANNEXURE-F**

### **BANK DETAILS OF M/S. SOPAN O&M COMPANY LIMITED, PUNE**

1210



## SOPAN O&M COMPANY PVT. LTD.

**Head Office:**

201 A, A.G. Trade Center, NDA-Pashan Road,  
Ramnagar Colony, Bavdhan, Pune - 411021,  
Maharashtra, India. Tel.: +91(0)20 67704141.

REF: SOP/MKTG/TFL/E&I/1872

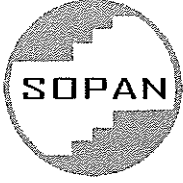
**F-13**

**E-Banking Mandate Form**

1. Vendor/customer Name: SOPAN O & M Co. Pvt. Ltd.
2. Vendor/customer Code:
3. Vendor /customer Address: 201A, A. G. Trade Center, NDA - Pashan Road,  
Ramnagar Colony, Bavdhan, Pune – 411021
4. Vendor/customer e-mail id: [accountspune@sopan.co.in](mailto:accountspune@sopan.co.in)
5. Particulars of bank account
  - a) Name of Bank: HDFC BANK LTD.
  - b) Name of branch: Bawdhan, Pune
  - c) Branch code: HDFC0002690
  - d) Address: GROUND FLOOR, PATIL PALACE, S.NO.-2-1,  
NDA-PASHAN ROAD, BAVDH AN,  
PUNE MAHARASHTRA 411021
  - e) Telephone number: +91 20 6160 6161
  - f) Type of account (current/saving etc.) : Current
  - g) Account Number: 05032320000326
  - h) RTGS IFSC code of the bank branch: HDFC0002690
  - i) NEFT IFSC code of the bank branch: HDFC0002690
  - j) 9 digit MICR code: 110240021

I/We hereby authorize TFL to release any amount due to me/us in the bank account as mentioned above. I/We hereby declare that the particulars given above are correct and complete. If the transaction is delayed or lost because of incomplete or incorrect information, we would not hold the TFL responsible.

1209



## SOPAN O&M COMPANY PVT. LTD.

**Head Office:**

201 A, A.G. Trade Center, NDA-Pashan Road,  
Ramnagar Colony, Bavdhan, Pune - 411021,  
Maharashtra, India. Tel.: +91(0)20 67704141.

REF: SOP/MKTG/TFL/E&I/1872

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(Signature of vendor/customer)

### BANK CERTIFICATE

We certify that SOPAN O&M Co. Pvt. Ltd. has an Account no. 05032320000326 with us and we confirm that the details given above are correct as per our records.

Bank stamp:

Date:17/04/2023



Authorized Officer

(Signature of authorized officer of bank)