



TAMIL NADU GENERATION AND DISTRIBUTION CORPORATION LIMITED

**TENDER SPECIFICATION FOR
ENGAGING A CONTRACTOR FOR
WORK CONTRACT**

TANGEDCO - MTPS-I (4 x 210MW) & MTPS- II (1 x 600MW) – Operation and Maintenance of Coal Handling Plants Complete System , Operation & Maintenance of Locomotives, Railway siding, Wagon Tippers and Bulldozers including supply of all spares (excluding OEM Spares, Hydraulic Spares, Iron& Steel, Gear Box Spares etc., and certain works as listed in Annexures- I & II) , consumables, T&Ps and PPE etc., to meet out the stations' generation requirements.

(THROUGH NIC PLATFORM)

SPECIFICATION NO: CE/MTPS-I/ SE/M.II/OT.No.62/2022-23
(OPEN TENDER)

OFFICE OF THE CHIEF ENGINEER/MTPS-I
METTURDAM-636406

Service provider: The Tamil Nadu Government e-Procurement System
Website for online bid submission: <http://tntenders.gov.in.nicgep/app>

INSTRUCTIONS TO BIDDERS

FOR SUBMISSION OF ONLINE BIDS

INSTRUCTION TO BIDDERS FOR SUBMISSION OF ONLINE BIDS IN E-TENDER

The bidding under this contract is electronic bid submission through website https://tntenders.gov.in/nicgep/app_page only. Detailed guidelines for viewing bids and submission of online bids are given on the website. Any citizens or prospective bidders can logon to this website and view the invitation for Bids and can view the details of works for which bids are invited.

1.0 REGISTRATION:

1.1 The prospective bidders can submit bids online, however, the bidders are required to have enrolment/registration in the website by clicking on the link "Online bidder enrolment" which is free of charge.

1.2 As part of the enrolment process, the bidders are required to choose a unique username and assign a password for their accounts.

1.3 Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These details would be used for any communication from the e-Portal.

1.4 Upon enrolment, the bidders are required to **register their valid Digital Signature Certificate (DSC)** (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.

1.5 Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.

1.6 Bidder then can login to the site through the secured login by entering their user ID / password and the password of the DSC / e-Token.

1.7 **Correspondence details :** For queries related to registration and online bidding (NIC):

e-mail : support.etender@nic.in

Contact No. : 044 – 24466495

24902580 Extn:332

24917850

2.0 SYSTEM REQUIREMENT:

i. Operating System: Windows XP-SP3 & above

ii. Internet browser : IE7 and above.

Signing type : Digital Signature (class III)

JRE 7 update 79 (referred file-Windows X-86 Offline) and above to be downloaded and installed in the system.

To enable AKK active X controls and disable 'use pop up blocker' under Tools – Internet Options – custom level. For detailed guidance about browser and Jaa configuration the bidders are advised to go through the video guide available under "Bidders Manual Kit" at

<https://www.tntenders.gov.in/nicgep/app?page=BiddersManualKit&service=page>

3.0 SEARCHING FOR TENDER DOCUMENTS

3.0 There are various search options built in the Website, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc.

3.1 Once the bidders have selected the tenders they are interested in, they may download the required documents/tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the Tamil Nadu Govt. e-Procurement Portal, to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

3.3 The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

4.0 PREPARATION OF BIDS

4.1 Bidder should take into account any corrigendum published on the tender document before submitting their bids.

4.2 Bidders are requested to go through the NIT and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

4.3 Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document. Since the uploaded documents shall be downloaded for evaluation of bid, bidders are advised to upload clear scanned copies. One hardcopy of the electronically submitted bid documents except the price schedule shall have to be submitted upon intimation by TANGEDCO after opening of the e-tender

4.4 To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My space or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

4.5 The completed bid comprising scanned copy of the proof for the payment of EMD or exemption from payment of EMD and necessary technical and commercial documents should be uploaded on the website along with signed and scanned copies of requisite certificates as are mentioned in the different sections in the tender document.

5.0 ELECTRONIC SUBMISSION OF BIDS:

The bidder shall submit online the requirements under qualification criteria and Technical Documents required and Price Schedule/BOQ. All the documents are required to be signed digitally by the bidder. After electronic online bid submission, the system generates a unique bid reference number which is time stamped. This shall be treated as acknowledgement of bid submission.

6.0 PROCEDURE FOR SUBMISSION OF BIDS:

6.1 Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

6.2 The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.

6.3 Bidder has to select the payment option as "offline" to pay the EMD amount through RTGS/NEFT or by way of account transfer as applicable and enter details of the instrument.

6.4 The scanned copy of payment made through RTGS/NEFT or by way of account transfer towards EMD amount has to be uploaded. TANGEDCO shall not be responsible for any delay in uploading the proof of EMD by any mode.

6.5 A BOQ format for the price bid has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the BOQ format provided and no other format is acceptable. Bidders are required to download the BOQ file, open it and complete the coloured (Unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the file name. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

6.6 The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

6.7 All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers' public keys.

6.8 The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

6.9 Upon the successful and timely submission of bids, (i.e. after clicking "Freeze Bid submission" in the portal) the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

6.10 Department or Service Provider is not responsible for any failure such as a bad internet connection or power failure outside of their control. The bidder is responsible to ensure they have sufficient time to submit an electronic bid prior to closing date and time including the payment of any fees including the Bid security and getting e-receipt. In case of a failure in the system within the control of the service provider that may affect a bidding process, the contracting authority on his sole discretion will postpone the closing time at least 24 hours from the time of system recovery to allow bidders sufficient time to submit their bids.

6.11 The TANGEDCO may, at its discretion, extend the deadline for the submission of bids by amending the bidding document, in which case all rights and obligations of TANGEDCO and bidders subject to the previous deadline shall thereafter be subject to the deadline extended.

7.0 LATE BIDS: The Electronic bidding system would not allow any late submission of bids after due date and time as per server time.

8.0 MODIFICATION AND WITHDRAWAL OF BIDS:

8.1 Bidders may modify their bids online before the deadline for submission of bids.

8.2 In case a bidder intends to modify his bid online before the deadline, the bidder need not make any additional payment towards the cost of bid processing. For bid modification and consequential re-submission, the bidder is not required to withdraw his bid submitted earlier. Modification and consequential re-submission of bids is allowed any number of times. The last modified bid submitted by the bidder within the bid submission time shall be considered as the bid. For this purpose, modification/withdrawal by other means will not be accepted. The bidder may withdraw his bid by uploading his request before the deadline for submission of bids, however, if the bid is withdrawn, the re-submission of the bid is not allowed.

8.3 No bid may be modified after the deadline for submission of Bids.

9.0 ASSISTANCE TO BIDDERS:

9.1 Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.

9.2 Any queries relating to the process of online bid submission or queries in general may be directed to the 24x7 Central Public Procurement Portal Helpdesk.

It may be noted by the bidders that NIC is only a service provider for conducting the online bidding process against this tender and shall not be a party to any contract between TANGEDCO and the successful bidder(s) subsequent to the bidding process.

Sd/XXX
SE/M-II/MTPS-II

Sd/XXX
SE/M-II/MTPS-I

TAMIL NADU GENERATION AND DISTRIBUTION CORPORATION LIMITED
METTUR THERMAL POWER STATION – I
ABSTRACT OF TENDER SPECIFICATION

01.	Tender Specification No.	CE/MTPS-I/SE/M.II/OT.No. 62 /2022-23
02.	Name of the work	E-tender for TANGEDCO – MTPS-I (4 x 210MW) & MTPS-II (1 x 600MW) – Operation and Maintenance of Coal Handling Plants Complete System , Operation & Maintenance of Locomotives, Railway siding, Wagon Tipplers and Bulldozers including supply of all spares (excluding OEM Spares, Hydraulic Spares, Iron& Steel, Gear Box Spares etc., and certain works as listed in Annexures- I & II) , consumables, T&Ps and PPE etc., to meet out the stations' generation requirements
03.	Quantity	4 Items (Four Items)
04.	Type & Mode of Tender	Open Tender (Two Part) System through e – tender (Online submission of Techno-Commercial cum Price Bid, through Website: https://www.tntenders.gov.in/nicgep/app of NIC.)
05.	a) Earnest Money Deposit (EMD)	Rs.3,99,00,000/- (Rupees Three Crores and Ninety Nine Lakhs only) to the Superintending Engineer / Purchase & Administration / MTPS-I's Account or EMD in the form of Bank Guarantee with one year Validity Account No : 550518752 Name of Bank : INDIAN BANK, MetturDam-636406 IFSC Code : IDIB000M034 The EMD amount shall be remitted through NEFT/RTGS Mode/Account Transfer and the timings for having paid the EMD in UTR receipt, shall be before the closing time of tender. EMD amount paid after tender closing time will be summarily rejected.
	b) Permanent EMD	As per Section –I / Sl. No.07
	c) EMD Exemption Categories	The exempted categories of tenderers as given in Section-I, S.I No.9.
06.	URL for online bid submission for e-Tender	https://tntenders.gov.in/nicgep/app
07.	Date of Closing of online e-tender for submission of Techno Commercial Bid & Price Bid	On 29.08.2022 at 14.00Hrs.
08.	Pre Bid Meeting	On 5.08.2022 @ 10.00 Hrs. @ O/o. SE/M.II/MTPS-I

09.	Date and time of opening of Tender electronically	On 30.08.2022 at 14.30 Hrs. (If the due date happens to be a declared holiday, the tenders will be opened on the next working day.)	
10	Specification at website	The tender specification will be placed at the following web sites. The prospective bidders may	
		TANGE	www.tangedco.gov.in
		DCO	www.tenders.tn.gov.in
		NIC	https://tntenders.gov.in/nicgep/app
11.	Documents to be uploaded by the tenderers during e- submission	PART-I 1. Scanned copy of e-receipt for EMD, proof of PEMD, GST Regn. & GSTIN etc., 2. Proof for BQR. 3. Scanned copy of Schedules, Annexures and other documents whichever is applicable. PART-II Prices should be quoted online in Schedule 'A' only.	
12.	Place at which tenders will be opened	Office of the Superintending Engineer/M.II/Mettur Thermal Power Station-I, Mettur Dam-636406. Through online.	
13.	Clarification to be sought from	The Superintending Engineer/M.II, Mettur Thermal Power Station – I, Mettur Dam-636406. Any clarification in the tender shall be sought before 48Hrs. of due date and time through email. Email id : sem2mtps@tnebnet.org Contact No : 04298-240393.	

Remarks: If the due date for opening the tenders happens to be a declared holiday, then the tender will be opened on the next working day, for which no prior intimation will be given.

Encl : 1.Sections I to VII
2.Schedules A to H
3.Annexures I & VI

Sd /XXX
CE/ MTPS-II

Sd/XXX
CE/MTPS-I

INDEX**SPECIFICATION NO: CE/MTPS-I/SE/M.II/OT.No.62/2022-23****TENDER**

<u>DESCRIPTION</u>		
SECTION - I	:	EARNEST MONEY DEPOSIT
SECTION - II	:	BID QUALIFICATION REQUIREMENTS
SECTION-III	:	REJECTION OF TENDERS
SECTION - IV	:	INSTRUCTIONS TO THE TENDERERS
SECTION - V	:	COMMERCIAL TERMS AND CONDITIONS
SECTION – VI	:	TECHINCAL SPECIFICATION
SECTION –VII	:	GENERAL CONDITIONS OF CONTRACT
Schedule A	:	SCHEDULE OF PRICES
Schedule B	:	DEVIATION FROM TECHNICAL SPECN
Schedule C	:	DEVIATION FROM COMMERCIAL TERMS
Schedule D	:	STATEMENT OF SUPPLY ORDERS EXECUTED/ UNDER EXECUTION DURING THE PASTTHREE YEARS AS ON THE DATE OF TENDER
Schedule E	:	DECLARATION FORM
Schedule F	:	UNDER TAKING FOR PAYMENT OF DUES TO TNEB
Schedule G	:	UNDERTAKING TOWARDS JURISDICTION OF LEGAL
Schedule H	:	TENDER ACCEPTANCE LETTER
Schedule I	:	DECLARATION TO BE SUBMITTED BY THE L1 BIDDER
Schedule J	:	UNDERTAKING TO BE SUBMITTED BY L1 BIDDER TOWARDS ESI & EPF
Schedule K	:	BANK GUARANTEE FOR COMBINED SECURITY DEPOSIT CUM PERFORMANCE GUARANTEE
Schedule L	:	BANK GUARANTEE FOR EMD
Schedule M	:	QUESTIONNAIRE – A (COMMERCIAL TERMS)
ANNEXURE 1		INDEMNITY BOND AND CERTIFICATE FOR EPF& ESI
ANNEXURE 2		CERTIFICATE

Sd/xxx
SE/M-II/MTPS-II

Sd/xxxx
SE/M-II/MTPS-I

SECTION – I
EARNEST MONEY DEPOSIT

1.0 Tenderer should pay an EMD as specified in the Abstract of Tender Specification.

2.0 The Earnest Money Deposit amount specified as in the Tender Notice should be in the form of NEFT/RTGS/ Account Transfer/Bank Guarantee. Scanned copy of the E-receipt duly reflecting the UTR Number shall be uploaded. The EMD amount has to be received in TNEB/TANGEDCO account through e payment, 2 hours before closing time of tender. EMD amount received beyond the specified time will be summarily rejected. The bidders who are willing to remit the EMD amount through Bank Account Transfer of same Bank are requested to upload a copy of Bank Account Scroll of bidders duly exhibiting the transaction of EMD amount with details of (i) Name of the Bank, (ii) Bank Account No. of Bidder (iii) IFSC Code and (iv) Tender Specification No. in order to verify the credit of same in TANGEDCO Bank account scroll for ensuring the EMD compliance of bidders.

3.0 The EMD will not carry any interest.

4.0 The Earnest Money Deposit will be refunded to the unsuccessful tenderers on receipt of application to the Superintending Engineer/ Mechanical-II / MTPS-I after intimation of the rejection / non-acceptance of their tender.

5.0 In respect of the successful tenderer, the EMD remitted by the firm will be carried over as part of the Security Deposit payable by the tenderer. Alternatively, the Earnest Money Deposit remitted by the firm will be refunded on request, if the Security Deposit for contract Performance is paid in full without adjusting the EMD amount.

6.0 Any other mode of payment of EMD other than NEFT/RTGS/BANK ACCOUNT TRANSFER OF SAME BANK /Bank Guarantee /PEMD shall not be accepted towards EMD and the tenders shall be rejected if EMD is not paid in the prescribed manner.

6.1 Bank Guarantee (BG):

The EMD in the form of IRRIVOCABLE Bank Guarantee (BG) with one year validity is also acceptable.

The Bank Guarantee towards EMD shall be in the form of an irrevocable Bank Guarantee on non-judicial stamp paper of value not less than Rs.100/- as per the proforma enclosed as schedule 'L' in section of this specification obtained from any Nationalized Bank / Scheduled Bank of India or any reputed foreign Bank having branches in India.

The scanned copy of the B.G. shall be uploaded with the Bid. Original BG towards EMD has to be submitted to the Tender Inviting Authority before the day of Tender opening for consideration towards EMD.

The Bank Guarantee shall be valid for one year.

7. PERMANENT EMD:

The Tenderers who are having valid Permanent EMD with TANGEDCO for an amount as mentioned below are exempted from payment of Earnest Money Deposit and are eligible to participate in the tender.

Sl. No.	PEMD Slab	Monetary limit of tender value of participate Without payment of EMD.
a	2,00,000	In case of all Iron and Steel materials, main producers (Government of India Undertaking only) for procurement of Iron & Steel materials.
b	20,00,000	In case of Tenders not exceeding Rs.10 Crores in value.
c	40,00,000	In case of Tenders not exceeding Rs.50 Crores in value.
	1,00,00,000	In case of all Tenders without any monetary limit.

7.1. The PEMD cannot be withdrawn by the tenderers within 3 years from the date of deposit under any circumstances.

7.2. The deposit shall not carry any interest.

7.3. Sister concerns of the depositing Firm are not entitled to quote on the basis of this Earnest Money Deposit.

7.4. Quotation from the Branch Offices of the Depositor which are part and parcel of the Firm, will however, be valid when quoted on the authority of this permanent Earnest Money Deposit.

7.5. The Permanent Earnest Money Deposit will be in-operative once the depositor gives his application in writing for withdrawal of the deposit after the minimum period of 3 years.

7.6. The Permanent Earnest Money Deposit is susceptible of being forfeited in the circumstances enumerated in individual specifications.

7.7. The Permanent Earnest Money Deposit will be subject to forfeiture against any dues to the TANGEDCO from the Depositor.

7.8. The deposit is of a permanent nature and enables the depositor to quote against tenders floated by all the Tender Inviting Authorities of TANGEDCO. Hence, requests for withdrawal of the deposit AFTER THE MINIMUM PERIOD OF 3 YEARS can be complied with only after getting the clearance certificate from various offices of the Corporation. The depositors are therefore, advised that refund of deposit will take time and claims for interest for delay etc. will not be entertained.

7.9. Requests for refund should be made duly surrendering the original Cash receipt and registration certificate.

7.10. Any suit or legal proceedings arising under this Scheme shall not be instituted in any Court Save in the City Civil Court of Madras or the Court of Small Causes at Madras under any circumstances whatever, irrespective of the fact that cause of action might arise under the jurisdiction of some other court.

7.11. The amount of Permanent Earnest Money Deposit is subject to revision from time to time at the discretion of the Corporation.

7.12. Successful tenders who had participated in the tenders upon PEMD will have to remit the full amount of Security Deposit required for individual contracts.

7.13 The **Declaration shall be part of the bid itself and no need to separate undertaking.**

Mere uploading of bid by the bidder, who has exempted from EMD payment, shall be considered as token of acceptance of the bidder to pay the amount equivalent to EMD, together with costs if any, in the events of non-fulfillment of the condition stipulated in the tender specification i.e. in all cases where EMD paid will be forfeited.

8.0 REGISTRATION OF MICRO, SMALL & MEDIUM ENTERPRISES BY COMPOSITE CRITERIA IN UDYAM REGISTRATION & GUIDELINES:

8.1 Classification of Enterprises:

As per the Ministry of Micro, Small and Medium Enterprises, GOI Notification No S.O 2119(E) dt. 26.06.2020 the enterprises are classified as:

- (i) A Micro Enterprise, where the investment in plant and machinery or equipment does not exceed Rs.1 Crore (one crore Rupees) and turnover does not exceed Rs.5 Cr. (Rupees five crore);
- (ii) A Small Enterprise, where the investment in plant and machinery or equipment does not exceed Rs.10 Cr. (Ten crore Rupees) and turnover does not exceed Rs.50 Cr. (Rupees fifty Crore);

- (iii) A Medium Enterprise, where the investment in plant and machinery or equipment does not exceed Rs.50 Cr. (Fifty crore Rupees) and turnover does not exceed Rs.250 Cr. (Rupees Two Hundred and Fifty crore).

8.2 Calculation of Turnover:

In calculation of turnover of an enterprises, Exports of goods or services or both, shall be excluded while calculating the turnover of any enterprise whether micro, small or medium, for the purposes of classification. However the bidders are requested to obtain a certificate from Chartered Accountant, along with the bid whose turnover includes export proceeds, for ascertaining the turnover achieved on export of goods or services or both and included in the total turnover to be uploaded.

8.3 Calculation of Investment:

The Plant and Machinery shall have the same meaning as assigned to the plant and machinery in the Income Tax Rules, 1962 framed under the Income Tax Act, 1961 and shall include all tangible assets (other than land and building, furniture and fittings). The cost of certain items specified in the Explanation I to sub-section (1) of section 7 of the Act shall be excluded from the calculation of the amount of investment in plant and machinery. The investment value in Plant and Machinery for the purpose has to be certified by a Chartered accountant and the same is to be uploaded in the bid in case the bidder claims EMD exemption.

8.4 Updation and transition period in classification:

An enterprise having Udyam Registration Number shall update its information online in the Udyam Registration portal, including the details of the ITR and the GST Return for the previous financial year and such other additional information as may be required, on self declaration basis. In case of an upward change in terms of investment in plant and machinery or equipment or turnover or both, and consequent re-classification, an enterprise will maintain its prevailing status till expiry of one year from the close of the year of registration. In case of reverse-graduation of an enterprise, whether as a result of re-classification or due to actual changes in investment in plant and machinery or equipment or turnover or both, and whether the enterprise is registered under the Act or not, the enterprise will continue in its present category till the closure of the financial year and it will be given the benefit of the changed status only with effect from 1st April of the financial year following the year in which such change took place.

9.0 EXEMPTION FOR PAYMENT OF EARNEST MONEY DEPOSIT IN THE CASE OF THE BIDDERS FURNISHING UDYAM REGISTRATION:

The following categories of Industries are exempted from payment of EMD subject to ensuring that the services should be covered in their Registration Certificate.

- a) The Micro and Small Enterprises located within the State and Registered with the Government of Tamil Nadu, Department of Industries and Commerce, District Industries Centre.
- b) The Small Scale Industries Units located within the State and registered with National Small Industries Corporation.
- c) Departments of the Government of Tamil Nadu.
- d) Undertakings and Corporations owned by the Government of Tamil Nadu.
- e) Labour Contract Co-Operative Societies registered within Tamil Nadu
- f) Tiny Industries registered with the State of Tamil Nadu and registration Certificate issued by the Department of Industries and Commerce /Government of Tamil Nadu.

- g) The Micro and Small Enterprises outside the State and registered with National Small Industries Corporation Limited
- h) Micro and Small Enterprises having provisional registration certificate are not eligible for Exemption.
- i) Central and the State Government Departments / Undertakings and Corporations other than those in Tamil Nadu shall have to pay Earnest Money Deposit.

9.1 DOCUMENTS TO BE UPLOADED AS A PROOF OF ELIGIBILITY FOR EXEMPTION FROM PAYMENT OF EARNEST MONEY DEPOSIT:

- a) Attested copy of Udyam Registration Certificate
- b) The tenderer shall upload a Chartered accountant certificate towards annual turnover and another certificate for calculation of investment on Plant and Machinery specified in the explanation I to sub – section (1) of section 7 of Income tax rules 1962 framed under the Income tax Act 1961, as per the recent MSME Notification No S.O 2119(E) dt. 26.06.2020. (Refer clause 8.3 & 8.4)
- c) Those tenderer under exempted category from payment of EMD shall upload the tender documents and tender document should be initialed/endorsed by the tenderer, having examined the tender specification together with the schedules attached, as a token of acceptance to pay the amount equivalent to EMD, together with costs if any, in the events of non-fulfilment of the conditions stipulated in the tender specification i.e. in all cases where EMD paid will be forfeited.
- d) In the event of non-fulfilment or non-observance of any of the conditions stipulated in the contract, consequent to such breach of contract to the effect, the tenderer have to pay as penalty an amount equivalent to EMD. The State Government, Public Sector Undertakings who are exempted from payment of EMD should also pay as penalty an amount equivalent to the amount fixed as Security Deposit in the event of non-fulfilment or non-observance of any of the conditions stipulated in the contract.

Meanwhile as per the Ministry of Micro, Small and Medium Enterprises (MSME), GOI Notification No S.O 2119(E) dt. 16.06.2021 has amended the above said notification for extending the validity of existing enterprises registered prior to 30.06.2020 up to 31.12.2021 i.e. extended the validity period of existing enterprises prior to 30.06.2020 through UAM, E-Part II etc, *from 31.03.2021 to 31.12.2021.*

As per Per(CMD) TANGEDCO Proceeding No:07(Accounts Branch) dated:17.03.2022, the validity of the existing enterprises registered prior to 30-06-2020 through UAM, EM part-2 etc., extended upto 31.03.2022 from 31.12.2021

Considering the above, approval has been accorded vide (Per) CMD TANGEDCO PROCEEDINGS No. 08, DT. 20.08.2021 to adopt the extension of validity of existing enterprises registered prior to 30.06.2020 through UAM, EM Pat II etc up to 31.12.2021 in TANGEDCO tenders for exempting the bidders from EMD.

10) EXEMPTION FOR PAYMENT OF EARNEST MONEY DEPOSIT IN THE CASE OF THE BIDDERS FURNISHING OF UAM, EM PART II:-

- (i) The following categories of Industries are exempted from payment of EMD subject to ensuring that the services should be covered in their Registration Certificate.
 - a) The Micro and Small Enterprises located within the State and Registered with the Government of Tamil Nadu, Department of Industries and Commerce, District Industries Centre.
 - b) The Small Scale Industries Units located within the State and registered with National Small Industries Corporation.
 - c) Departments of the Government of Tamil Nadu.

d) The SSI Units within the state, holding Acknowledgement issued for Entrepreneur Memorandum part-II obtained from District Industries Centre of Directorate of Industries and Commerce in respect of those items for which the Registration Certificate/ Acknowledgement has been issued.

e) Undertakings and Corporations owned by the Government of Tamil Nadu.

f) Labour Contract Co-Operative Societies registered within Tamil Nadu

g) Tiny Industries registered with the State of Tamil Nadu and registration Certificate issued by the Department of Industries and Commerce/Government of Tamil Nadu

h) The Micro and Small Enterprises outside the State and registered with National Small Industries Corporation Limited

(ii) a) Micro and Small Enterprises having provisional registration certificate are not eligible for Exemption.

b) Central and the State Government Departments / Undertakings and Corporations other than those in Tamil Nadu shall have to pay Earnest Money Deposit.

iii). DOCUMENTS TO BE UPLOADED AS A PROOF OF ELIGIBILITY FOR EXEMPTION FROM PAYMENT OF EARNEST MONEY DEPOSIT:

a) Attested copy of Entrepreneur Memorandum Part-II acknowledgement /Udyog Aadhar Memorandum Certificate issued by the Department of Industries and Commerce, District Industries Centre for Micro and Small Industries registered within the State of Tamil Nadu.

b) Attested copy of Entrepreneur Memorandum Part-II acknowledgement Udyog Aadhar Memorandum Certificate issued by the Department of Industries and Commerce, District Industries Centre in their respective states and Registration Certificate of National Small Industries Corporation Limited for Micro and Small Industries registered outside Tamil Nadu.

c) Those tenderer under exempted category from payment of EMD shall upload the tender documents and tender document should be initialed/endorsed by the tenderer, having examined the tender specification together with the schedules attached, as a token of acceptance to pay the amount equivalent to EMD, together with costs if any, in the events of non-fulfillment of the conditions stipulated in the tender specification i.e. in all cases where EMD paid will be forfeited.

d) The tenderers shall upload the audited attested copy of Profit and Loss account / Balance Sheet in order to ensure the Status of Micro and Small Enterprises of the firm based on the investment held in Plant and Machinery for extending exemption from paying EMD. In case the investment held by them in Plant and Machinery as per their Financial Statement of Accounts exceeds *Rs.5 Crores*, the General Manager, District Industries Centre concerned will be requested to verify the Status of Micro / Small Enterprises of the firm. Till receipt of confirmation from General Manager / District Industries Centre concerned, the exemption from paying EMD for Micro and Small Enterprises shall not be extended.

iv). In the event of non-fulfilment or non-observance of any of the conditions stipulated in the contract, consequent to such breach of contract to the effect as penalty, an amount equivalent to EMD is to be paid. The State Government, Public Sector Undertakings who are exempted from payment of EMD should also pay as penalty an amount equivalent to the amount fixed as Security Deposit in the event of non-fulfillment or non-observance of any of the conditions stipulated in the contract.

v) Further, as per the Government of India, Ministry of MSME, vide Notification No.S.O.2119(E) dated 26.06.2020 has notified certain composite criteria for classifying the enterprises as Micro, Small and

Medium Enterprises and insisted Udyam registration in "Udyam Registration Portal" to obtain an e-certificate viz. Udyam Registration Certificate.

11. CONDITIONS FOR REJECTION OF BIDS OF EXEMPTION CATEGORIES:-

- a) If the documentary evidences towards Exemption from payment of EMD are not uploaded.
- b) If the services are not covered in the Registration Certificate uploaded as evidence for exemption from payment of EMD.
- c) If not furnished the Chartered Accountant certificate for investment held in Plant and Machinery or Equipment and Annual turnover value in support of Udyam registration.
- d) If the documentary evidences produced for Exemption from payment of EMD not attested by Gazetted Officer / Notary public.

12. The following should be uploaded by the Vendor during submission of Techno-commercial bid for payment of EMD failing which the offer will be SUMMARILY REJECTED.

- a) The e-receipt of payment of EMD through NEFT/RTGS or other appropriate documents such as Bank Account Scroll in case of Account transfer from same Bank.
- b) Proof of documentary evidences towards Exemption from payment of EMD.

13. The Earnest Money Deposit made by Tenderer will be forfeited after e-tender opening:

- a) If he withdraws his tender or backs out after acceptance of the tender or fails to remit the Security Deposit.
- b) If he revises any of the terms quoted during the validity period.
- c) If he violates any of the conditions of the Tender specification.
- d) If the documents furnished with the offer being found to be bogus or the documents contain false particulars.
- e) If the successful tenderer fails to execute the order placed on them to the satisfaction of the TANGEDCO Limited.
- f) In case of tenderers participating on the strength of PEMD, an amount equivalent to the EMD for this specification will stand forfeited in the event of such Tenderer committing any one of the acts listed above.
- g) In case of tenderers participating on the strength of Exception Categories, an amount Equivalent to the EMD for this specification will stand forfeited in the event of such Tenderer committing any one of the acts listed above.
- f) If the Bid Qualification Requirements are found to be fraudulent/ non-genuine, the EMD paid will be forfeited in addition to black listing in future contracts with TANGEDCO.

Sd/xxxx
SE/M-II/MTPS-II

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SE/M-II/MTPS-I

SECTION – II**BID QUALIFICATION REQUIREMENTS (BQR)**

The Bidders shall become eligible to bid on satisfying the following Bid Qualification Requirements and uploading of the required documentary evidences.

1a: The bidder should have minimum experience for a continuous period of 3 years as on the date of tender opening in successful Operation and Maintenance of PLC based Coal Handling Plant in Thermal Power Plant /Port in any Govt. Organization / Govt. Undertaking / State Electricity Board in India consisting of Main Control Room, Mechanical & Electrical maintenance works and including Stacker & Reclaimers /Stacker Cum Reclaimer and Conveyor System Capacity of **1500 T/Hr or above** for a value of not less than Rs.100 Crores in a single order within last ten years.

Or

1b. The bidder should have minimum experience for a continuous period of 3 years as on the date of tender opening in successful operation & maintenance of coal handling terminal at any port in India (including Mechanical & Electrical maintenance) having Stacker and Reclaimer / Stacker cum Reclaimer and conveyor system capacity of 1500 T/Hr or above under DBOMT / BOOT basis for minimum 3 years with cumulative revenue of minimum Rs.100 Crores within last ten years and the bidder should furnish Auditor's certificate for the above cumulative revenue of Rs.100 Crores.

2a. The Bidder should furnish the performance certificate of the above executed O&M work. In case the work was carried out in TNEB/TANGEDCO, the performance certificate will be obtained by the tender inviting authority.

(or)

2b. For the O&M works under DBOMT / BOOT basis, the bidder should furnish Auditor's certificate for the above cumulative revenue of Rs.100 Crores.

3. The bidder should have average annual turnover of more than Rs.100 Crores during the last three financial years (2018-19, 2019-20 & 2020-21). The bidder shall upload the attested copy of audited Balance sheets duly certified by Chartered Accountant for all the above three financial years. The bidder must have earned net profit after tax for the last three financial years.

4. The net worth of the bidder based on the latest audited accounts shall not be less than Rs.100 Crores.

5. Documentary evidence in support of all the above requirements for items (1) to (4) attested by Gazetted officer or Notary public should necessarily be enclosed along with the offer. In the absence of attested supporting documents, the offer will be rejected.

6. The bidder must have visited the site for ascertaining the prevailing site conditions before quoting the tender and get the signature of the concerned Superintending Engineer/Mechanical-II of MTPS-I & II and the proof should be enclosed along with the tender.
7. Joint Venture / Consortium / Sub Contract experience will not be considered for qualification.
8. The Firm who have applied for Corporate Debt Restructuring / Strategic Debt Restructuring (CDR/SDR) Or Board for Industrial and Financial Reconstruction (BIFR) during the last three financial years and as on the date of submission of the bid are not eligible to participate in this Tender.

Note:

The evidences required for satisfying BQR conditions shall be uploaded along with the offer. Otherwise, offers will be summarily rejected. The BQR evidences submitted after the due date of submission of tender shall not be accepted.

NOTE TO BQR :

- (1) Copy of the above documentary evidences attested by a Gazetted Officer/ Notary public should be uploaded along with the offer.
- (2) In the event of documents furnished with the offer being found to be bogus or the documents contain false particulars, the EMD paid by the tenderer will be forfeited in addition to blacklisting them for future tenders/ contracts in TANGEDCO.
- (3) The required BQR evidences shall be furnished along with the tender itself, otherwise the offers will be summarily rejected. The BQR evidences submitted after the due date of submission of tender shall not be accepted.
- (4) Offers from the bidders having done the above work on subcontract basis are not eligible to participate in the tender. Also Joint venture/consortium is not eligible to participate in the tender.

Sd/xxx
CHIEF ENGINEER/MTPS-II

Sd/xxxx
CHIEF ENGINEER/MTPS-I

SECTION III
REJECTION OF TENDERS

I) Tenders will be SUMMARILY rejected if

- 01) Received by Post / Courier / telex / telegram / Fax / E-mail/ any other mode other than e-submission.
- 02) Received with EMD in any other mode of payment other than NEFT / RTGS/Account transfer/Bank Guarantee/PEMD.
- 03) Not paid the requisite EMD amount
- 04) Not accompanied by the e-receipt of payment of EMD or Proof of
PEMD or Proof of exemption from payment of EMD
- 05) Not accompanied by Undertaking / Agreement where EMD is to be exempted.
- 06) From the approved tenderer whose permanent EMD is not adequate for this tender.
- 07) If price is indicated anywhere in Part – I
- 08) Not accompanied with a copy of evidences for meeting the Bid Qualification Requirement.
- 09) Does not meet Bid Qualification Requirement.
- 10) Received from a tenderer whose past performance / Vendor Rating is not satisfactory in any one of the Government Organization/Govt. undertaking/PSU.
- 11) If GSTIN NUMBER is not furnished ,the offer of bidder will be liable for rejection.
- 12) Received from a tenderer who is directly or indirectly connected with Government service or TANGEDCO Limited Service or service of Local Authority.
- 13) Offer received from joint Venture / Consortium
- 14) Received from any blacklisted/banned/suspended/debarred/poor performance Firm or Contractor in any one of the Government Organization.
- 15) If, the documents furnished with the offer being found to be bogus or the documents contain false particulars.
- 16) Incomplete and evasive offer.
- 17) Not in the prescribed Form & Procedure.

II) Tender is LIABLE to be rejected, if it is:

- 1) Not in conformity with TANGEDCO's Commercial terms and Technical Specifications
- 2) With validity period less than that stipulated in this specification.
- 3) Not containing all required particulars as per Schedule B to H.

- 4) Not accompanied the documents in support of investment held in plant and machinery & turnover with the certificate of Chartered Accountant.
- 5) If the L1 tenderer does not produce the following documents on demand.
 - a) GST, EPF & ESI code number for having registered in the respective statutory bodies and the evidence for the same.

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SE/M-II/MTPS-II

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SE/M-II/MTPS-I

SECTION – IV
INSTRUCTION TO THE TENDERERS

- 1.0 Tamil Nadu Transparency in Tenders Act 1998 and the Tamil Nadu Transparency in Tender Rules 2000 and subsequent amendments thereof are applicable to this Tender.
- 2.0. **SUBMISSION OF TENDER OFFER:**
- 2.1. The tenderer is expected to examine all instructions, Schedules and Annexures detailed in the Specification and submit the Schedule of Prices and other required particulars in the Schedules and Annexures called for in this Specification, only as per the formats prescribed herein.
- 2.2. The Tender Offer consisting of Schedules-B to M and Annexure-1 & 2 should be filled up and signed by the Tenderer or any person holding Power of Attorney authorizing him to sign on behalf of the Tenderer before submission of the Tender. The date of signature should invariably be indicated.
- 2.3. In the event of tender being submitted by other than a firm, it must be signed by a partner (copy of partnership deed should be enclosed) and in the event of the absence of any Partner, it shall be signed on his behalf by a person holding a Power of Attorney authorising him to do so, certified copies of which shall be enclosed.
- 2.4. Tender submitted on behalf of companies registered under the Indian Companies Act, shall be signed by person duly authorised to submit the tender on behalf of the company and shall be accompanied by certified true copies of the resolutions, extracts of the Articles of Association, special or general Power of Attorney etc to show clearly the title, authority and designation of persons signing the tender on behalf of the company.
- 3.0. **MODIFICATIONS/CLARIFICATIONS TO TENDER DOCUMENTS:**
- 3.0.1. At any time after the commencement of e-Tender and before the closing of the event, TANGEDCO may make any changes, modifications or amendments to the tender documents and same will be intimated to the concerned Vendors through corrigendum which can be downloaded from the Vendor login .
- 3.0.2. In case any tenderer asks for a clarification to the tender documents before 48 hours of opening of tenders, the CE/MTPS-I or SE/M-II/MTPS-I/ TANGEDCO, MetturDam-06 will clarify the same.
- 3.0.3. If any tenderer raises clarifications after the opening of the tender, the clarified reply issued by the Chief Engineer/MTPS-I or SE/M-II/MTPS-I/TANGEDCO, MetturDam-06 on the clarifications will be final and binding on the Tender.
- 3.0.4. All tender offers shall be prepared by typing or printing in the formats enclosed with this specification.
- 3.0.5. All information in the tender offer shall be in ENGLISH only. It shall not contain interlineations, erasures or over writings except as necessary to correct errors made by the tenderer. Such erasures or other changes in the tender documents shall be attested by the persons signing the tender offer.
- 3.0.6. **BEFORE QUOTING:**
- Every tenderer is expected to inspect the site before quoting his rates.
 - The TANGEDCO will not however accept after acceptance of the contract rate any extra charge for the lead for any other reason in case the contractor is found later on to have misjudged materials available.

- The standard specification of the Tamil Nadu Public works department and I.S.S. will be followed for the performance of the contract wherever applicable and for all particulars not specially covered by this specification.

3.1. QUOTATION OF RATES:

- 3.1.1. Rates should be quoted figures and words i.e., integers only.
- 3.1.2. Offers shall be given in the Price Schedule/BOQ in the form of lumpsum price or lumpsum on pro-rata basis as required which otherwise will be liable for rejection.

3.2. PRINTED TERMS AND CONDITIONS IN TENDERS:

Firm's printed terms and conditions will not be considered as forming part of the tender under any circumstances.

3.3. INCOMPLETE TENDERS:

Tender, which is incomplete, obscure or irregular is liable for rejection.

3.4. AMBIGUITIES IN CONDITIONS OF TENDERS:

In the case of ambiguous or contradictory terms / conditions mentioned in the bid, interpretation as may be advantageous to the Contractor may be taken without any reference to the Tenderer.

- 3.4.1. The tender offer shall contain full information asked for in the accompanying schedules and elsewhere in the specification.
- 3.4.2. Tenderers shall bear all costs associated with the participation in the e-Tender and the purchaser will in no case be responsible or liable for these costs.
- 3.4.3. No offer shall be withdrawn by the Tenderer in the interval between the deadline for submission and the expiry of the period of validity specified / extended validity of the tender offer.
- 3.4.4. The Tenderers are requested to furnish the exact location of their factories with detailed postal address and pin code, telephone and Fax Nos. etc. in their tenders so as to arrange inspection by the TANGEDCO, if considered necessary.

3.5. INFORMATION REQUIRED AND CLARIFICATIONS:

- 3.5.1. In the process of examination, evaluation and comparison of tender offers, the TANGEDCO may at its discretion, ask the Tenderer for a clarification of his offers. All responses to requests for clarifications shall be in writing to the point only. No change in the price or substance of the offer shall be permitted.
- 3.5.2. The TANGEDCO will examine the tender offers to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed and whether the offers are generally in order.
- 3.5.3. The Tender offers shall be deemed to be under consideration immediately after they are opened and until such time official intimation of award / rejection is made by the Tender Accepting Authority to the tenderers. The Tenderers shall not make attempts to establish unsolicited and unauthorized contact with the Tender Inviting Authority, Tender Accepting Authority or Tender Scrutiny Committee after the opening of the tender and prior to the notification of the award and any attempt by any tenderers to bring to bear extraneous pressures on the Tender Accepting Authority shall be sufficient reason to disqualify the tenderer.

4.0. **TENDER OPENING:**

4.1. **OPENING OF COMMERCIAL & TECHNICAL BIDS WITHOUT PRICE (PART-I):**

The Tender offers except price Bid will be opened electronically at 14.30 Hrs. on the date notified at the Office of the Superintending Engineer / Mechanical-II /Mettur Thermal Power Station-I/MetturDam-636406 through <https://tntenders.gov.in/nicgep/app>. Tenderers need not to visit MTPS-I office during tender opening, whereas tenderers can witness the tender opening event through their login.

4.2 **OPENING OF THE PRICE BIDS : (PART-II)**

The date and time of opening of Price Bids shall be later notified through registered e-mail to the Bidders who fulfil the BQR criteria and whose bids are found to be commercially and technically acceptable.

5.0. **EVALUATION AND COMPARISON OF THE TENDER OFFERS:**

5.1. The tenders will be evaluated strictly as per the Tamil Nadu Transparency in Tenders Act, 1998 and the Tamil Nadu Transparency in Tender Rules, 2000 and its subsequent amendments till date.

5.2. The tender offers received will be examined to determine whether they are in complete shape, all required Data have been furnished, properly signed and generally in order and conforms to all the terms and conditions of the Specification without any deviation. .

5.3.1. For the purpose of evaluation of tender offers, the following factors will be taken into account for arriving the evaluated price:

The quoted price will be corrected for arithmetical errors.

In case of discrepancy between the price quoted in words and figures lowest of the two will be considered.

The rate of CGST, SGST, and IGST as applicable both in percentage and amount shall be indicated in the offer along with HSN / SCT code as per GST Act.

The evaluated price shall be arrived in compliance with the provisions of GST on the Transaction value + GST.

Since GST is enacted wherein all taxes & duties are subsumed, price evaluation shall be inclusive of applicable GST in all cases, i.e., even if the bidders are only within the State or bidders are within the State and outside TN.

5.3.2. The rates quoted by the eligible lowest tenderer in the open tender Rate Contract Scheme shall be compared with the prevailing market rate and the rates of previous period and if the Tender Accepting Authority is of the view that the quoted rates are too high, the rates will be negotiated with the L1 tenderer and the rate will be determined. All eligible bidders who accept the rate shall be enlisted.

5.4 The L1 bidder shall furnish the declaration (Schedule – I) in respect of passing of ITC benefit as per sec 171 of CGST Act as rebate in the price offered. In the event of L1 bidder specifying the ITC benefit as nil, the same shall be supported with certificate from chartered accountant. 'A' format of declaration will be as stipulated by TANGEDCO.

6.0. **RIGHTS OF THE TANGEDCO :**

6.1. Not to accept the lowest or any tender without assigning any reason.

6.2. Notwithstanding anything contained in this specification/the TANGEDCO reserves the rights to:

6.3. Relax or waive any of the conditions stipulated in the tender specification as deemed necessary in the best interest of the TANGEDCO for good and sufficient reasons.

- 6.4. Cancel the order for not keeping up the delivery schedule/contract period.
- 6.5. The TANGEDCO reserves the rights to request for any additional information and also reserves the right to reject or accept the proposal of any bidder, if in the opinion of the TANGEDCO, the qualification data is incomplete or in the opinion of the TANGEDCO the bidder is found not qualified to satisfactorily perform the contract.
- 6.6. To recover losses, if any, sustained by the TANGEDCO, from the contractor/supplier who pleads their inability to execute/supply and backs out of his obligation after award of contract. The Security Deposit paid in that case shall be forfeited.
- 6.7. At any time after issue of the tender documents and before the opening of the tender, the TANGEDCO may make any changes, modifications or amendments to the tender documents and shall send information of such changes to all those who have purchased the tender documents.
- 7.0. **DEVIATIONS:**
- 7.1. The offers of the Tenderers with Deviations in Commercial terms and Technical Terms of the Tender Document are liable for rejection.
- 7.2. No alternate offer will be accepted.
- 8.0. **BIDDER'S EXPERIENCE:**
The intending tenderers shall furnish the details of various supply orders/works contracts executed by them as on the date of tenders in the Schedule D enclosed to the tender specification. The details furnished by the tenderers shall be in complete shape and if it is found that any information is found omitted, suppressed, incomplete or incorrect, the same will be taken note of while dealing with the tenderer in future and will entail forfeiture of EMD. Tenders furnished by the tenderers without these accompanying details of their past performance are liable for rejection.
- 9.0 **VENDOR RATING:**
TANGEDCO Limited will verify the vendor rating of the bidders from Concerned Thermal Power Stations / Utility. In case the vendor rating is not satisfactory, their offers will not be considered for further processing and will be rejected.
- 10.0. **GST REGISTRATION:**
TANGEDCO opts to purchase goods or services only from the GST registered persons and GSTIN Number shall be furnished in the offer.
- 11.0. **SOUNDNESS OF THE COMPANY:**
The tenderer who is an Industrial company should clearly state as per schedule E in his tender whether the company is potentially sick Industrial company or a sick industrial company in terms of Section 23 of Section 15 of the sick industrial company act 1985. Failure to supply this information will make the tender liable for rejection.
- 12.0. **PAST PERFORMANCE:**
The intending tenderers shall furnish the details of various orders executed by them during the past years as on the date of tendering in the proforma enclosed to the Tender Specification and also proof for having executed the tendered item and for their satisfactory performance. The details furnished by the tenderers shall be in complete shape and if it is found that any information is found omitted, suppressed, incomplete or incorrect, the same will be taken note of, while dealing with the tenderers in future. Tenders furnished by the tenderers without these accompanying details of their past performance are liable for rejection.

13.0. INCOMPLETE DATA:

The TANGEDCO reserves the right to request for any additional information and also reserves the right to reject the proposal of any bidder, if in the opinion of the TANGEDCO, the qualification data is incomplete or the bidder is found not qualified to satisfactorily perform the contract.

14.0 NEGOTIATION:

Negotiation will be carried out with the L1 tenderer after finalizing eligible tenderers.

15.0 REGISTRATION OF VENDORS IN THE IMS ONLINE PORTAL:

The vendors shall register in the IMS online portal for Online Bill processing system.

The Digital based Statutory Compliance Service Audit will be integrated with the online bill processing system. All the contract bills which consist of the work portion will be processed only after statutory Compliance Clearance Certificate of the Online Compliance Service providers.

The bidder should obtain the labour license so as to comply with the Contract Labour Regulation & Abolition) Act 1970 and Rules 1975 and Inter-State Migrant Workmen (Regulation of Employment and Condition of service) Act 1979 & Rules 1983 for registration of vendors in the IMS online portal.

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SECTION – V

COMMERCIAL TERMS AND CONDITIONS

1.0. SCOPE:

The scope of work is Operation & Maintenance of Coal Handling Plant I & II Complete System MTPS-I (4 x 210MW) & MTPS- II (1 x 600MW) including Operation & Maintenance of Locomotives, Railway siding, Wagon Tippers and Bulldozers & supply of spares (excluding OEM Spares, Hydraulic Spares, Iron& Steels , Gear Box Spares etc., as listed in Annexure - I & II) and consumables, T&Ps and PPE etc., at MTPS-I & II for a period of 5 years from date of taking over of site.

2.0. LOCATION:

The work is required in the Mettur Thermal Power Station – I & II located at Mettur Dam, Salem(Dt.), 636406, Tamil Nadu.

3.0. COMPLETENESS OF TENDER:

The tender should be complete in all respects.

In order that the tenders may receive full consideration, the whole information called for in the accompanying schedule and elsewhere together with relative leaflets, literature and details etc., must be supplied by the tenderer. The tenders not containing the complete details as above are liable for rejection.

4.0. VALIDITY OF THE TENDER:

4.1 Bid shall be kept valid for acceptance for minimum period of 180 days from the date of opening of Techno Commercial bid. However the tenderer shall keep his offer open till such time his tender is either accepted or rejected by TANGEDCO Limited/ competent Authority. Any extension thereof should also be given if requested by TANGEDCO Limited without revision of prices and terms in the bid.

4.2 Tenders with less validity period will be rejected.

5.0 PRICE:

The contractor / firm should closely note all the specification clauses which govern the rates while he is tendering. Escalation for the awarded rates is applicable for the balance period of contract from 2nd year of contract @ 5% on the first year rate, 3rd year of contract @ 10% on the 1st year rate, 4th year of contract @ 15% on the 1st year rate, 5th year of contract @ 20% on the 1st year rate and for any extension thereof. The rates quoted should be inclusive of all incidental expenses for carrying out subject work. All the expenses to be incurred by contractor are required to be included to the extent they are charged for to arrive the contract value i.e. transaction value. The applicable GST shall be worked out on the transaction value only.

The L1 tenderer shall furnish the declaration in respect of passing of ITC benefit as per sec 171 of CGST Act in the format as stipulated in the specification as Schedule -I and upload the same along with price bid.

6.0 CONTRACT PERIOD:

The period of contract proposed is for 5 (FIVE) Years from the date of taken over of the Coal Handling Plant. The contract period shall automatically cease to exist after 5 (FIVE) Years from the date of taken over of the plant and the contractor shall have no right to ask for any extension and he has to clear the site immediately after completion of contract period.

However, the TANGEDCO at its discretion can extend this Contract if required for a further period, at the same terms and conditions.

7.0 MANNER OF EXECUTION OF CONTRACT:

The Agreement, unless otherwise agreed to shall be signed within thirty (30) days of the date of issue of order, at the Office of the TANGEDCO on a date and time to be mutually

agreed. The Contractor shall provide for signing of the Contract, appropriate Power of Attorney and other requisite materials. Unless and until a formal agreement is prepared and executed, the order issued by TANGEDCO LIMITED read in conjunction with the Tender / Bid documents will constitute a binding Contract.

It is expressly understood and agreed by and between the Contractor and the TANGEDCO that the TANGEDCO is entering into this agreement solely on its own behalf and not on behalf of any other person or entity. In particular, it is expressly understood and agreed that the Government of India/Govt. of Tamil Nadu is not a party to this Agreement and has no liabilities, obligations or rights here under. It is expressly understood and agreed that the TANGEDCO is an independent legal entity with Power and Authority to enter into Contracts solely on its own behalf under the applicable laws of India and the general principles of Contract Law. The Contractor expressly agrees, acknowledges and understands that the TANGEDCO is not an agent, representative or delegate of the Government of India/Govt. of Tamil Nadu. It is further understood and agreed that the Government of India/Govt. of Tamil Nadu is not and shall not be liable for any acts, commissions, breaches or other wrongs arising out of the Contract. Accordingly, Contractor expressly waives releases and foregoes any and all actions or claims, including cross claims, imp leader claims or counter claims against the Government of India/Govt. of Tamil Nadu arising out of this Contract and cove Nance not to sue the Government of India/Govt. of Tamil Nadu as to any manner, claim, and cause of action or thing whatsoever arising of or under this agreement.

The Agreement will be signed in four (4) originals and the Contractor shall be provided with one

(1) signed original and the rest will be retained by the Owner.

8.0 SECURITY DEPOSIT FOR CONTRACT PERFORMANCE:

- 8.1 The successful tenderer will have to furnish Security Deposit (S.D) *for 5%* (Five Percent) including the EMD already remitted along with the tender in the form of Demand Draft/Banker's Cheque or NEFT / RTGS (or) irrevocable Bank Guarantee drawn in favour of SE/P&A/MTPS-I payable at Mettur Dam directly to the Cash Section with a copy of Acceptance Order and the permanent receipt has to be furnished to this office within 30 days from the date of receipt of this order, **failing which EMD shall be forfeited and order will be cancelled.** The Security Deposit/BG shall be @ 5% on the 1st year contract value and the SD/BG has to be replenished before the end of the 1st year period to cover 5% value of 2nd year contract and *the same has to be* continued till the end of the contract period.
- 8.2 The Security Deposit for contract will be refunded to the contractor only if the contract is completed as per the agreed conditions. If the TANGEDCO incurs any loss or damages on account of breach of any of the clauses or any other amount arising out of the contract becomes payable by the contractor to the TANGEDCO, then the TANGEDCO will, in addition to such other dues that he shall have under the law, appropriate the whole or part of the security deposit and such amount that is appropriated will not be refunded to the supplier.
- 8.3 The above security deposit for contract Performance has to be paid within 30 days from the date of receipt of work order, failing which their EMD will be forfeited and work order will be cancelled. The security deposit for contract Performance will not carry any interest.
- 8.4 The successful tenderer will have to furnish the Security Deposit within 30 days from the date of receipt of award of order and will not carry any interest. The belated payment of Security Deposit shall not be accepted hereafter. In the event of failure to remit security deposit within the prescribed period, EMD shall be forfeited and order will be cancelled. Further the order will be made to L2 Tenderer.
- 8.5 In case of submission of irrevocable Bank Guarantee, the validity of irrevocable BG should be for a period covering the period of contract and guarantee period Otherwise ,BG will not be accepted.

In case of the requirement arising for extension of the Bank Guarantee, the extended Bank Guarantee shall have to be submitted to TANGEDCO within the date of expiry of the existing Bank Guarantee. In case failure to submit such extended Bank Guarantee within the due date (expiry date), TANGEDCO shall invoke the Bank Guarantee by addressing the Bank directly.

Further, in the case of bank Guarantee being extended without any break in period and there is delay in submission of such extended Bank Guarantee, for any reason, TANGEDCO shall reserve the right to accept the belated submission of the extended Bank Guarantee by levying penal interest at the rate of 22% per annum for the delayed period of submission. Such penal interest shall be recovered from the service provider's subsequent bill.

8.6 *The Security Deposit for contract will be refunded to the contractor only if the contract is completed satisfactorily as per the agreed conditions. If the TANGEDCO incurs any loss or damages on account of breach of any of the clauses or any other amount arising out of the contract becomes payable by the supplier to the TANGEDCO, then the TANGEDCO will in addition to such other dues that he shall have under the law, appropriate the whole or part of the security deposit and such amount that is appropriated will not be refunded to the contractor.*

8.7 GST for forfeiture of security deposit: GST will have to be paid if forfeiture of EMD/ Security Deposit, GST@18% will have to be collected additionally for forfeiture EMD/SD amount.

9.0 **MOBILIZATION ADVANCE:**

No mobilization advance will be given for this contract & no advance payments will be made for any item of work.

10.0 GUARANTEE:

10.1 Work Portion: Not applicable

10.2 Supply portion: *The spares supplied under the reimbursement basis for the work shall be guaranteed for satisfactory performance for a period of 12 Months from the date of commissioning or 18 Months from the date of supply whichever is later, subject to an overall period of 24 months. Any defect in supplied material/workmanship as decided by the Engineer-in-Charge shall be replaced/ rectified by the contractor at free of cost during the above guarantee period. The defective materials will have to be taken back at their own cost and risk".*

10.3 *The spares materials supplied under the contractor's scope for the work shall be provided with Test certificate obtained from approved testing laboratory and the same shall be submitted to the Engineer-in-charge.*

11.0 **SUPPLY OF SPARES ON CHARGEABLE BASIS :**

i) All the spares and consumables (Excluding OEM spares, Hydraulic spares, Iron and Steel and Gear box spares) should be supplied by the contractor. The contractor shall draw the required spares, if they are available at TANGEDCO's stores, on chargeable basis (Requisition Duplicate rate or latest P.O. rate whichever is higher). The cost of such spares shall be recovered from the contractor's bills. The contractor should ensure the availability of required spares, which are covered in his scope after receipt of order. The availability of Critical spares has also to be ensured after receipt of order.

(ii) If Spares under TANGEDCO's scope are not available at MTPS stores, the contractor should arrange to supply the spares on reimbursable basis from the market directly to ensure *availability of conveyors for operation*. The cost of these items of spares shall be paid by TANGEDCO based on previous PO with due escalation or prevailing market rates as approved by the Chief Engineer concerned. Such supply of materials should be regularized through Central Stores / MTPS.

(iii) *The contractor shall ensure that stock of items available at end of the contract is within 15% of installed capacity of CHP for all the spares which are under the scope of the contractor.*

(iv) At the end of contract, the contractor can handover to TANGEDCO the balance stock of spares material available with the contractor.

(v) The payment to the contractor for handed over spares material shall be as per the approved cost data with due escalation / market rate prevailing at the time of handing over as approved by the Chief Engineer concerned

12.0 PERMANENT ACCOUNT NUMBER, GSTIN NUMBER AND OTHER STATUTORY CHARGES:

The Tenderer shall indicate the Permanent Account No., GSTIN number and EPF & ESI Main Code Number and enclose the proof with the tender.

13.0 GOODS AND SERVICES TAX:

The Goods and Services Tax will be paid extra as applicable. The amount of CGST, SGST, and IGST as applicable shall be indicated in percentage payable and amount separately in the tender offer.

The TANGEDCO has been registered as a dealer under GST Act 2017 and the details are given below.

Sl. No.	Description	Details
1	Billing Address of the Customer	The Superintending Engineer, Mechanical-II, Mettur Thermal Power Station-I, Mettur Dam-636406.
2	GSTIN Enrolment Provisional Registration	33AADCT4784E1ZC
3	ARN	AA330617106413K
4	Type of Customer	Company
5	Name & Address as registered in GSTIN Principal place of Business	Tamil Nadu Generation and Distribution Corporation Limited, 144, Anna Salai, NPKRR Maaligai, Chennai – 600 002.
6	State of Registration of GSTIN	Tamil Nadu
7	Details of Additional Places of Business	Please see www.tangedco.gov.in

It is the responsibility of the tenderer to make sure about the correct rates of duty leviable on the material/ works at the time of tendering. If the rates assumed by the tenderer are less than the current rates prevailing at the time of tendering, the TANGEDCO Ltd., will not be responsible for the mistake. If the rates assumed by the tenderer are higher than the current rates prevailing at the time of tendering, the GST prevailing at the time of tendering will only be paid.

Any increase in GST consequent to the suppliers coming into different duty slab during the execution of the contract shall have to be taken into account and the all-inclusive firm price shall be quoted accordingly by the tenderers. Any variation in GST due to statutory variation within the contract delivery date shall be considered by the TANGEDCO Ltd.,

In case of delay in execution of work/supply, the GST prevailed on the date of actual execution of work/supply or both the date of contractual period whichever is less shall be admitted. For both the cases, the supplier/contractor shall furnish documentary evidence while submitting the bills for payment.

The GST provisional ID and ARN of TANGEDCO is given below to incorporate to supplier / Contractor domain. *Necessary GST ITC undertaking (Schedule-I) as per TANGEDCO's standard specification is to be submitted by the L1 tenderer after evaluation of price for compliance of section 171 of CGST Act.*

13.1 GST E-way bill system:-

a) E-way Bill is an electronic document to be generated to cover movement of goods more than Rs.50,000/- for inter states and Rs.1,00,000/- for intra states and such generation needs to be

done in e-Way Bill portal [http:// ewaybillgst.gov.in/](http://ewaybillgst.gov.in/).

Consequently transporters of goods, under GST provisions are required to carry on e-Way Bill for the movement of such goods. The value of goods shall be the value declared in an invoice, a bill of supply of a delivery challan and also includes the Central tax, State or Union territory tax, integrated tax and cess charged, if any. But, it will not include value of freight charges for the movement charged by transporter.

b) Transactions which require E-way bill:

For transportation of goods of more than Rs.50,000/- for inter states and For transportation of goods of more than Rs.1,00,000/- for intra states in relation to all types of transactions such as

i) Inward Supply. It is the responsibility of the Supplier/ contractor or then transporters to generate e-way bill before transporting goods for delivery at TANGEDCO's premises.

ii) Inward supply from an unregistered person. There is a condition in the e-way bill clause that registered person has to generate e-way bill at the time of movement of goods from unregistered person under GST.

13.2 GST E-way bill system:

The Government of India has noticed E-Way bill system for interstate movement of goods w.e.f. 01.04.2018. Similarly the Government of Tamil Nadu has introduced the E-way bill system for intra-state movement of goods w.e.f.02.06.2018.

The delivery of materials shall be at MTPS-I stores and as such it is the responsibility of suppliers to comply with GST e-way bill provisions for ensuring prompt delivery of ordered items.

13.3 Provision of IT Clause (194 Q) of IT Act:

In view of the instruction of Sec 194Q, 206AB and 206CCA by the Finance Act 2021 from 1st July 2021, the following clauses to be added in the tender specification:-

"Any person being a buyer, who is responsible for paying any sum to any resident for purchase of goods of value (or) aggregate value exceeding Rs.50 lakhs in any previous year. Shall, at the time of credit of such sum to account of the seller (or) at the time of payment, whichever is earlier, shall deduct an amount equal to 0.1% of such sum exceeding

Rs.50Lakhs as TDS under section-194Q of IT Act. The supplier of goods is required to furnish the PAN to TANGEDCO for making the payment. In case the suppliers do not have PAN, TANGEDCO is required to deduct tax at higher rate as per the provisions of section 206AA. In case of specified person i.e., any person who has not filed Income Tax return for two previous years immediately before the previous year in which TDS is required to be deducted and the time limit for filing of Income tax return u/s 139(1) of the Income Tax Act, 1961 has expired provided the total TDS & TCS in INR is Rs.50,000 (or) more in each of the two previous years the TDS rate u/s 194Q will apply at higher rate u/s.206AB.

The Provision of this section shall not apply to the transactions on which tax is deductible under any other provisions of the Income Tax Act 1961 and also on the transactions in which Tax is collectible under the provisions of section 206C.

On purchase of goods/ materials TANGEDCO shall have the primary and foremost obligation to deduct Tax at source and no tax shall be collected on such transaction u/s 206C (1H). TDS u/s 194Q is also applicable on the Advance paid for purchase of goods.

In case of, works contract, wherein supply and erection portions are separable, the value of supply of goods exclusive of GST will be subject to deduction of TDS under section 194 Q. On the other charges i.e., erection, testing, commissioning and maintenance charges, TDS under section 194C will apply and hence TDS u/s 194Q will not apply.

The above provision comes into effect from 01.07.2021 onwards and hence no TCS under section 206C (1H) has to be paid by TANGEDCO on purchase of goods. Accordingly, TANGEDCO will deduct TDS under section 194Q on all the purchase of goods exceeding the threshold limit. i.e aggregate credit (or) payment exceeds Rs.50 Lakhs. It is mandatory for vendor to submit the declaration format in Schedule -I to determine the applicability of TDS rate u/s 206AB.

13.4 Applicability of GST TDS :

a) The TDS under GST will be deducted at the time of payment or accounting in the books of accounts whichever is earlier. Once the taxable value of contract exceeds Rs.2,50,000/-, then each and every invoice on that contract shall be subjected to the TDS under GST irrespective of value of such invoice.

Taxable Supply means supply of goods or services or both which is liable to tax under GST. Thus, TDS under GST is to be deducted only on the Taxable supply of goods or services or both and not on Exempt supply (supply of any goods or services or both which attracts nil rate of tax or which may be wholly exempt from tax under section 11 of the CGST/ SGST Acts or under section 6 of the IGST Act) and non- taxable supply. Similarly, TDS under GST rate need not be applied on GST component in the invoice. TDS under GST is also applicable for suppliers/ contractors registered under composition scheme also.

b) TDS under GST is also applicable in the following cases:-

- * Bills of supplier for advance payment.
- * Amount of retention from the bills of supplier.
- * Supply of goods or services or both by supplier registered under GST as Composition dealer.

Thus Gross value of invoice (Except GST portion) shall be taken while applying TDS under GST rate.

c). Value of Supply for Deduction of TDS :

For the purpose of deduction of tax specified above, the value of supply shall be taken as the amount excluding the central tax, state tax, union territory tax, integrated tax and cess indicated in the invoice i.e., without including the amount of GST charges in the bill.

13.5 GSTIN NO., PERMANENT ACCOUNT NUMBER & OTHER STATUTORY CHARGES:

GST REGISTRATION: TANGEDCO opts to purchase goods and services only from the GST registered person. Hence, GSTIN No. and Account code of service should be furnished in their tender. Attested copy of certificate of provisional registration should be enclosed.

INCOME TAX: Income Tax will be recovered from the contractors every running bill at the prevailing rate of tax in force with amendments issued from time to time as per the Income Tax Act.

PAN No.: The Tenderer shall furnish the Permanent Account No. issued by Income Tax Department in their tender. Attested copy of evidence should be enclosed.

14.0 INCOME TAX AND STATUTORY CHARGES:

INCOME TAX: Income Tax will be recovered from the contractors every running bill at the prevailing rate of tax in force with amendments

15.0 STATUTORY COMPLIANCES:

- 1) The Contractor shall employ labour in sufficient numbers to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the Contract and to the satisfaction of the Engineer-in-Charge. The Contractor shall not employ in connection with the Works any person who has not completed his eighteen years of age.
- 2) The Contractor shall pay to labour employed by him through digital transfer. The wages should not be less than fair wages as defined in the current PWD Schedule rates (or) Minimum Wages Act (if applicable).
- 3) The Contractor shall in respect of labour employed by him comply with or cause to be complied with the Contract Labour Regulations in regard to all matters provided therein.
- 4) The Contractor shall comply with the provisions of the payment of Wages Act, 1936, Minimum Wages Act, 1948, Employers' Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefit Act, 1961, Employees Provident Fund & Miscellaneous Provisions Act, 1952, Employees State Insurance Act, 1948, Payment

of Bonus Act, 1965 and Mines Act, 1952, Contract Labour Regulation & Abolition Act, 1970 or any modifications thereof or any other law relating thereto and rules made there under from time to time.

- 5) The Engineer-in-Charge shall on a report having been made by an Inspecting Officer as defined in the Contractors Labour Regulations, have the power to deduct from the amount due to the Contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the Conditions of the Contract for the benefit of workers, non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the Contract or non-observance of the said Contractors Labour Regulations.
- 6) The Contractor shall indemnify the Corporation against any payments to be made under and for observance of the Regulations afore said without prejudice to his right to claim indemnity from his sub- contractors. (if permitted)
- 7) In the event of the Contractor committing a default or breach of any of the provisions of the aforesaid Contractors Labour Regulations as amended from time to time or furnishing any information or submitting or filling any Form/ Register/Slip under the provisions of these Regulations which is materially incorrect then on the Report of the Inspecting Officers as defined in the Contractors Labour Regulations the Contractor shall without prejudice to any other liability pay to the Corporation a sum not exceeding Rs. 50.00 as liquidated damages for every default, breach or furnishing, making, submitting, filling materially incorrect statement as may be fixed by the Engineer-in-Charge and in the event of the Contractor's default continuing in this respect, the liquidated damages may be enhanced to Rs. 50.00 per day for each day of default subject to a maximum of ten percent of the estimated cost of the Works put to tender. The Engineer-in-Charge shall deduct such amount from bills or security deposit of the Contractor and credit the same to the Welfare Fund constituted under Regulations. The decision of the Engineer-in-Charge in this respect shall be final and binding.

16.0 CONTRACT LABOUR REGULATIONS:

(i) Notice of commencement: The Contractor shall, within SEVEN days of commencement of the work, furnish in writing to the Inspecting Officer of the area concerned the following information:

- (a) Name and situation of the work.
- (b) Contractor's name and address
- (c) Particulars of the Department for which the work is undertaken,
- (d) Name and address of sub-contractors as and when they are appointed.
- (e) Commencement and probable duration of the work.
- (f) Number of workers employed and likely to be employed.
- (g) 'fair wages' for different categories of workers.
- (h) Number of hours of work which shall constitute a normal working day:-

(i) The number of hours which shall constitute a normal working day for an adult shall be NINE hours. The working day of an adult worker shall be so arranged that inclusive of intervals, if any, for rest it shall not spread over more than twelve hours on any day, when an adult worker is made to work for more than NINE hours on any day or for more than FORTY EIGHT hours in any week he shall, in respect of overtime work, be paid wages at double the ordinary rate of wages.

(ii) Weekly day of rest : Every worker shall be given a weekly day of rest which shall be fixed and notified at least TEN days in advance. A worker shall not be required or allowed to work on the weekly rest day unless he has or will have a substituted rest day, on one of the five days immediately before or after the rest day. Provided that no substitution shall be made which will result in the worker working for more than ten days consecutively without a rest day for a whole day.

- (a) Where in accordance with the foregoing provisions a worker works on the rest day

and has been given a substituted rest day he shall be paid wages for the work done on the weekly rest day at the overtime rate of wages.

(b) Note: The expression 'ordinary rate of wages' means the fair wage the worker is entitled to.

(c) Display of notice regarding Wages, Weekly Day of Rest etc. The Contractor shall before he commences his work on contract, display and correctly maintain and continue to display and correctly maintain in a clean and legible condition in conspicuous places on the works, notice in English and in the local Indian Language, spoken by majority of workers, giving the rate of fair wages, the hours of work for which such wages are payable, the weekly rest days workers are entitled to and name and address of the Inspecting Officer. The Contractor shall send a copy each of such notices to the Inspecting Officers.

(iii) Register of Workmen: A register of workmen shall be maintained in the Form appended to these regulations and kept at the work site or as near to it as possible, and the relevant particulars of every workman shall be entered therein within THREE days of his employment.

(iv) Employment Card: The contractor shall issue an employment card in the Form appended to these regulations to each worker on the day of work or entry into his employment. If a worker already has any such card with him issued by the previous employer, the contractor shall merely endorse that Employment Card with relevant entries. On termination of employment the Employment Card shall again be endorsed by the Contractor and returned to the worker.

(v) Register of Wages etc. : A Register of Wages-Cum-Muster Roll in the Form appended to these regulations shall be maintained and kept at the work site or as near to it as possible.

(vi) Fines and deductions: Wages of a worker shall be paid to him without any deductions of any kind except the deduction for damage to or loss of goods expressly entrusted to the employed person for custody, or for loss of money which he is required to account for, where such damage or loss is directly attributable to his neglect or default;

(a) No fine shall be imposed on a worker and no deductions for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.

(b) The Contractor shall maintain a register of fines and the register of deductions for damage or loss in the Forms appended to these regulations which should be kept at the place of work.

(vii) Register of Accidents : The Contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars:--

- (a) Full particulars of the labourers who met with accident.
- (b) Rate of Wages.
- (c) Sex.
- (d) Age.
- (e) EPF UAN number
- (f) ESI number
- (g) Aadhaar number
- (h) Nature of accident and cause of accident.
- (i) Time and date of accident.
- (j) Date and time when admitted in hospital.
- (k) Date of discharge from the hospital.
- (l) Period of treatment and result of treatment.
- (m) Percentage of loss of earning capacity and disability as assessed by Medical Officer.
- (n) Claim required to be paid under Workmen's Compensation Act.
- (o) Date of payment of compensation.
- (p) Amount paid with details of the person to whom the same was paid.
- (q) Authority by whom the compensation was assessed.
- (r) Remarks.

[Note: k,l,m,n for the workmen not covered under the ESI provisions]

- (viii) Preservation of Registers: The Register of workmen and the Register of Wages-cum- Muster Roll required to be maintained under these Regulations shall be preserved for 3 years after the date on which the last entry is made therein.
- (ix) Enforcement: The Inspecting Officer shall either on his own motion or on a complaint received by him carry out investigations, and send a report to the Engineer-in-Charge specifying the amounts representing Workers' dues and amount of penalty to be imposed on the Contractor for breach of these Regulations, that have to be recovered from the Contractor, indicating full details of the recoveries proposed and the reasons there for. It shall be obligatory on the part of the Engineer-in-Charge on receipt of such a report to deduct such amounts from payments due to the Contractor.
- (x) Disposal of amounts recovered from the Contractor: The Engineer-in-Charge shall arrange payment to workers concerned within FORTY FIVE days from receipt of a report from the Inspecting Officer except in cases where the Contractor had made an appeal under Regulation 16 of these Regulations. In cases where there is an appeal, payment of workers dues would be arranged by the Engineer-in-Charge, wherever such payments arise, within THIRTY days from the date of receipt of the decision of the competent authority.
- (xi) Welfare Fund: All moneys that are recovered by the Engineer-in-Charge by way of workers dues which could not be disbursed to workers within the time limit prescribed above, due to reasons such as whereabouts of workers not being known, death of a worker etc. and also amounts recovered as penalty, shall be credited to a Fund to be kept under the custody of the Corporation for such benefit and welfare of workmen employed by Contractors.
- (xii) Appeal against decision of Inspecting Officer : Any person aggrieved by a decision of the Inspecting Officer may appeal against such decision to the competent authority concerned within THIRTY days time stipulated from the date of the decision, forwarding simultaneously a copy of his appeal to the Engineer-in-Charge. The decision of the competent authority shall be final and binding upon the Contractor and the workmen.
- (xiii) Inspection of Books and other Documents : The Contractor shall allow inspection of the Registers and other documents prescribed under these Regulations by Inspecting Officers and the Engineer-in- Charge or his authorized representative at any time and by the worker or his agent on receipt of due notice at a convenient time.
- (xiv) Interpretation, etc.: On any question as to the application interpretation or effect of these Regulations, the decision of the Commissioner of Labour (or) Director/ Industrial Safety and Health shall be final and binding.
- (xv) Amendments: Government may, from time to time, add to or amend these Regulation and issue such directions as it may consider necessary for the proper implementation of these Regulations or for the purpose of removing any difficulty which may arise in the administration thereof.

17.0 Compliance of EPF& MP Act, 1952:

- (a) The Contractor who take up works contract for TANGEDCO/TANTRANSCO is required to comply with all the relevant provisions stipulated in the EPF & MP Act;
- (b) The Contractor should have a separate EPF main code number.
- (c) The Contractor should be responsible for the payment of necessary EPF contributions both Employer's and Employee's contribution as per the provisions of the EPF Act in respect of the actual workers engaged for the specified works.
- (d) The contractor should submit necessary returns to EPF Organisation within the stipulated time as required under the said EPF & MP Act.
- (e) The Contractor should produce the proof of payment of contribution – both Employer's and Employee's contributions made to EPF Organisation in order to claim the Bills for the respective works.
- (f) The contractor should be fully liable to meet and fulfill all the relevant provisions of the EPF act in the respect of the execution of the Tendered work.

- (g) In case the Contractor fails to fulfill any of the statutory provisions of the EPF & MP Act and consequently it happens that TANGEDCO/TANTRANSCO Ltd has to meet such requirements of the said Act or Statutory provisions in the capacity of Principal Employer, TANGEDCO/ TANTRANSCO shall make good such requirements out of the money due and payable to the said Contractor and further the performance of the said Contractor in this regard will be noted for all future Contracts of TANGEDCO/TANTRANSCO.

In respect of the category of employee for whom the wages are fixed at the rate of Rs.500/- and above in the current PWD Schedule rates (or) say the monthly wages of Rs.15,000/- above.

The EPF employer contribution will be restricted up to Rs.15,000/- only.

18.0 Compliance of ESI Act 1948:

- (a) The contractor who take up the works contract for TANGEDCO & TANTRANSCO is required to comply with all the provisions stipulated to ESI Act 1948.
- (b) The contractor should have a separate ESI main code number.
- (c) The contractor should be responsible for the payment of necessary ESI contributions – both Employer's and Employee's contributions as per the provisions of the ESI Act in respect of the actual workers engaged for the specified works.
- (d) The contractor should submit necessary returns to the ESI Organization within the stipulated time as required under the said ESI Act.
- (e) The contractor should produce the proof of payment of contributions - both Employer's and Employee's contributions made to ESI Organization in order to claim the Bills for the respective work.
- (f) The contractor should be fully liable to meet and fulfill all the relevant provisions of the ESI Act in respect of the execution of the Tendered work.
- (g) In case the Contractor fails to fulfill any of the statutory provisions of the ESI Act and consequently it happens that TANGEDCO & TANTRANSCO has to meet such requirements of the said Act or Statutory provisions in the capacity of Principal Employer, TANGEDCO & TANTRANSCO shall make good such requirements out of money due and payable to the said Contractor and further the performance of the said Contractor in this regard will be noted for all future Contracts of TANGEDCO & TANTRANSCO.
- (h) (i) The contractor who claims exemption under the ESI Act should produce the xemption order obtained from the Government/ESI organization.
- (ii) The contractor who claims exemption for those areas that are not covered under the purview of the ESI Act, necessary evidences should be submitted by the contractor to ensure that the revenue village where the work is being carried out has not been covered under the implemented area of ESI.
- (iii) The category of employees (Technical Assistant II Grade) and above for whom the wages are fixed at the rate of Rs.700/- and above in the PWD Schedule rates (or) the monthly wages of Rs.21,000/- above. Such employees will not be covered under the ESI Act. In all such conditions, the Contractor has "to ensure the medical benefits for the Workers engaged by the Contractors for the works and has to take relevant group insurance policies with the applicability for giving compensation to the workers" under the Employee's Compensation Act.

19.0 Statutory Compliance Clearance Certificate:-

- (a) The Contractor executing the works contract in TANGEDCO/TANTRANSCO should obtain the Statutory Compliance Clearance Certification from the Online Compliance Service Providers engaged by TANGEDCO/ TANTRANSCO, the required documents should be submitted by the contractors to the respective Online Compliance Service Providers.

- (b) The charges for Statutory Compliance Clearance Certification will be at the rate of Rs.2.00/- per man day per month with minimum charges of Rs.400/- and maximum charges of Rs. 3200/- and Rs.300/- for re-audit due to reasons attributable to the contractor. The charges should be paid by the respective contractors to the service provider through online.

The above charges are subject to changes from time to time.

20.0 The Building and Other construction Workers Act:- (other than the circle/station registered under the Factories Act)

(a) The contractor should obtain the Registration certificate under the Building and Other construction Workers (Regulation of Employment and Condition of Service) Act, 1996 from the Competent Authority (the Joint Director/Industrial Safety and Health (BOCW)).

(b) The contractor should comply all the provisions of the Building and Other construction

Workers (Regulation of Employment and Condition of Service) Act, 1996.

21.0 The Contract Labour (Regulation & Abolition) Act 1970 & Rules 1975 and Inter-State

Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979 & Rules 1983.

(a) The Contractor who take up works contract for TANGEDCO/TANTRANSCO should deploy sufficient number of workmen for the work and the contractor should deploy 20 or more workmen on a day of emergency (or) in necessity.

(b) The Contractors should comply with all the provisions of the Contract Labour (Regulation & Abolition) Act, 1970 and Tamilnadu Contract Labour (Regulation & Abolition) Rules 1975 as modified from time to time and shall also indemnify TANGEDCO/TANTRANSCO from all and against any claims under the aforesaid Act and the Rules. The contractors should also submit the copy of the labour licence before executing the works.

(c) The Contractors who desires to engage the migrant workmen (workmen from other states) for the works contracts of TANGEDCO/TANTRANSCO is required to comply with all the provisions of the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979 and Tamil Nadu rules, 1983 as modified from time to time and shall also indemnify TANGEDCO/TANTRANSCO from all and against any claims under the aforesaid Act and the Rules The contractors should also submit the copy of the migrant labour licence before executing the works.

(d) The contractors should maintain the following records as per section 78 of Contract Labour (Regulation & Abolition) central rules 1971.

Muster Roll in Form – XVI.

Register of Wages in Form – XVII.

Register of overtime in Form – XVIII.

The contractor shall issue an photo identity card to his employees.

22.0 Wages:-

(a) The Wages prescribed for the contractor/ industry/ establishment as per rates of Minimum Wages notified by the Government of Tamil Nadu under the Minimum Wages Act, 1948 or the current PWD rates of wages, whichever is higher is to be paid by the contractor to their employees.

(b) The contractor should pay the wages before the expiry of seventh day as per section 65 and shall issue wage slip in Form – XXVIII to the workmen as per section 78(b) of The Tamil Nadu Contract Labour Rules, 1973. The copies of the wage slip so issued to the workmen should be maintained by the contractor and produced as when called for.

23.0 EPF Documents to be Produced for Claiming Bills:-

(1) The EPF contribution should be remitted separately (by separate Challan) for each and

every work. The acceptance order/ formal order reference number should be entered in the remarks column of the ECR Challan (Electronic Challan Cum Return) and the same should be submitted.

(2) The payment confirmation receipt should be submitted (the payment confirmation date is mandatory)

(3) The combined Challan of Account No. 1,2,10,21 & 22 should be submitted.

(4) All the documents should duly signed with seal by the contractor.

ESI Documents for While Claiming Bills:-

(a) The Monthly Contribution Challan Form should be submitted (Transaction status field – completed successfully is mandatory).

(b) The contribution history of the respective months should be submitted.

(c) The month wise statement should be submitted showing the details of the employees utilized by the contractors for the specific work and the contribution remitted as per the below format.

S.No.	IP.No	IP.Name	No. of days	Wages	IP Contributions
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(d) All the documents should be duly signed with seal by the contractor.

24.0 Tamil Nadu Rationalisation of Forms and Reports under Certain Labour Laws Rules, 2020.

The contractor should comply/ maintain the applicable new combined forms introduced vide the following Acts/ Rules.

(a) The Tamil Nadu Contract Labour (Regulation and Abolition) Rules, 1975.

(b) The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) (Tamil Nadu) Rules, 1983.

(c) The Tamil Nadu Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Rules, 2006.

New Forms:

FORM I	Certificate of Registration of Principal Employer/Employer (under 3 Rules)
FORM II	Application for Licence/ Renewal of Licence (under CLRA and ISMW Rules)
FORM III	Form of Certificate by Principal Employer (under CLRA and ISMW Rules)
FORM IV	Certificate of Initial and Periodical Test and Examination of Various Appliances (under BOCW Rules)
FORM V	Application for Adjustment of Security Deposit (under CLRA and ISMW Rules)
FORM VI	Licence and Renewal (under CLRA and ISMW Rules)
FORM VII	Notice of commencement/ completion of work (under CLRA and BOCW Rules)
FORM VIII	Service Certificate (under 3 Rules)
FORM IX	Certificate of Medical Examination (under BOCW Rules)
FORM X	Report on recruitment and employment of migrant workmen and cessation of employment of migrant workmen (under ISMW Rules)
FORM XI	Report of Poisoning or Occupational Notifiable Diseases/ Accidents and Dangerous Occurrences (under BOCW Rules)

FORM XII	Application for Registration of Establishments Employing Contract Labour or Migrant Workmen or Building Workers (under 3 Rules)
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25.0 **Agreement and Undertaking to be furnished by the contractors in respect of the Statutory Provisions:-**

- (a) An undertaking as specified in Annexure-1 should also be obtained from the contractors to ensure the remittance of EPF & ESI, Employee and Employer contribution for the respective works while claiming the bills.
- (b) The TNEB (TANGEDCO/ TANTRANSCO) registered contractor, who wants to execute the works in a circle shall be instructed to execute an agreement with respective Superintending Engineer's of the circle.

26.0 SAFETY CONDITION:-

- (i) All the relevant personal protective equipments like safety helmets, safety shoes, safety belt, goggles, nose mask, face mask, dust respirator, asbestos suit, apron, leg guards, rubber gloves, face shield, hand sleeves, ear plug, ear muff, fiber helmet, fall net etc., should be supplied by the contractors to their workmen and ensure for proper usage by their workers without fail.
- (ii) Proper welding machines with accessories, good and sound construction of hand tools, power tools such as grinding machines, cutting machines, chipping tools, scaffolding materials, etc., should be used. Proper earthing to be provided wherever necessary.
- (iii) The contractor shall not allow his workmen to wear loose garments, like lungies, dhotis, watches, loose jewels and bangles, etc., while at work and smoke cigarettes, beedies etc., inside the power house premises.
- (iv) The contractor shall ensure that his workmen to wear tight full or half pant while at work inside the powerhouse premises.
- (v) Technically skilled and also safety-oriented supervisor should supervise the work at all time.
- (vi) If any accident occurs, it should be informed to the concerned officer of TANGEDCO in writing by the concerned contractor immediately.
- (vii) For any safety violation and non-compliance of the statutory provisions and rules as applicable the contractor is solely responsible and the contractor is liable for any prosecution and imposition of penalty as per the rules in force.

(a) Every opening in floor of a building or in a working platform shall be provided with suitable means to prevent fall of persons or materials by providing suitable fencing or railing with a minimum height of 1 meter.

(b) All practical steps shall be taken to prevent danger to persons employed, from risk or fire or explosion, or flooding. No floor, roof, or other part of a building shall be so overloaded with debris or materials as to render it unsafe.

All necessary personal safety equipment as considered adequate by the Engineer-in-Charge shall be available for use of persons employed on the Site and maintained in a condition suitable for immediate use; and the Contractor shall take adequate steps to ensure proper use of equipment by those concerned.

(i) When workers are employed in sewers and manholes, which are in use the Contractor shall ensure that manhole covers are opened and manholes are ventilated at least for an hour before workers are allowed to get into them. Manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to public.

(a) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.

(b) Suitable face masks shall be supplied for use by workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scrapped.

(ii) Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following :-

(a) These shall be of good mechanical construction, sound material and adequate strength and free from patent defects and shall be kept in good working order and properly maintained.

(b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.

(iii) The Contractor shall at his own expense arrange for the safety provisions as appended to these conditions or as required by the Engineer-in-Charge, in respect of all labour directly employed for performance of the works and shall provide all facilities in connection therewith.

In case the Contractor fails to make arrangements and provide necessary facilities as aforesaid, the Engineer-in-Charge shall be entitled to do so and recover the cost thereof from the Contractor.

(iv) Failure to comply with Safety Code shall make the Contractor liable to pay to the Corporation as liquidated damages an amount not exceeding Rs. 50.00 for each default or materially incorrect statement. The decision of the Engineer-in-Charge in such matters based on reports from the Inspecting Officers as defined in the Contract Labour Regulation as appended to these conditions shall be final and binding and deductions for recovery of such liquidated damages may be made from any amount payable to the Contractor.

(a) All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in a safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities shall be provided at or near places of work.

(b) These safety provisions shall be brought to the notice of all concerned by display on a notice board at a prominent place at the work spot. Persons responsible for ensuring compliance with the Safety Code shall be named therein by the Contractor.

(c) To ensure effective enforcement of the rules and regulations relating to safety precautions, arrangements made by the Contractor shall be open to inspection by the Engineer-in-Charge or his representatives and the Inspecting Officers as defined in the Acts/Rules applicable.

(d) The Contractor is not exempted from the operation of any other Act or Rule in force.

27.0 SPECIAL CONDITIONS TO EXECUTE THE WORK FOR TANGEDCO:

The Contractor should provide the following:

1. The contractor should provide the specified number of manpower to execute the work with the required qualification and experience. The bills will be processed accordingly.
2. The contractor has to quote the rate, considering all the Statutory Obligations to be complied with in respect of workmen to be engaged for the works contract/ service contract. The base price will be fixed for the Tender accordingly.
3. The contractor has to quote considering the base price and has to submit the breakup details of the Statutory Components for the proposed number of workmen to be engaged for the works contract after award of contract to the successful bidder.
4. If more than one tenderer quote the same rate, the tender will be finalized in accordance to the procedures prescribed in the Tender Transparency Act.
5. In case of any increase in minimum wages resulting in the statutory benefits, the increase in the statutory benefits shall be reimbursed on production of documentary evidence after getting approval from the competent authority
6. Necessary approval has to be accorded by the competent authority for the face value enhancement due to the increase in statutory liabilities.

28.0 General Guidelines

1. All tools & tackles such as welding generator, gas cutting set, chain blocks, etc. required for the work should be brought by the contractor. The contractor should ensure for healthiness/working conditions of tools & tackles. Only special tools and plants such as EOT crane shall be availed at free of cost, if feasible.
2. Oxygen & DA gas, MS welding electrodes, Gouging, Cutting electrodes and all other miscellaneous consumables required for the work should be brought by the contractor. However, the consumables which go with the equipment shall be supplied by the TANGEDCO at free of cost.
3. Chain blocks, Wire ropes, slings and shackles whenever supplied or used by the contractor shall be got approved by the Engineer in charge /TANGEDCO at site before they are actually used on the works.
4. All consumable items like cloth, cotton waste, kerosene, gas, diesel, lubricants, etc will be in the scope of the contractor.

5. The contractor shall supply all information regarding supplying of materials and progress of work, as is required by the ENGINEER for compiling the daily progress reports.
6. The contractor shall submit following documents to the Engineer-in-charge for verification purpose of the bill:
Copy of invoices, in pass for the materials and the Tools and plants brought and used for this work. Copy of receipt for the board materials
7. If any equipment or part are found damaged due to negligent / faulty maintenance the equipment the cost of such damages as assessed by the TANGEDCO shall be recovered from the contractor's monthly bill/retention money/security deposit.
8. The contractor has to shift spares, lubricant etc in required quantity duly approved by TANGEDCO engineer whenever necessary from TANGEDCO store / warehouse to site or site store as per the instruction of engineer in charge. Contractor has to arrange transportation for above. The cost of transportation will be on contractor's account. The contractor is responsible for safe transportation, handling and storage of board materials.
9. In case of breakdown of equipment, the contractor should work round the clock for putting back the equipment in service immediately within minimum time. In case of any emergency arising during night hours/Sunday/PH the contractor should be in a position to mobilize the manpower immediately within minimum time.
10. All new replacements either spare parts or any other shall be inspected and approved by T A N G E D C O engineer in charge before its actual use in work.
11. It is the contractors responsibility to ensure without failure Immediately after completion of maintenance job, that the work area has to be cleaned by removing all the tools, scrap, cotton waste, oil, grease etc,.
12. In the event of the contractor's labour resorting to strike or the contractor reporting to look out the TANGEDCO shall have the right to go ahead with the work employing its own labour or through other agencies or both and the cost incurred thereon by the TANGEDCO shall be deducted from the contractors bill / EMD etc.
13. All such works, which are required to be done for the satisfactory completion or commissioning or running of the equipments though not specifically mentioned above have to be done by the contractor at no extra cost. The decision on such works shall rest with the Engineer-in-charge and also with Superintending Engineer/Mechanical- II/ MTPS-I and Superintending Engineer/Mechanical- II/ MTPS-II respectively.
14. If the progress of work is not satisfactory, the undersigned reserves the right to entrust the whole or part of the balance work to any other contractor after intimating the contractor in writing.
15. Electricity, Water and air shall be supplied by the TANGEDCO at free of cost and the contractor should make his own arrangement to tap it from the nearest point. Necessary main switch TANGEDCO,s and other arrangement should be done by the contractor at his cost and supply shall be provided to his main TANGEDCO,s from the nearest supply point. Only 24 V hand lamp should be used for internal works.
16. The contractor should be the custodian of all the portable fire extinguishers and other major T&P handed over to him and any other minor equipment which are likely to be easily dismantled and taken away.
 - a. As per the safety regulations, LPG should never be used in place of DA Gas. If LPG usage has been found, the awarded work will be suspended and penalty of Rs. 500/- will be recovered from the contractors bill and the contract is liable for cancellation.
 - b. For lighting up gas cutting torches, the contractor should use only gas lighter and should not use unscientific methods or rope burning or wood burning or welding arc method.

17. On no account TANGEDCO employee shall be engaged by the contractor.
18. Whenever the contractor does not commence the work as agreed the Earnest Money Deposit/Security Deposit paid by the Contractor shall be forfeited in terms of the contract and his/their name will be black listed after due notice. In addition the difference on prices Agreed to by the failed contractors and the higher rate at which the works are to be entrusted with others, because of the failure of the ordered contractors shall be recovered from the failed contractors on any of his/their pending bills.
19. For taking out board materials from Mettur Thermal Power Station-I or II, all the transaction should be done through MTPS-I & II respectively. In respect of reconditioning/repairs/fabrication works, after furnishing necessary indemnity bond for the value of materials.
20. Spares under the contractor scope shall be routed through stores as per the prevailing TANGEDCO procedures.
21. The workmen deployed for the works shall have no lien or claim permanency for the works they are engaged for.
22. The contract will be terminated at any time due to Administrative reasons and according to site condition without prior notice.
23. The contractor should mobilize himself well in advance and start the work immediately and complete the specified works satisfactorily within the stipulated period.
24. The contractor or his authorized supervisor / representative should be available at site throughout the period of work. The contractor should intimate the name of representative before commencing the work.
25. Separate work force should be engaged by the contractor and the work should be completed as per the target fixed by engaged workmen round the clock for each/ equipment and as per the direction of the TANGEDCO Engineer in charge.
26. The contractor should engage only skilled and experienced workmen.
27. The Executive Engineer will turn down any person who is unfit for the work.
28. There should not be any hindrance to other departmental/ contractor workers working nearby.
29. Drawal of materials from central stores / sub stores and devolution of materials to central stores / sub stores should be done by the contractor.
30. The contract workman should have entry pass or token pass with him while he is inside the Power House.
31. Identity cards to the contract workers which have to be issued by the respective contractors.
32. All the scrap/waste oil generated should be disposed off to the scrap yard or any other designated place as instructed by Engineer in Charge.
33. Insulation scrap materials like glass wool, ceramic wool etc. should be collected in gunny bags with proper care and then disposed of at suitable location as per the instruction of engineer in charge.

29.0 LIQUIDATED DAMAGES (LD):

If the plant availability factor as per Clause 32 falls below 80% and the feeding quantity to the unit bunkers falls below the minimum monthly quantity as per Schedule Item 1 or 3 then LD will be levied at the rate of 25% of the calculated awarded rate per MT for the shortfall quantity, for the reasons solely attributable to the contractor.

30.0 DEMURRAGE CHARGES PAYABLE BY THE CONTRACTOR:

In case of any delay in unloading the railway wagons over the free time allowed by Railways due to the reasons solely attributable to the contractor, the demurrage charges payable to the Railway authorities will be recovered from the contractor's bills. The reasons attributable to TANGEDCO and O&M CONTRACTOR are as furnished below.

Reasons attributable to	
TANGEDCO	O&M CONTRACTOR
1) Any specific instruction for stoppage by TANGEDCO.	1) System Failure including locomotives and for reasons solely attributable to the contractor.
2) Non availability of power points or any other Railway related reasons.	2) Non availability of labour
3) Bulge boxes, wagon equipment failures pertaining to railways.	3) Non-cooperation of labour / Non-working of labour / Failure to obey the instruction of Engineer in charge.
4) Failure of power supply to Coal Handling Plant.	4) Delay in previous rakes unloading due to reasons solely attributable to the contractor.
5) Non availability of stock yard and all bunkers in filled condition.	5) Any unforeseen causes solely attributable to the contractor.
6) Delay due to boulders / wet coal / sticky coal.	
Note: - The wagons which cannot be admitted into the wagon tippler tables are construed as bulge boxes.	

Note-1(a): In case of receipt of wet coal and bunching of rakes as accepted by the Railways, the waiver benefit granted by the railways will be passed onto the O & M Contractor.

Note-2: In case of any dispute in assessment of demurrage charges payable by the contractor, the TANGEDCO's decision is final.

31.0 TERMS AND CONDITIONS FOR PRICE BASIS:

The bidders shall quote the 1st Year Price on lump sum basis for Schedule Item Nos. (1) & (3) and on lumpsum on pro-rata basis for Schedule Item Nos. (2) & (4) as per price schedule format provided in the tender specification and upload the same. Escalation for the awarded rates is applicable for the balance period of contract from 2nd year of contract @ 5% on the first year rate, 3rd year of contract @ 10% on the 1st year rate, 4th year of contract @ 15% on the 1st year rate, 5th year of contract @ 20% on the 1st year rate and for any extension thereof.

Price quoted shall include cost of all spares and consumables which are covered in the contractor's scope and operation and maintenance of the plant to meet out TANGEDCO's requirement as specified in the tender specification. Bidders are requested to quote their operation and maintenance charges as per the price schedule enclosed herewith.

32.0 ENSURING OF MINIMUM AVAILABILITY FACTOR: ■

(i) MTPS-I

The MTPS-I Coal Handling Plant should be made available for operation to receive coal from rakes arriving at MTPS siding and for feeding coal to MTPS-I coal yard / bunkers for at least 80% hours of the total hours of coal stacking and feeding operations in a month (i.e. all stoppages of conveyors for reasons solely attributable to the contractor's scope of work will be taken into contractor's account and other stoppages owing to operational aspects which are attributable to TANGEDCO will not be taken into the contractor's account for calculation of Plant Availability).

(iii) MTPS-II

The MTPS-II Coal Handling Plant should be made available for operation to receive coal from rakes arriving at MTPS siding and for feeding coal to MTPS II coal yard / bunkers for at least 80% hours of the total hours of coal stacking and feeding operations in a month (i.e. all stoppages of conveyors for reasons solely attributable to the contractor's scope of work will be taken into contractor's account and other stoppages owing to operational aspects which are attributable to TANGEDCO will not be taken into the contractor's account for calculation of Plant Availability).

$$\text{Coal Handling Plant Availability Factor} = \frac{(\text{Net Available Time} - \text{Down Time Losses})}{\text{Net Available Time}} \times 100$$

Note: Net Available Time & Down Time Losses will be as per the records maintained in the Respective CHP Control Room

33.0 PAYMENT TERMS:

- a) i) The monthly charges payment for Schedule-A shall be as per the awarded price and as per the clause 34.0, (Sl.No. 1 & 3).
 ii) The above payment is applicable only when the system availability is at or above 80% and other conditions are met out by the contractor. Otherwise the payment will be made as per Clause 35.3.
- b) 100% payment with GST will be paid at the awarded price for the each work as per Schedule-A (Sl.No.1 & 3) on monthly basis irrespective of quantities fed to unit bunkers.
- c) The overall quantity fed to Unit bunkers on each work/ item for each contract year shall be reconciled on annual basis for each Work.

In case the actual quantity fed to Unit bunkers in a year is more than the annual schedule quantity indicated in the clause 34 (1) & (3), the payment for the quantity fed to Unit bunkers over and above will be paid as tonnage pro-rata basis as per the awarded price as in schedule - A (Sl.No. 2 & 4) for the respective plant.

In case the actual quantity fed to Unit bunkers in a year is less than the annual schedule quantity indicated in the clause 34 (1) & (3), payment of the fixed charges already made will stay.

- d) The billing quantity of coal will be taken as only the actual quantity of coal fed to the boiler unit for generation for every month and the same only will be taken for annual reconciliation quantity of coal. In case of the unit under shutdown, the coal handling plant has to be operated invariably with maintaining stacking to the yard to its maximum capacity as directed by the Engineer in charge for which the monthly fixed charges only will be paid for that period.
- e) The annual reconciliation payment will be made at the first month of the succeeding year of previous contract year.
- f) The payment will be made by DFC/Central Payment, TANGEDCO, Chennai-600 002.

34.0 Quantities for Fixed Charges (1 & 3) & Variable Charges (2 &4) payable to the contractor:

Sl.No	Quantity	Description of Work
1	12 Months	Charges for Operation and Maintenance of Coal Handling Plants Complete System , Operation & Maintenance of Locomotives, Railway siding, Wagon Tippers and Bulldozers including supply of all spares (excluding OEM Spares, Hydraulic Spares, Iron & Steel, Gear Box Spares etc., and certain works as listed in Annexures- I), consumables, T&Ps and PPE etc., to meet out the stations' generation requirements as instructed by the Engineer In charge at MTPS-I, For feeding of Coal to Unit Bunkers (For a quantity of Up to 2664500MT for 1 Year)
2	1 Year	Charges for Operation and Maintenance of Coal Handling Plants Complete System , Operation & Maintenance of Locomotives, Railway siding, Wagon Tippers and Bulldozers including supply of all spares (excluding OEM Spares, Hydraulic Spares, Iron & Steel, Gear Box Spares etc., and certain works as listed in Annexures- I), consumables, T&Ps and PPE etc., to meet out the stations' generation requirements as instructed by the Engineer In charge at MTPS-I, For Feeding of Coal to Unit Bunkers (From 2664501MT to 3730300 MT)
3	12 Months	Charges for Operation and Maintenance of Coal Handling Plants Complete System , Operation & Maintenance of Locomotives, Railway siding, Wagon Tippers and Bulldozers including supply of all spares (excluding OEM Spares, Hydraulic Spares, Iron & Steel, Gear Box Spares etc., and certain works as listed in Annexures- II), consumables, T&Ps and PPE etc., to meet out the stations' generation requirements as instructed by the Engineer In charge at MTPS-II, For feeding of Coal to Unit Bunkers (Up to 2007500 MT for 1 Year)
4	1 Year	Charges for Operation and Maintenance of Coal Handling Plants Complete System , Operation & Maintenance of Locomotives, Railway siding, Wagon Tippers and Bulldozers including supply of all spares (excluding OEM Spares, Hydraulic Spares, Iron & Steel, Gear Box Spares etc., and certain works as listed in Annexures- II), consumables, T&Ps and PPE etc., to meet out the stations' generation requirements as instructed by the Engineer In charge at MTPS-II, Feeding of Coal to Unit Bunkers (From 2007501 to 2810500 MT)

Note - 1: For additional coal quantity fed to unit Bunkers for MTPS-I from 2664501 MT to 3730300 MT, charges will be paid on tonnage pro-rata basis in the quoted price in the Schedule 2 after reconciliation at the end of the year

Note - 2: For additional coal quantity fed to unit Bunkers for MTPS-II from 2007501 MT to 2810500 MT, charges will be paid on tonnage pro-rata basis in the quoted price in the Schedule 4 after reconciliation at the end of the year

Note - 3: Quantity may vary from the order to the extent of 25% on either way of the requirement indicated in the tender documents as per Tamilnadu Transparency in Tender Rule 2000 Chapter IV, 14. Commercial Condition, Clause-9.

Note - 4: The price quoted in Price Schedule should be kept firm for the first year. Annual escalation for the awarded amount is applicable for the further 4 years with fixed annual escalation of 5% on 1st year price from 2nd year onwards.

35.0 PRICE VARIATION :

The price awarded should be kept firm for the first year. Escalation for the awarded quoted rates is applicable for the balance period of contract from 2nd year of contract @ 5% on the first year rate, 3rd year of contract @ 10% on the 1st year rate, 4th year of contract @ 15% on the 1st year rate, 5th year of contract @ 20% on the 1st year rate and for any extension thereof.

If the contract period is extended, the escalation will also be given for awarded rate for the subsequent years as per the above terms.

35.1 (i) If the system availability factor is not achieved due to the following reasons then it will be construed that the reasons are attributable to TANGEDCO.

- a) Upto the period of completion of revamping/repair/rectification works of entire system as assessed during the join inspection for the reasons not solely attributable to the contractor.
- b) Any unforeseen causes other than the above not solely attributable to the contractor.

(ii) If the monthly quantity pertaining to the monthly charges at the awarded price is not fed to unit bunkers due to the following reasons, then it would be construed that the reasons are attributable to TANGEDCO:

- a) Required quantity of coal is not available for feeding purpose.
- b) Non Receipt of rail rakes at MTPS siding.
- c) If the works under TANGEDCO's scope are not carried out in time.
- d) Any unforeseen causes other than the above not solely attributable to the contractor.

35.2 If the system availability of 80% or above is maintained, but other conditions stipulated in the Technical specification are not met out due to reasons not solely attributable to the contractor, then the Monthly Fixed Charges will be paid as per clause 33.a.(i)

35.3 If the system availability is less than 80% and also other conditions are not met out but the quantity pertaining to the monthly charges is achieved, then full applicable Fixed charges will be paid as per awarded rate as per clause 33.a.(i)

35.4 If the System availability is less than 80% and also other conditions are not met out and the quantity pertaining to the monthly charges is not achieved for the reasons solely attributable to the contractor, then the Monthly Fixed Charges will be paid as below:

Let the Actual System availability be (%)	"E"
The billing for MTPS-I will be	Calculated Awarded Rate / MT X Actual Qty of coal handled X (E ÷ 80)
The billing for MTPS-II will be	Calculated Awarded Rate / MT X Actual Qty of coal handled X (E ÷ 80)

35.5 PENALTY:

- I. Rs. 1000/- per outages of coal mills of MTPS-I & II due to entry of any foreign materials will be recovered from the running bills on monthly basis if the reason is solely attributable to the contractor.
- II. Penalty @ Rs.1,00,000/- (Rupees One Lakh only) per empty bunker per calendar day or part thereof shall be imposed due to any coal bunker is in empty condition though the coal is available and the reason is solely attributable to the contractor.
The calendar day shall mean 00.00 Hrs to 24.00 Hrs.

36.0 EVALUATION OF PRICE BIDS

The O&M charges on quoted price as Fixed Charges (monthly charges) on Lumpsum basis and the Variable Charges (yearly charges) on lumpsum on pro-rata basis (Including EPF, ESI, all consumable and the spares covered in the contractor's scope) shall be taken as the base price.

Applicable GST shall be added over the above value.

TANGEDCO will not accept any deviations either in the commercial terms or in the technical terms of the tender specification.

37.0 PENALTY FOR DELAY IN COMMENCEMENT OF O & M WORKS:

If the contractor fails to commence O & M works as per contract conditions, then penalty at the rate of 50% of the O & M charges on awarded price on pro-rata basis (monthly charges) per month will be levied for non-commencement of works as agreed.

If the commencement of work exceeds more than one month the order will be terminated without any notice.

38.0 DEDUCTIONS FROM CONTRACT PRICE:

All cost, damages, or expenses which the owner might have paid, for which under contract, the contractor is liable, shall be deducted by the owner from any amount due or becoming due to the contractor under the contract or shall be recovered by action of law or otherwise from the contractor.

In the event of recovery to the necessary extent becoming impossible owing to insufficiency of the EMD, SD and withheld amount, the balance due to the TANGEDCO shall be recovered as arrears of land revenue under 'The Madras Revenue Recovery Act 1864' or by other legal terms.

39.0 FORCE MAJEURE:

If at any time, during the continuance of the contract, the performance in whole or in part, in any obligation under this contract, shall be prevented or delayed by reasons of any war, hostility, acts of public enemy, acts of civil commotion, strikes, lockouts, sabotages, fires, floods, explosions, epidemics, quarantine restrictions or other acts of God (herein after referred to as eventualities) then, provided notice of the happening of any such eventuality is given by the tenderer to the TANGEDCO within 15 days from the date of occurrence thereof, neither party shall, by reasons of such eventuality, be entitled to terminate this contract nor shall have any claim for damages against the other in respect of such non-performance or delay in Performance and deliveries under this contract, shall be resumed as soon as practicable after such eventuality has come to an end or ceased to exit.

Provided that if the performance in whole or part by the supplier / Contractor on any obligation under this contract is prevented or delayed by reasons of any eventuality for a period exceeding 60 days, the TANGEDCO may at its option terminate this contract by a notice in writing.

40.0 FAILURE TO EXECUTE THE CONTRACT AS PER THE PO CONDITIONS AND TECHNICAL SPECIFICATION:

The tenderer is responsible, if, they fail to execute the order placed on them to the satisfaction of TANGEDCO under the terms and conditions set forth therein will be liable to make good the loss sustained by TANGEDCO consequent to the placing of fresh orders elsewhere at higher rate, i.e., the difference between the price accepted in the contract already entered in to and the price at which fresh

orders have been placed. This is without prejudice to the imposition of Liquidated Damages and forfeiture of Security Deposit for the breach of contract.

41.0 **POWERS TO TERMINATE THE CONTRACT:**

In the event of Non-fulfillment and lack of diligence, the contract will be terminated and the security deposit and Earnest Money Deposit will be forfeited. In that circumstance, TANGEDCO reserves the right, to arrange some other contractor for the execution of this contract. The TANGEDCO the right to terminate the contract by giving one month prior notice without assigning any reason

42.0 **EFFECTING OF RECOVERIES:**

Any loss, arising incident to non-fulfillment of this contract or any other contract, will be recovered from the Security Deposit and Earnest Money Deposit held and or any other amount due to the Contractor from TANGEDCO

43.0 **RECTIFICATION OF DEFECTIVE WORKMANSHIP:**

1. Notwithstanding anything contained in Liquidated Damages clause of this specification, where the whole or part of the materials supplied and workmanship by the contractor are found to be defective or damaged or are not in conformity with the specification, such defects or damages in materials supplied and workmanship shall be rectified within 30 days from the date of intimation of the defect/ damage from the TANGEDCO. If the defects or damages are not rectified or replaced within this period, the supplier shall pay a sum towards liquidated damages clause given above, for the delay in rectification/ replacement of the defects or damages.
2. If even after such rectification or replacement of the damaged or defective part if the equipment/ materials ordered is not giving satisfactory performance as per the contract, then it will be open to the TANGEDCO either to reject the goods or repudiate the entire contract and claim such loss sustained by the TANGEDCO.

44.0 **JURISDICTION FOR LEGAL PROCEEDINGS AFTER AWARD OF PO NO:**

No suits or any proceeding in regard to any matter arising in any respect under this contract shall be instituted in any court save in the Civil Court of Chennai or the court of small causes in Chennai. It is agreed that no other court shall have jurisdiction to entertain any suit or proceedings even though part of the cause of action might arise within their jurisdiction. In case any part of the cause of action arises within the jurisdiction of any of the courts in Tamil Nadu and not in the courts of Chennai city then, it is agreed to between the parties that such suits or proceedings shall be instituted in a court within Tamil Nadu and no other court outside Tamil Nadu shall have jurisdiction even though any part of cause of action might arise within the jurisdiction of such courts.

45.0 **ARBITRATION ACT NOT TO APPLY:**

TANGEDCO will not accept arbitration in case of disputes arising in any respect under this contract. Any dispute arising out of this contract shall not be subject to arbitration under the provision of Arbitration Act 1940 or any other enactment in replacement thereof in the event of any dispute between the parties.

Sd/xxx
SE/M-II/MTPS-II

Sd/xxx
SE/M-II/MTPS-I

TECHNICAL SPECIFICATION

SECTION VI

TECHNICAL SPECIFICATION

BRIEF DESCRIPTION OF THE COAL HANDLING PLANT/MTPS-I/METTUR DAM

After placing the coal rakes by Railways, the Coal wagons are brought to the Wagon tippler by Locomotives. The wagons are tipped into the hopper / Apron feeders 1 to 4. From the Apron feeders the coal is fed to the underground conveyor 1 to 4. The Conveyors 6A / 6B receive the coal from the conveyors 1 to 4 and pass on to further downstream conveyors. The integral weigh bridge records the gross and tare weight of the wagons before and after tipping the wagons.

The Coal is transported through conveyors 6A / 6B, 7A / 7B and to the Primary crushers house and then to the Secondary crusher house through conveyors 8A1 / 8B1. The conveyors 7A / 7B are equipped with Inline Magnetic Separators (IMS) 1A & 1B for separating tramp iron particles from coal prior to discharge in to the Bradford breakers(PCR), where coal size is reduced to less than 150 mm. PCR bypass arrangement is also provided. From the Primary crusher house, the conveyors 8A1/8B1 discharge the coal to the Secondary crusher house. The conveyors 8A1 / 8B1 are equipped with Suspended Magnetic Separators (SMS) A & B and Inline Magnetic Separators IMS 2A & 2B for separating tramp iron particles from coal. The Secondary crusher house is equipped with flow dividers, roller screens and ring granulators. In ring granulators, the coal size is reduced to less than 25 mm.

Two (2) nos. of reversible bucket wheel type Stacker cum Reclaimers are provided for stacking and reclaiming of coal at coal yard. The coal received from Secondary Crusher house through conveyors 8A2 / 8B2 is sent to the bunkers. When the bunkers remain full, the coal will be stacked in the Coal Stock yard through the Stacker cum Reclaimers. When there is no receipt of coal, the coal stacked in the coal yard is reclaimed by utilizing the SCRs and is fed to the bunkers. The crushed coal is stacked on either side of SCRs through boom conveyor upto a height of approx. 9m. The stacked coal is reclaimed from the stock pile by means of Stacker cum reclaimer and is fed to the reversible boom conveyor which in turn feed the conveyor 13 / 17.

In the event of Stacker cum Reclaimer not in operation, the crushed coal can be reclaimed by emergency reclaimer hopper through Bull dozers. Conveyor 16 receive the coal from the emergency reclaim hopper and feed the crushed coal to the main line conveyors 9A / 9B. The conveyors 9A / 9B is equipped with Inline Magnetic Separators (IMS) 3A & 3B for separating tramp iron particles from coal prior to discharge to bunkers. In the event of Stacker cum Reclaimers are not in operation and coal is not required for bunkers, the coal have to be stacked through Emergency stacking arrangement via telescopic chute through Conveyor 14. In the event of non-availability of Stacker cum Reclaimers machines and non-receipt coal rakes, the coal has to be fed to the bunkers through Emergency Reclaiming arrangement

The conveyors 15A / 15B is equipped with Inline Magnetic Separators (IMS) 4A & 4B for separating iron particles from coal. In line belt weighers are provided in Conveyor 9A / 9B and Boom Conveyors of Stacker Cum Reclaimer I & II. Flap gates, Rack and Pinion gates, Dust extraction system, plain water type Dust suppression system etc., are also provided.

TECHNICAL DETAILS OF THE SYSTEM:

The technical details of the equipment, details of routine and periodical maintenance required are furnished below:

EQUIPMENT TECHNICAL PARAMETERS:

Sl No	Description	Location	Rated Capacity	Qty.
1	Diesel Hydraulic Locomotives Make: SAN	CHP-I	650 HP	3 Nos.
2	Diesel Electric Locomotive Make: BHEL	CHP-I	700 HP	3 Nos.
3	Railway Track line	CHP-I	Broad gauge, 52 Kg. Rail mounted on CST 9 sleeper/ PSC sleepers.	36 Kms
4	Railway Track line	CHP-I	Point and crossings	57 Nos.
5	Wagon Tippler 1 to 4	Wagon Tippler complex	500 MTPH each	4 Nos.
6	Apron Feeder 1 to 4	Wagon Tippler complex	500 MTPH each	4 Nos.
7	Dribble conveyor 1 to 4	Wagon Tippler complex	500 MTPH each	4 Nos.
8	Conveyor 1 to 4	Wagon Tippler complex	500 MTPH each	4 Nos.
9	Belt feeder 1 to 4	Wagon Tippler complex	500 MTPH each	4 Nos.
10	Sump Pump	Wagon Tippler complex, Tunnel Conveyors & MCC - II		19 Nos.
11	Conveyor 6A/6B	Tunnel Area	1500 MTPH each	2 Nos.
12	Belt feeder 6A/6B	Tunnel Area	1500 MTPH each	2 Nos.
13	Conveyor 7A/7B	Between conveyor 6A/6B to PCH	1500 MTPH each	2 Nos.
14	Inline Magnetic Separator 1A/1B	PCH		2 Nos.
15	Manual Flap Gate 1 & 2	PCH		2 Nos.
16	Bradford breaker (PCR)	PCH	1500 MTPH each	2 Nos.
17	Reject Conveyor R1 & R2	PCH	150 MTPH each	2 Nos.
18	Water pump	PCH		2 Nos.
19	Suspended Magnetic Separator A & B	Conveyor 8A1/8B1		2 Nos.
20	Conveyor 8A1/8B1	Between PCH to SCH	1500 MTPH each	2 Nos.
21	Inline Magnetic Separator 2A/2B	SCH		2 Nos.
22	Roller Screen	SCH		3 Nos.
23	Belt Feeder 13A2	SCH	1500 MTPH each	1 No.

24	Ring Granulator 1A/2A/1B/2B	SCH	850 MTPH each	4 Nos.
25	Belt Feeder 7A1,7A2,7B1,7B2	SCH	1500 MTPH each	4 Nos.
26	Conveyor 8A2/8B2	Between SCH and TT1A	1500 MTPH each	2 Nos.
27	Belt Feeder 8A,8B	TT1A	1500 MTPH each	2 Nos.
28	Conveyor 9A/9B	Between TT1A and JT-2	1500 MTPH each	2 Nos.
29	Inline Magnetic Separator 3A/3B	JT-2		2 Nos.
30	Conveyor 10A/10B	Between JT-2 and JT-1	1500 MTPH each	2 Nos.
31	Belt Feeder 9A,9B	JT-1	1500 MTPH each	2 Nos.
32	Conveyor 11A/11B	Bunker Top	1500 MTPH each	2 Nos.
33	Travelling Tripper	Bunker Top	1500 MTPH each	2 Nos.
34	Conveyor 12A1/12B1	Between TT1A and TT-2	1500 MTPH each	2 Nos.
35	Belt Feeder 10A,10B	TT-2	1500 MTPH each	2 Nos.
36	Conveyor 13	Coal Yard	1500 MTPH	1 No.
37	Conveyor 12A2/12B2	Between TT-2 and JT-4	1500 MTPH each	2 Nos.
38	Belt Feeder 11A/11B	JT-4	1500 MTPH each	2 Nos.
39	Conveyor 14	Coal Yard	1500 MTPH	1 No.
40	Belt Feeder 12A,12B	ERH	1500 MTPH each	2 Nos.
41	Conveyor 16	Between ERH and JT-4	1500 MTPH	1 No.
42	Conveyor 17	Coal Yard	1500 MTPH	1 No.
43	Conveyor 18	Between JT-4 and JT-3	1500 MTPH	1 No.
44	Conveyor 15A/15B	Between JT-3 and TT1B	1500 MTPH each	2 Nos.
45	Inline Magnetic Separator 4A/4B	TT1B		2 Nos.
46	Dust Extraction System	CHP-I and CHP-II areas		21 Nos.
47	CCTV & Surveillance camera	CHP-I and CHP-II areas		As handed over.
48	Air Ventilation System	Wagon Tippler Complex		1 No.
49	Air Ventilation System	Conveyor 6A/B,7A/B		2 Nos.

Abstract of Mechanical Equipments:

SI No.	Equipment	Qty.
1	Diesel Hydraulic Locomotives Make: SAN	3 Nos.
2	Diesel Electric Locomotive Make: BHEL	3 Nos.
3	Railway Track line	36 Kms

4	Railway Point & Crossings	57 Nos.
5	Wagon Tippler	4 Nos.
6	Apron Feeder	4 Nos.
7	Belt Weigher	4 Nos.
8	Belt Conveyor	29 Nos.
9	Reject Conveyor	2 Nos.
10	Ring Granulator	4 Nos.
11	Dribble Conveyor	4 Nos.
12	Emergency Reclaim Hopper	1 No.
13	Motorized Flap Gate	6 Nos.
14	Belt Feeder unidirectional / Reversible	21 Nos.
15	Inline Magnetic Separator	8 Nos.
16	Integral Weigh Bridge	4 Nos.
17	Junction Tower	4 Nos.
18	Bunker Level Indicator	24 Nos.
19	Primary Crusher House	1 No.
20	Pent House	1 No.
21	Bradford Breaker	2 Nos.
22	Reject Hopper	1 No.
23	Rack & Pinion Gate	2 Nos.
24	Roller Screen	3 Nos.
25	Secondary Crusher House	1 No.
26	Stacker cum Reclaimer	2 Nos.
27	Suspended Magnetic Separator	2 Nos.
28	Sump Pump	19 Nos.
29	Transfer Tower	3 Nos.
30	Travelling Tripper	2 Nos.
31	Flow Divider	2 Nos.
32	Cable Reeling Drums	2 Nos.
33	Telescopic Chute	1 No.
34	Dust Extraction System	22 Nos.
35	Dust Suppression Pump	11 Nos.
36	Dust Suppression System in WT area	4 sets (200 nos /set)
37	Air Ventilation System	3 Nos.
37	Bulldozer	6 Nos. as handed over.

Abstract of Electrical Equipments:

Sl No.	Equipment	Qty.
1	Power transformer (various rating)	6 Nos.
2	Switch gear MCC-I & II, ans SCR M/c I & II	4 Nos.
3	HT Motors approx. (Various ratings)	23 Nos.
4	LT Motors approx. (Various ratings)	201 Nos.
5	PLC panels and Thyristor panels	4 Nos.
6	LDB Panel (MCC-I & II)	12 Nos.
7	Air washer system	2 Nos.
8	Weighment computers	5 Nos.
9	Weighment computer server and printer	1 No.
10	100 ton electronic weigh bridges in wagon tippler 1 to 4	4 Nos.
11	AC Machine 1Ton, 1.5Ton, 2 Ton single phase	16 Nos.
12	Computer and accessories	LS
13	Battery & Battery chargers, UPS	LS
14	Radio modem	10 Nos.
15	Variable frequency drives	6 Nos.
16	HMI and SCADA systems	3 Nos.
17	Pull cord monitor system	1 No.
18	High mast and lighting towers	15 Nos.
19	CCTV Camera	As handed over.

Sd/xxx
SE/M-II/MTPS-I

BRIEF DESCRIPTION OF THE COAL HANDLING PLANT/MTPS-II/Mettur Dam

The Coal wagons will be brought to the Wagon tippler through Locomotives. One wagon at a time will be placed on the table of wagon tippler. The wagons will be tipped into the hopper/Apron feeders 5&6. From the Apron feeders the coal will be feed to the underground conveyor 1A/1B. The Conveyors 2A/2B will receive the coal from the conveyors 1A/1B and pass on to further downstream conveyors. The integral weigh bridge will record the gross and tare weight of the wagons before and after tipping the wagons.

The Coal will be transported through conveyors 2A/2B to the Primary crushers house and then to the Secondary crusher house through conveyors 3A/3B and 4A/4B. The conveyors will be equipped with Magnetic Separators for separating tramp iron particles from coal prior to discharge in to the Rotary Breakers (Primary Crusher), where coal size will be reduced (-) 150 mm. Rotary Breaker (Primary Crusher) bypass arrangement also provided. From the Primary crusher house, the conveyors 3A/3B & 4A/4B will discharge the coal to the Secondary crusher house. The Secondary crusher house will have Flow Dividers, Roller Screens, Ring Granulators (Secondary Crusher). In Ring Granulators, the coal size will be reduced to (-) 25 mm. Elevators are provided in PCH and SCH

Two (2) nos. of Reversible bucket wheel type Stacker cum Reclaimers erected in the eastern side adjacent to the existing coal yard with suitable provision for emergency stacking/reclaiming of coal at new yard. The coal received from Secondary Crusher house thro' conveyors (5A & 5B) will be sent to the bunkers/mills directly when the bunkers are empty. When the bunkers will remain full, the coal will be stacked in the new stock yard through the Stacker cum Reclaimers. When there is no receipt of coal, the coal stocked in the coal yard will be reclaimed by utilizing the SCRs and fed to the bunkers/mills. The crushed coal will be stacked on either side of rail track through boom conveyor upto a height of approx. 9m. The stacked coal will be reclaimed from the stock pile by means of bucket wheel and will be fed to the reversible boom conveyor which in turn will feed the conveyor no.7 or 9.

In the event of bucket wheel reclaimer not in operation, the crushed coal can be reclaimed by Emergency Reclaimer hopper through Bull dozers. Conveyor no.15 will receive the feed from the emergency reclaim hopper and feed the crushed coal to the main line conveyors 6A & 6B.

The Conveyors 13A/13B are equipped with Belt Weighers for weighing prior to discharge to respective bunkers.

In Conveyor line belt weighers, suspended magnets, metal detectors, inline magnetic separator, flap gates, rack and pinion gates, Dust extraction system, plain water type Dust suppression system etc., are provided wherever required.

TECHNICAL DETAILS OF THE SYSTEM:

The technical details of the equipment, details of routine and periodical maintenance required are furnished below:

EQUIPMENT TECHNICAL PARAMETERS:

Sl No	Description	Location	Rated Capacity	Qty.
1	Wagon Tippler 5&6	Wagon Tippler complex	1100 MTPH each	2 Nos.
2	Apron Feeder 5&6	Wagon Tippler complex	1000 MTPH each	2 Nos.
3	Dribble Feeder 5&6	--do--	200 MTH each	2 Nos.
4	Conveyor 1A/1B	Tunnel Area	1000 MTPH each Length:67.415 M each	2 Nos
5	Sump Pump	--do--		4 Nos
6	Flap Gate 1&2	Transfer House		2 Nos.
7	Inline Magnetic Separator 1&2	--do--		2 Nos.
8	Sump Pump	--do---		2 Nos
9	Conveyor 2A/2B	Between Transfer House to PCH	1000 MTPH each Length:554.720 each	2 Nos.
10	Inline Magnetic Separator 3&4	PCH		2 Nos.
11	Reversible Belt Feeder 1&2	PCH	1000 MTPH each	2 Nos.
12	Rotary Breaker 1&2	PCH	1100 MTPH each	2 Nos.
13	Reject Conveyor	PCH	50 MTPH	1 No.
14	Sector Gate	PCH		1 No

15	Belt Feeder 1& 2	PCH	1000 MTPH each	2 Nos.
16	Flap Gate 3&4	PCH		2 Nos.
17	Rack & Pinion Elevator 1	PCH		1 No.
18	Suspension Magnetic Separator 1 & 2	In Conveyor 3 A/3 B		2 Nos
19	Conveyor 3 A/3 B	Between PCH and JT-7	1000 MTPH each Length:263.300 m each	2 Nos.
20	Flap Gate 5 &6	Junction Tower-7		2 Nos
21	Conveyor 4 A/ 4B	Between JT-7 and SCH	1000 MTPH each Length:215.030 m each	2 Nos.
22	Inline Magnetic Separator 5&6	SCH		2 Nos.
23	Flow Divider 1 &2	SCH	850 MTPH each	2 Nos.
24	Roller Screen 1A/2A/1B/2B	SCH	850 MTPH each	4 Nos.
25	Ring Granulator1A/2A/1B/2B	SCH	850 MTPH each	4 Nos.
26	Reversible Belt Feeder 3 & 4	SCH	1000 MTPH each	2 Nos.
27	Belt Feeder3/4/5/6	SCH	1000 MTPH	4 Nos.
28	Rack & Pinion Elevator 1	PCH		1 No.
29	Conveyor 5A/5B	Between SCH and JT-6	1000 MTPH each Length 5A:185.742 m 5B:188.941 m	2 Nos.
30	Belt Weigher 1& 2	In Conveyor 5 A/5 B		2 Nos
31	Reversible Belt Feeder 5&6	JT-6	1000 MTPH each	2 Nos.
32	Belt Feeder 7	JT-6	1000 MTPH	2 Nos.
33	Flap Gate 7&8	JT-6		2 Nos
34	Conveyor 15	Between ERH and JT-6	1000 MTPH Length:271.099 m	1 No
35	Rod Gate 1 & 2	ERH		2 Nos.
36	Rack and Pinion Gate 1 & 2	ERH		2 Nos.
37	Vibro Feeder 1 & 2	ERH		2 Nos.
38	Conveyor 14	JT-6 to Telescopic Chute	1000 MTPH Length:211.909 m	1 No
39	Sump Pump	Conveyor-15 Tail End		2 Nos
40	Telescopic Chute			1 No.
41	Conveyor 6 A/6B	Between JT-6 and JT5	1000 MTPH each Length:218.841 m each	2 Nos.
42	Reversible Belt feeder 8 /9/10	JT-5	1000 MTPH each	3 Nos.
43	Flap Gate 9/10	JT-5		2 Nos.
44	Reversible Conveyor # 7	Between Drive House-I and Junction Tower-5	Cap:1000 TPH Length: 1201.774 m	1 No.
45	Stacker Cum Reclaimer-I	Coal Yard	Reclaiming mode i) Average 700 TPH ii) Peak:1000 TPH Stacking mode i) Stacking : 1000TPH	1 No.
46	Conveyor # 8A/8B	Between Junction Tower - 5 and Junction Tower-4	Cap:1000 TPH Length:141.401 m each	2 Nos.
47	Reversible Belt Feeder 11/12	Junction Tower-4	Cap:1000 TPH	2 Nos.
48	Flap Gate 11/12	Junction Tower-4		2 Nos.
49	Conveyor # 10A/10B	Between Junction Tower - 4 and Junction Tower-3	Cap:1000 TPH Length:240.154 m each	2 Nos.

50	Reversible Belt Feeder 13/14	Junction Tower-3	Cap:1000 TPH	2 Nos.
51	Flap Gate 13	Junction Tower 3		1 No.
52	Reversible Conveyor # 9	Between Drive House-II and Junction Tower-3	Cap:1000 TPH Length: 1548.891 m	1 No.
53	Stacker Cum Reclaimer-II	Coal Yard	Reclaiming mode i) Average 700 TPH ii) Peak:1000 TPH Stacking mode i) Stacking : 1000TPH	1 No.
54	Conveyor # 11A/11B	Between Junction Tower - 3 and Junction Tower-2	Cap:1000 TPH Length:166.818 m each	2 Nos.
55	ILMS #7/8	Junction Tower-2		2 Nos.
56	Flap Gate 14/15	Junction Tower-2		2 Nos.
57	Conveyor # 12A/12B	Between Junction Tower-2 and Junction Tower-1	Cap:1000 TPH Length:529.330 m each	2 Nos.
58	Reversible Belt Feeder 15/16	Junction Tower-1	Cap:1000 TPH	2 Nos.
59	Belt Weigher 5/6	Conveyor # 13A/13B		2 Nos.
60	Metal Detector1/2	Conveyor # 13A/13B		2 Nos.
61	Travelling Tripper1/2	Bunker Top	Cap:1000 TPH	2 Nos.
62	Flap Gate 16/17	Travelling Tripper		2 Nos.
63	Conveyor # 13A/13B	Between Junction Tower-1 and Bunker Top	Cap:1000 TPH Length:293.120 m each	2 Nos.
64	Dust Extraction System	PCH, SCH, Bunker Top and Junction Tower 1 to 7		10 Nos.
65	Dust Suppression Pump	DS Pump house		4 Nos.
66	Locomotives	Loco engines	Diesel Hydraulic Locomotives Model : DL-700-HDRIV-O-C-O-67.5T	3 Nos.
67	Dozers	Coal Yard	Model:PD220Y-1 Make:PENGPU Engine Make : Cummins Model: NT855-C280-S10	6 Nos.
68	Air Ventilation System	Wagon Tippler Complex		2 Nos.
69	Air Ventilation System	ERH		1 No.
70	CCTV & Surveillance camera	WT, PCH & Coal yard		CCTV-2 Nos. Camera-16 Nos.

Abstract of Equipments:

Sl No.	Equipment	Qty.
1	Wagon Tippler	02 Nos
2	Apron Feeder	02 Nos.
3	Belt Weigher	06 Nos.
4	Belt Conveyor	26 Nos.
5	Reject Conveyor	01 No.
6	Ring Granulator	04 Nos.
7	Dribble Conveyor	02 Nos.
8	Drive House	02 Nos.
9	Emergency Reclaim Hopper	02 Nos.
10	Motorized Flap Gate	18 Nos.
11	Belt Feeder	07 Nos

12	Inline Magnetic Separator	08 Nos.
13	Integral Weigh Bridge	02 Nos.
14	Junction Tower	07 Nos.
15	Bunker Level Indicator	08 Nos.
16	Metal detector	02 Nos.
17	Primary Crusher House	01 No.
18	Pent House	02 Nos.
19	Rotary Breaker	02 Nos.
20	Reversible Belt Feeder	16 Nos.
21	Reject Hopper	01 No.
22	Rod Gate	02 Nos.
23	Rack & Pinion Gate	02 Nos.
24	Roller Screen	04 Nos.
25	Secondary Crusher House	01 No.
26	Stacker cum Reclaimer	02 Nos.
27	Sector Gate	01 No.
28	Suspended Magnetic Separator	02 Nos.
29	Sump Pump	08 Nos.
30	Transfer House	01 No.
31	Travelling Tripper	02 Nos.
32	Vibratory Feeder	02 Nos.
33	Flow Divider	02 Nos.
34	Cable Reeling Drums(PCRD & CCRD)	04 Nos.
35	Bunker sealing Arrangement	02 Nos.
36	Telescopic Chute	01 No.
37	Dust Extraction System	10 Nos.
38	Dust Suppression Pump	4 Nos.
39	Dust Suppression System	1 Lot
40	Locomotives (SAN)	3 Nos.
41	Mono Rails and Hoists	42 Nos.
42	Dozers (PD220 Y-1)	6 Nos.

Abstract of Electrical Equipments:

SI No.	Equipment	Qty.
1.	Power transformer (various rating)	8 Nos.
2.	Lighting Transformer and Welding Transformers	7 Nos.
3.	Switch gear MCC-I & II, SCR M/c I & II and WT MCC	5 Nos.
4.	HT and LT Breakers, Modules and SFU (various ratings)	LS
5.	HT Motors approx. (Various ratings)	15 Nos.
6.	LT Motors approx. (Various ratings)	260 Nos.
7.	PLC panels	5 Nos.
8.	LDB Panel (MCC-I & II)	6 Nos.
9.	AC Machine 1Ton, 1.5Ton, single phase	4 Nos.
10.	Computer and accessories	LS
11.	Battery & Battery chargers, UPS	LS
12.	Variable frequency drives	6 Nos.
13.	HMI and SCADA systems	4 Nos.
14.	High mast lighting towers	5 Nos.
15.	CCTV Camera	LS

Length of Conveyors to be maintained

Sl. No.	Description	Length (Metres)
1	Conveyor # 1 A/1 B	142.83
2	Conveyor # 2 A/2 B	1125.44
3	Conveyor # 3 A/3 B	534.60
4	Conveyor #4 A/4 B	438.060
5	Conveyor #5A	189.742
6	Conveyor #5 B	192.941
7	Conveyor #6A/6 B	445.682
8	Conveyor #7	1239.48
9	Conveyor #8A/8B	290.802
10	Conveyor #9	1588.5
11	Conveyor #10A/10 B	488.308
12	Conveyor #11A/11B	341.636
13	Conveyor #12A/12B	1070.66
14	Conveyor #13A/13B	594.24
15	Conveyor # 14	215.909
16	Conveyor # 15	275.099
17	Reversible Belt Feeder 1 to 16 & Belt Feeder1 to 7	449.969
18	Bunker sealing	187.534
	Total	9863.042

Sd/xxx
SE/M-II/MTPS-II

SCOPE OF OPERATION & MAINTENANCE (MECHANICAL & ELECTRICAL)

Scope of work for Operations, Routine Maintenance and Up keeping (Mechanical & Electrical), of entire Coal Handling System including Railway siding, Wagon Tippers 1 to 6, Bulldozers-12 Nos. and Locomotives-9 Nos. connected with MTPS-I & II.

Operation (Mechanical & Electrical)

- Total operation of all equipment's including all Mechanical, Electrical and Control & Instrumentation of entire Coal Handling Plant and its auxiliaries so as to maintain adequate bunker level to meet the plant requirement in close coordination with CHP control room as per the Standard operating procedures (SOPs), best industry practices and compliance to all safety norms.
- Operation of Diesel Locomotives – 9 Nos. by engaging Loco drivers, Points man, Coupling / De-Coupling men for unloading of coal wagons through any four of the Wagon tippers 1 to 6 simultaneously. The Loco Driver should possess adequate knowledge of Diesel Engine with minimum qualification of ITI / Diploma and the Points man, coupling / De-Coupling man should have adequate knowledge of Mechanical maintenance works. The Loco Driver, Points man and Coupling / De-coupling men should have good vision and physical strength. Eye test should be carried out for the loco Drivers and Points man, Coupling/De- Couplings man every year by the government medical Practitioner and test certificate to be produced to the TANGEDCO. The unloading activity involves releasing of air hoses of wagons, Marshalling of loaded coal wagons from load lines, placing the loaded coal wagons on the wagon tippler, De-Coupling the loaded coal wagons, tipping the loaded coal wagon in Wagon Tippler, Collection and coupling the coal wagon in tippler outhaul side and Marshalling & formation of empty coal wagons in the empty line to hand over to Railways.
- *Operation of Wagon Tippers 1 to 6 and its weigh bridge* by operators having sufficient, compatible and relevant knowledge of all its Mechanical, Electrical and Instrumentation equipments. Monitoring the choking of hopper grill and to ensure its cleaning after each tipping for optimum utilization of Wagon Tippler.
- Operation of Stacker Cum Reclaimer(SCR) by operators with relevant experience and compatible knowledge in PLC operation of SCR, its protections, mechanical, electrical and C&I parts etc., The operator has to feed or stack coal to or from SCR as and when instructed from CHP control room by adhering to Standard operating procedures (SOPs), best industry practices and compliance to all safety norms.
- Round the clock assistance for the plant operation having adequate competency to work in PLC and related instrumentation in CHP area.
- Ensure adequate bunker levels to prevent any generation risks.
- Operation of Bulldozers for dozing of the coal for stacking since the MTPS Yard capacity necessitates dozing. Further the stacked coals have to be dozed back towards Stacker cum Re-claimers for reclaiming and the stacked coal have to be properly rammed to avoid spontaneous ignition in yard.
- Operation of entire lighting system and auxiliaries such as ventilation system, dust Extraction system, Dust Suppression system, sump pumps, Electrical pumps, EOT/Electrical Hoists, Bag filter devices, Spray system for combating coal fire etc.,
- Operation of dewatering pumps in tunnel area.
- Taking periodical bunker level measurement manually and informing to CHP control room.
- To prevent ingress of magnetic materials and foreign materials in bunkers, proper operation of SMs, ILMS, and MDs.
- Cleaning of all Mechanical, Electrical and Instrumentation equipments on daily basis to ensure healthiness of equipments.
- Monitoring of necessary parameters as per OEM recommendations or as per Engineer-in-charge.
- Management of coal yard including receipt of coal, stacking, feeding etc., Ensure water sprinkling in coal yards to prevent fire in coal heaps, pollution and helping fire service in case of any fire incident in the CHP.
- Removal of oversized coal/boulder received from rakes during unloading at WT and disposal of same to the designated place as per the direction of EIC.
- Stone picking in the conveyors and disposal of stones.

- Monitoring fire and safety parameters and take fire extinguishing actions as needed.
- Maintenance of operational log sheets to be submitted equipment wise on daily basis to ensure healthiness of equipments and optimize operational efficiency.
- Any cleaning and removal of choking of chutes.
- Carrying out of standard checks on all operational requirements of equipments during operation like current, vibration, noise, bearing temperature, oil level etc., as per instruction of EIC.
- Operation of Dust extraction and Dust suppression systems.
- All safety precautions are to be taken during operation of CHP. The contractor shall ensure the emergency preparedness awareness amongst his employees through training classes, mock drill etc.,
- Both the streams of CHP should always be kept in healthy condition. The contractor shall ensure the minimum availability of 80% for individual streams and 100% availability of at least one stream at any point of time.
- If any part of equipment found damaged due to negligent/faulty operation, the cost of such damages shall be recovered from the contractor's RA bill.
- Any failure in coal feeding, yard management, bunker levels, rake unloading due to non-availability, improper operation or insufficient operators as per scope of work which leads to any stream failure will be to the contractor account and shall be penalized as per EIC.
- The contractor shall mobilize additional manpower, without any additional cost, for the operation of plant during monsoon to remove chute choking, removal of sticky coal and slurry at transfer points, transfer of removed material in to conveyor.
- Handling of coal rake right from shunting of load wagons marshalling of load wagons from load lines and decoupling of load wagons and tipping through wagon tipplers 1 to 6 (or any one wagon tippler in MTPS- I & II in case of emergency as directed by the Engineer in charge), collection and coupling of empty wagon of MTPS and formation in MTPS lines for handing over to Railways and Placing of all loco one by one from wagon tippler 1 to 6, to loco shed for attending the maintenance works of locos & return and placing the Locos to diesel bunk for filling diesel & return.
- The above scope of work is indicative only. Any other related work arising for smooth, safe and efficient operation of CHP in all seasons shall be the contractor's scope.

Daily Routine Maintenance and Upkeeping. (Mechanical & Electrical),

- The contractor has to carry out the daily running maintenance as per direction of EIC and schedule annexed and arrange for necessary work permit in every morning and job to be carried out with predefined timed manner.
- After completing scheduled maintenance, the contractor will give report to EIC. The contractor should maintain the records duly reviewed by EIC.
- Apart from scheduled maintenance, the contractor has to provide full maintenance support as per requirement of site other than normal working hours of general shift.
- Collection and removal of coal dust/scattered coal/slurry coal etc., from all crusher houses, tunnels, and associated belt conveyors, and cleaning of all equipments
- Cleaning and removal of jamming/choking coal in discharge chutes, crushers, head and tail pulleys travelling tripper etc.,
- Removal of coal from belt conveyor when required and shifting the coal to the adjacent belt, removal of spilled coal accumulated due to surging and swaying.
- Cleaning of sump pits, cleaning of drains, stair case of all structures gallery walkways, deck plates etc.,
- Cleaning of all the floors of tunnels, conveyor gallery walkways /structures, TP's WT, AF, SCR, bunker floors, Crushers houses pumps and compressor rooms etc.,
- Removal of all cobwebs from all roofs, side walls conveyor gallery etc.,
- Cleaning of spilled coal below all conveyor galleries
- Collection and transportation of coal dust, slurry coal from different areas of CHP like tunnels. Crusher house TPs Conveyor galleries to coal stock yard.
- Cleaning of coals from all beams, truss, cable trays coffin box etc., of CHP
- Cleaning of all the spilled coal due to improper disposition by concerned agency has fallen into location outside area of scope.

- Complete cleaning of equipments, pipeline, ducts etc., on which maintenance is carried out. This includes disposal of scraps, accumulated dust, refuse etc., from the work area to an area earmarked for disposal of these materials as directed by EIC.
- The contractor shall maintain complained log book and all non-compliance by EIC will invite penalty.

Daily & Routine maintenance works in all bulldozers and Locomotives:

- Water & oil level checking and top up, Checking belt tension of alternator & fan, air filter cleaning and renewals if any, Checking of universal joint assembly, checking of steering system & booster, Checking clutch system and brake removing and reassembling, Checking of batteries and if any, Checking and replacing of self-starter and alternator, Checking carrier *rollers, rollers and idlers etc.*, Checking of track shoe assembly tension and bolt & nuts replacing any, Oil leakages arresting in all system, periodic oil servicing and changing filters and etc., Complete water servicing & greasing in all point of the dozer, Renewal of Hoses, 'O' etc., Engine front oil seal and diesel pump changing, diesel tank cleaning and assembling, etc., Carrying out all the other allied minor works to keep the dozer in operating condition directed by the Engineer in-charge at site, including cost of T&Ps and consumables.

Details of works to be carried out

- A) **Operation:** Carrying out the Trial operations/shift operations viz., issuing clearances for starting the equipments/conveyors, monitoring the temperature of bearings, fluid couplings and gear boxes, monitoring the vibration of the equipments, applying of pull chord in case of any abnormalities and resetting after attending any defects and monitoring the running of belts without any sway. Conveying the operating parameters of equipments in Junction Towers, Bunker Top and Stacker Cum Reclaimer etc ., to the Shift operator in CHP MCC-I & II, Fire Quenching & Dust Suppression in Coal Yard and Stone Picking in various locations in Coal Handling Plant/MTPS-I.

B) Preventive and Periodical maintenance of Equipments

1. Railway siding

A	Daily
1	Maintenance of 6 Nos. Locomotives such as radiator water level checking, oil level checking and top up, cleaning the Locomotives, bolt tightness checking such as fan bolt, water pump bolt, alternators bolt, engine bed bolt and compressor bolt etc., battery distilled water level checking, checking of Head light and cabin light bulb, electrical circuit etc. draining the Air tank, Air leak checking, Air filter cleaning, adjusting brake shoes, brake shoe replacement, greasing in cardon shaft, Diesel filling, any welding works if necessary. Stores drawals and devolution of scrap materials to stores etc. Maintaining the loco shed with neat and tidy condition. The required quantity of spares and consumables should be borne by the contractor.
B	B-Check Maintenance
1	'B' check maintenance of 6 Nos. Locomotive after every 300 running hours which includes, draining of old engine oil and filling with new engine oil, replacement of all service filters such as fuel filters, lub oil filters super by pass filter and CR Air intake filter and checking of transmission oil and make up, suspension bearing assembly, all gear oil, all cardon shaft grease filling, all valves operation and connected pipes. Electrical connection and contact checking, Torque arm bush changing, all drives belt checking and traction motors carbon brush changing. Radiators check and water washing including necessary filters as per OEM recommendation, Attending oil leak, diesel leak then and there without delay. The required quantity of Oil, Filters, other spares and Consumables should be borne by the contractor.
C	Break Down Maintenance
	(The necessary spares, consumables and other special materials required to carry out the following breakdown maintenance should be borne by the contractor)
1	Replacement of liner, piston and piston rings, with cylinder head including upper engine gasket and Injector "O" rings etc. including the materials of Upper Engine gaskets and Injector "O" rings.
2	Replacement of traction motor work.
3	Replacement of brake collar assembly and brake cylinder
4	Replacement of wheel and Wheel bearings.
5	Replacement of traction motor bearing including Bearings
6	Repairing of Self stators 32V/24V including all the spares required.
7	Repairing and calibration of fuel pump including the spares required.
8	Repairing of water pump including the overhauling kit.
9	Repairing of turbo charger including the spares required.
10	Calibration of 12 Nos. injectors of engine model VTA 1710 L including spare replacement including the spares required for Injectors.
11	Traction motor pinion changing including pinion
12	Replacing/Rectification of Gear boxes in the M/s. SAN Locomotives.
13	Repairing/ Renewal of new of BN-BX Card including spares and consumables required whenever required.
14	Repairing of L.C.C Card for BHEL Locomotive including the spares and Consumables require whenever required.
15	Repairing of rectifier unit for BHEL Locomotive whenever required.
16	Changing of coil spring for BHEL Locomotive including coil springs
17	Changing of spring bearing assembly for BHEL Locomotive
18	Cardon shaft replacement works whenever required. etc.
19	Replacement of coupling, supporting pad and coupling bracket
20	Spare engine replacement works whenever required.
21	Overhauling of lub oil cooler
22	Replacement of TC oil cooler

23	Replacement of silencer assembly (2 Nos. for 1 Locomotive). Whenever required
24	Replacement of Radiators
25	All electrical wiring replacement in SAN/BHEL Locomotives power cable replacement, control cable replacement, bulb replacement including all electrical works in SAN and BHEL Locomotives including the copper wire required for repair. Any Electrical problems when ever arises, the contractor should attend the problems immediately.
26	Repairing of valves by replacing repair kit including materials such as valve repair kit whenever required.
27	Replacement of final drive assembly with wheel and axle in SAN Locomotive
28	Overhauling of air compressor including all the spares and consumables required.
29	Reconditioning of Locomotive radiators including consumables.
D	Annual Maintenance
1	Overhauling of Locomotive Engine which includes all the spares such as Push rod, main bearing set, Injector, Cylinder liner, Kit piston and rings and other spares and consumables etc. required for the works. (Minimum One Engine per year)
2	Overhauling, Load testing and Certification of 10 tons capacity EOT Crane including bearings, oil seals and other spares, consumables required for the works. (Minimum One time per year)
3	Overhauling of Locomotive alternator including Spares and bearings (Minimum One number per year)
II. Railway Siding/Track Maintenance	
	(The boundary of the track line is from Karumalaikoodall and entire track yard of MTPS)
A	Daily
1	Patrolling of all tracks from karumalai koodal and entire track yard of MTPS-I, checking and tightening of bolts and nuts of fish plate joints, crossing tongue rails, steady bar, stretcher bar, bolts and nuts, two way keys, split cotters / elastic rail clips, points boxes, oil and greasing of tongue rail & switches and side surface of rails head in the curved track line area point box, in entire yard, minor rails replacement and minor track line works. All the Track work should be carried out after getting clearance from Rail ways and Engineer Incharge of TANGEDCO. The work should be carried out without disturbing the movement of Coal rakes (All the consumables required for the work should be borne by the Contractor)
2	Removing of Elastic rail clip by cleaning the insert surface, greasing and re fixing the same including elastic rail clips. (All the consumables such as grease and oil required for the work should be borne by the Contractor)
B	Periodical Track Maintenance
1	Through packing of track lines as per Railway / RDSO specification has to be carried out whenever required.
2	Through packing of point & crossings as per Railway / RDSO specification has to be carried out whenever required.
3	Deep screening of Point & crossings as per Railway / RDSO specification has to be carried out whenever required.
4	Deep screening and through packing of track lines as per Railway / RDSO specification has to be carried out whenever required.
5	Renewal of worn out CST 9 sleepers / wooden sleepers /PSC sleepers by new PSC sleepers (T2496) as per Railway / RDSO specification has to be carried out whenever required.
6	Renewal of Tongue rails, Stock rails and point box for Point and crossings as per Railway / RDSO specification. has to be carried out whenever required
7	Pre-assembling and reversing the grounded rails in to its position fixing the elastic rail clips, fish plate bolts and nuts etc. as per Railway / RDSO specification has to be carried out whenever required.
8	Supply, Leading dumping and spreading hard broken ballast of 40 mm size as per Railway / RDSO specification has to be carried out whenever required

9	Re-railment of empty wagon whenever required including crane and other lifting materials required for the works.
10	Re-railment of loaded coal wagons whenever required including crane and other lifting materials required for the works.
11	Re-railment of Locomotives whenever required including crane and other lifting materials required for the works.
12	Removal of worn out rails, fabricated crossings, stock rails, tongue rails, check rails, damaged wooden steel sleepers, laying of new pre-stressed concrete sleeper layout, cast manganese steel crossings, stock rails, tongue rails, check rails, with all fittings deep screening, through packing 40mm hard broken stone ballast deficiency make up work at point & crossings as per Railway / RDSO specification has to be carried out whenever required.
13	Grinding the elongated edges to right angle to provide the expansion gap in between rails as per Railway / RDSO specification has to be carried out whenever required.
14	Levelling the track rail to zero, by checking and aligning the track rail with piano wire on one side and parallelism of another side rail etc. has to be carried out whenever required
15	Providing PCC 1:2:4 concrete pavements in between railway track line including deep screening hard broken ballast in between track line, earth work excavation, providing well gravel bed, centering and shuttering, thermacool cost and transport of concrete mixture by using JCB whenever required.
16	Dismantling the existing rails after removing the steel keys, fish plate's bolts and nuts in order to provide accessibility for grinding the edges has to be carried out whenever required.
17	Dismantling of plain concrete loading and transporting as directed by Engineer incharge whenever required.

III. Railway Siding/Others Special Works

1	Disconnection of air hoses and brake releasing in all the loaded coal wagons received at MTPS and checking of entire empty coal rake at both sides and closing of opened wagons side doors which had occurred during handling of wagons and to ensure all the wagons side doors are in closed condition after empty formation before releasing to Railways. (All the work should be carried out within the stipulated time given by Railways.)
2	Clearing of scrub jungle in the entire inside and outside track yard area with all safety precautions as directed by the Engineer in-charge at site including all labour, all lead & lift, removal of dried debris far away from site, transporting and all T&P's safety appliances such as face mask, Gum boot etc. The contractor should maintain the entire Railway line from Karumalaikoodal and entire track yard of MTPS with neat and tidy condition without any compliance from Railways .
3	Applying herbicide including cost of herbicide on the entire area of inside and outside track yard surface area for maintaining without further growth of vegetation including sprayer, all lead and lift of materials and water at working spot, removal of dried debris far away from site if necessary, transporting and all T & P's, safety appliances such as face mask, Gum boot etc., complete as directed by the Engineer in charge at site..
4	Cutting and clearing branches of trees and small plants existing near track line of inside, outside and shunting line area which hid the railway signal lamp post, signal between driver and points man. Removal of debris to far away from the site once in two months as directed by the engineer in charge.
5	The contractor should attend all the inspection remarks of railway Track raised by railway inspection team then and there without any delay.
6	All the works in the railway track line should be carried out after getting line clear from railways as directed by Engineer in charge of TANGEDCO. The work should be carried out without hindrance to the movement of coal rakes.
7	The Contractor should adhere all the safety precaution while moving / working in the track line.

8	Contractor has to ensure no derailments of wagons and locos during their operation within the battery limit of the scope. In case derailment happens then contractor shall be bound to carry out re-railment of loco and/or wagons at the cost of the contractor, contractor shall bear the complete cost of re-railment including various payments and/or penalties with respect to Indian Railways and any other incidental expenditures not described here shall be borne by the contractor. In case of accident and/or derailment, the contractor shall take all possible steps to restore normalcy including repair of track, loco and wagons at the earliest. Requisitioning of Railway crane (ART, MFD or any re-railment machinery of railway, if required) shall be arranged and paid by the contractor. All equipments for rerailment such as cranes, jacks, hydras, ceiling and/or wire ropes etc. would be in contractor's scope.
9	Rake speed during weighment and haulage shall be maintained as per the instructions issued time to time by EIC.
10	Any type of minor repair to be carried out in the sick wagon is in contractor's scope.
11	Detaching & placement of sick wagons at sick lines as directed by railways.
12	Coordination with Railway administration for movement of TANGEDCO inward and outward rail traffic.
13	Operation of all manual level crossings within the specified boundary limit is in contractor's scope.
14	Contractor has to ensure optimum utilization of locos through efficient operational planning. The fuel economy of locos shall be maintained as per OEM manual.
15	Preventive maintenance schedules of locomotives have to be carried out as specified by the manufacturer.
16	The contractor has to follow maintenance schedules of locomotives recommended by OEM.
17	All preventive maintenance schedules shall be carried out during the general shift.
18	Locos shall be washed once a month thoroughly or as on when required.
19	Any repairs which includes welding, drilling, wiring, painting, grinding, cutting etc. has to be done by the contractor.
20	Procurement and/or maintenance of fittings (hoses, nozzles, clamps, fasteners etc.) of utilities required for loco maintenance is in contractor scope.
21	Maintenance of utilities at loco shed is under contractor's scope. Arrangement of slings and/or wire ropes for lifting of loco and/or loco assemblies is under contractor's scope.
22	Contractor has to transport diesel for locos from TANGEDCO onsite fuelling station and fill the diesel in locomotives. In case of outage of diesel fuelling station contractor has to arrange diesel from outside and the amount would be reimbursed by TANGEDCO at actual cost after submission of all original documents subject to the utilization.
23	Charging of loco batteries has to be done by the contractor.
24	Painting of both locomotives has to be done by the contractor once in a year as per EIC instructions.
25	Procurement and/or arrangement the fabrication of fixtures and tackles required for fitting and/or removal of loco parts would be in contractor's scope.
26	All necessary testing in locomotives , compressor oil pressure gauge, blow by test apparatus, compression and firing testing apparatus, wheel profile gauge etc. shall be done as per the instruction of EIC.
27	Contractor should confirm availability of spares before carrying out of any maintenance job
28	Any expert engagement from OEM if required for railways would be in contractor scope

29	Temporary lighting arrangements for maintenance work to be done by the contractor.
30	All tools & tackles but not limited to list provided are in contractor's scope
	Inspection of locomotives
31	Daily visual inspection. Checking and diagnosing improper functioning of systems and/or components and take remedial steps.
32	Health inspection of both locos to be carried out once in a month for all assemblies of locomotives. The measuring and testing instruments should be brought by the vendor.
33	Assemblies include radiators, radiator fan, after cooler element, turbo charger, water pump, lube oil pump, engine, auxiliary generator, exciter, alternator and rectifier, traction motors, fuel pump motor, crank case exhaust motor, dust exhaust blower motor, governor, EP Contactors, EM Contactors, Relays, Reverser and bogies.
34	Leakages for oil, fuel, water and air.
35	Condition of all hoses for oil, fuel, water and air.
36	Proper working of all air valves and brake system.
37	Checking of locomotives for any abnormality.
38	Thorough checking of engine for proper working, wear and tear, worn and/or broken parts, proper lubrication of all parts of engine, checking of engine for proper clearances.
39	Checking of dimensions of bogie, buffers and CBC couplings.
40	Loco and/or engine safety system checks but not limited to low lube oil, low water level, hot engine, over speed trip, power and/or control ground, battery charging, wheel slip, CK tip weld etc.
41	Analyze and prevent minor repair becoming major & expensive.
42	Inspection of parts and assemblies as informed by Engineer In charge.
	Preventive maintenance of locomotives.
43	Carry out preventive maintenance as per schedule for both locomotives as per weekly, monthly, two monthly, three monthly, six monthly schedules and yearly maintenance schedule as recommended by OEM and instruction of engineer in charge.
44	Lubrication, greasing of all parts and bearings of locomotives.
45	Replacement of hoses as per condition and requirement.
46	Checking and carrying out all field adjustments and/or replacement as recommended by the OEM or as per OEM Service and/or maintenance manual.
47	Adjustment and/or replacement means to adjust and/or replace a brake, motor, accessory, components of engine, transmission, undercarriage, hydraulic system etc., and components of piping and all other equipment of locomotive.
48	Service and maintenance of the loco engine shall be done as per the OEM instructions and maintenance schedules.
49	Task list and servicing schedule shall be in line with the OEM recommendation and O&M manual. PM checklist & schedule are subject to change as per site requirements
50	Visual inspection of oil leakage, connections, and overall function and/or performance validation of the system and/or components that is included in the contract. Everything found in the visual inspection to be included in a written report.
51	All measureable parameters shall be measured and noted. If any deviation (from acceptance limits) observed in parameters, to be reported and proposals to rectify to be submitted. Accordingly the fault to be rectified during site visit.
	Corrective Maintenance of locomotives
52	Carry out changing work of radiator fan, traction motor, compressor, water pump, turbocharger, connecting rod bearing, engine main bearing, pump bearing, maintain and/or oil seal changing of water pump, oil pump, compressor, cleaning of after cooler element, changing of cam shaft segment, cam shaft rollers, fuel injection pump element, engine piston & rings, cylinder head valves and/or valve seat and/or guide, changing of radiator, lube oil cooler, compressor lube oil pump and information of Engineer in Charge.

53	Carry out Roller and/or ball bearing changing, chamfering, mica cutting, insulation varnishing of small and/or medium electrical rotating machines such as fuel pump motor, crank case exhaustor motor, dust exhaustor blower motor, dynamic brake blower motor auxiliary generator and exciter and information of Engineer in Charge.
54	Calibration (Once a year or in case of recalibration required as per performance)
	Calibration and/or testing of all items of locomotive I such as loco fuel injection pumps, injector nozzles as and when required and as per instruction of engineer in charge from certified sources.
	Breakdown maintenance of locomotives
55	Carry out breakdown maintenance with top priority and no delay by deputing extra manpower if required without any additional cost.
56	Emergency break down repairs, accident repairs and out of course repairs shall be carried out as and when necessary.
	Deliverables and/or KPIs
57	All KPIs and deliverables to be achieved Other KPIs for locos are to be mentioned.
58	Aim for reduced per hour operation and maintenance cost of locomotives.
59	Provide written operation and maintenance guidelines and daily checkpoint list to TANGEDCO personnel.
60	Timely preparation & submission of service and/or maintenance reports to the concerned TANGEDCO personnel.
61	Ensure adequate stock of service consumables.
62	Maintain complete equipment maintenance history and KPIs, submission to concerned TANGEDCO team.
63	Provide proper guidelines of preventive maintenance & replacement schedule keeping in mind the designed parameters of each component
64	Provide guidelines for modifications, changes & product up-gradation resulting out of technical advancement, frequent problem fixation.
	MAINTENANCE OF RAILWAY TRACK SYSTEM
	REGULAR INSPECTION OF THE PERMANENT WAY
65	Railway track inspection as per Indian Railway norms to be done and certificate from certified agency and/or person to be submitted at intervals as per the instruction EIC.
66	Track fitness certification renewal if required, compliance of periodic inspection from railway for track to be ensured.
67	Daily monitoring of railway track by key man round the clock and inform to PWI and/or EIC for any abnormality.
68	Maintenance and/or repairing of track inspection motor trolley and other trolleys.
	MAINTENANCE OF TRACK
69	Maintenance of complete Railway track is to be done as per Indian Railway norms. This item includes but not limited to following activities:
70	Alignment, lifting, packing and through packing.
71	Railway track ballast dressing, boxing, filling and spreading.
72	Shifting of Ballast, rail and any item and/or part required for track maintenance to the required point within the entire railway stretch.
73	Rail cutting and drilling.
74	Maintenance of rail line gauges and maintain gauge as per railway norms.
75	Maintenance of points & crossings
76	Inspection of Curves and their maintenance
77	Maintenance of steel bridges, including replacement of channel slipper, damage rail, guard rail, fixing of dog pin, J-hook or any other maintenance

78	Level crossing work, including dismantling of road, replacement of rail, slipper, guard rail, lifting, and packing & through packing. Maintenance of level crossing gates
79	Checking, Fitting & Maintenance of loose rail fitting, pandrol clips, C.S.9 key, PSC slipper 52 and/or 60 kg rail, fixing of fish plate, cotter pin, rubber pad.
80	Drain cleaning in Railway area as per the requirement
81	Replacement of burnout rail, damage rail, check rail, lever point, PSC slipper, tongue rails & shifting all rail material from store or any place of track area for requirement point.
82	Maintaining rail gaps for all the rails both inside and outside the plant tracks lines as per railway Norms.
83	Inspection and/or maintenance of complete railway track as per Indian Railway schedule or as per information of EIC.
84	If at any point of time spare and/ item required for track maintenance is not available with TANGEDCO then contractor has to arrange that part/ item for rectification of the problem and cost of that part / item would be reimbursed by TANGEDCO Collection and transportation of the above material to the required site shall be Contractor's responsibility. Consumables required are in the scope of the contractor.
85	An annual maintenance program shall be made out for the contract period.
86	Clearing the track lines from debris and/or animal body is included in the maintenance responsibility of Contractor. Routine cleaning of allied equipment's is also in the scope of work of the contractor.
87	Rectification of weld failures and Rail fractures are to be restored by the contractor at the earliest.
88	Repairing low cess and widening of formation with turfing where ever required (otherwise ballast shall not retain) are in the scope of the contractor.
89	Before monsoon in every year side drain cleaning and de-silting the minor bridges are in the scope of contractor
90	Over hauling of level crossing whenever required & replace the damage fittings if any are in the scope contractor.
91	Greasing of all curves (with graphitized grease) irrespective of the degree (both in plant & section) Greasing of ER clips, Greasing of the Rail gauge face, points & crossings, are to be done by the Contractor. Greasing of all fishplate & alternate the fishplate bolt in every six month are also in the Scope of contractor.
92	Vegetation has to be removed from both sides of track area by contractor.
93	Contractor shall deploy additional resource during monsoon (at least for four months i.e. July, August, September and October) for smooth operation of traffic without any additional cost.
94	Rain cuts has to be filled by the contractor on TANGEDCO railway line to avoid washing of ballast and maintain healthiness of railway line.
95	Monthly, weekly maintenance schedule & daily progress report with reading & half yearly plan are to be provided by the contractor to TANGEDCO EIC.
96	Contractor has to keep complete set of re-railing equipment.
97	For retaining the ballast near the bridge approaches, Necessary works as directed by EIC of TANGEDCO shall be done by the contractor.
98	The contractor shall make necessary arrangements during inspection of SSE- Permanent way, SR in every 3 months or whenever it is required on its own.
99	Fixation of check rail & guard rail wherever required are in the scope of the contractor
100	Contractor has to ensure cordial relationships with surrounding residential areas and villagers such as to ensure that work outside plant boundary happen continuously as per the schedules without any hindrance.

101	Periodic maintenance and healthiness has to be carried out and/or maintained of switch expansion joints and bridges by the contractor.
102	Maintenance of embankments of bridges and cleaning of culverts of hume pipe bridges due to chocking by the contractor.
103	De-stressing of rails
104	Checking of rail joints by USFD- (ultra-sonic flow detector)(USFD machine is in contractor scope)
105	Rail ballast of required quantity has to be supplied by the contractor.

2.Wagon Tippler, Apron Feeder and Dribble Conveyor and its auxiliaries

(i) Weekly Maintenance

Sl.No.	Equipments	Description of work
Wagon tippler		
1	Weigh bridge	i) check the dislocation of all the load cells ii) clearing of table pit area spillage coal iii) check the Pawl & Pawl lever for proper engagement iv) Buffer worn out condition v) Spur wheel and pinion lubrication by Servo Coat and check for wear and tear vi) Hopper liner inspection for wear and tear and correction if required
2	Apron Feeder	i) Check the pan bolts and nuts for tightness and wear and tear, replace if necessary ii) Check the spill plate roller for free rotation i) Discharge chute liner inspection for wear and tear and rectification if necessary
3	Sump Pump	Cleaning ,Inspection and lubrication

(ii)Monthly Maintenance

Sl.No.	Equipments	Description of work
Wagon tippler		
1	Wagon tippler	1.check the end frame table bolt & nut for tightness and wear & tear 2.Side arm top stop arm rubber pads for worn out condition and replace if necessary
2	Drive unit	1.Check the torque arm 2.Drive pit cleaning 3.Checking the hydraulic drive and oil line joints for leakage 4.Cleaning of pressure and return line filters
3	Hydraulic Power pack(Tilting & Clamping)	1.To ensure that hydraulic power pack is in perfect working condition. 2.To maintain hydraulic cylinders, direction valve and adjustment 3.To check pressure relief valves in perfect working condition.
4	Sump pump	Inspection of impeller & casing for coal choke if any and clean
5	Apron Feeder	1.Inspection and greasing of flanged rollers 2.Head and tail shaft bearing greasing
	Drive unit	1.Check the torque arm 2.Checking the hydraulic drive and oil line joints for leakage 3.Cleaning of pressure and return line filters
	Hydraulic Power pack	1.To ensure that hydraulic power pack is in perfect working condition. 2.To maintain hydraulic cylinders, direction valve and adjustment 3.To check pressure relief valves in perfect working condition.

6	Dribble Conveyor	1.Check the Pin & Bush for wear &tear and replace if necessary 2.Greasing of drive and non drive pulleys
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(iii) Annual Maintenance

Sl.No.	Equipments	Description of work
1	Wagon tippler	i) Inspection of Weigh bridge steel balls for wear & tear and replacement if required and grease ii) Check the condition of spill plate, split spur wheel and pinion, drive shaft bearing bushes
2	Drive unit	Filtration of oils
3	Sump pump	Overhauling of sump pump
4	Apron Feeder	Overhauling of Plummer block bearings
5	Dribble Conveyor	Overhauling of pulley bearings and Plummer blocks

3. Conveyor, Belt Feeder and Reversible Belt Feeders and its Auxiliaries

i) Daily maintenance.

Sl.No.	Equipments	Description of work
1	Auxiliaries	Cleaning of i)Gear box ii)Pulley Plummer block iii)Spillage coal on floor, Head and tail end, walkway and decking sheet
2	Gear Box	Check for i)oil and top up if necessary ii)abnormal temperature raise if any iii)abnormal noise if any iv)abnormal vibration if any v)brake shoe condition for wear and tear vi)oil leakage in fluid coupling
3	Pulley	Check for i) Check against unusual noise and heating of bearings / Housings. ii) Check against running out of Labyrinth seal. iii) Check against jamming of pulley bearings. iv) pulley condition for wear and tear & lagging condition for healthiness v)noise for abnormality if any vi)bearing temperature raise if any
4	Chutes	Check and clean i)coal choking ii)checking chute puncture iii)skirt board condition for wear and tear iv)flange bolt condition for tightness
5	Conveyor	Check for i) Proper alignment of belt during running and inspection of belt joints. ii) Check against jamming of Idlers. Adjustment of Idler Brackets iii)Checking the tightness of idler frames
6	Belt scrapper	i) Cleaning of cracked/ struck materials from blade edge to avoid damage of belt
7	Skirt Board	Cleaning of Struck / trapped materials between belt and skirt board to avoid damage of belt.
8	AFD&QS	Checking the healthiness of automatic fire detection and quenching system nozzles, valves & pipe line etc

ii) Weekly Maintenance

Sl.No.	Equipments	Description of work
1	Gear Box	Cleaning of breather
2	Skirt Board	Skirt rubber adjustment and replacement if required Tightening of fasteners

3	Chutes	Inspection of chutes & rectification of damages if any
4	Conveyor	Scraper adjustment /replacement if required lubrication of swiveling arrangement of Self aligning idlers.

(iii) Monthly Maintenance

Sl.No.	Equipments	Description of work
1	Gear Box	Checking the tightness of fixing bolt of gear box and base frame Check for leakage of oil and Check for oil level
2	Pulley	Lubrication of bearings Tightening of Plummer Block Bolts.
3	Fluid Coupling	Checking of oil level and top up if necessary
4	Brake	Adjustment if any
5	Geared Coupling	Lubrication.
6	AFD&QS	Checkig the operation of spary system of automatic fire detection and quenching system

iv) Annual Maintenance

Sl.No.	Equipments	Description of work
1	Gear Box	Checking and overhauling of gear box if required
2	Pulley	Checking and overhauling of Plummer block if required
3	Fluid Coupling	Checking and replacement of oil if required
4	Brake	Checking and adjustment if any
5	AFD&QS	Servicing of automatic fire detection and quenching system equipment such as control panel, valves, batteries etc.

4. STACKER CUM RECLAIMER AND ITS AUXILIARIES

i) Daily Maintenance

Sl.No.	Equipments	Description of work
1	SCR	1) General cleaning of the Stacker cum Reclaimer and spillage coal 2) General inspection of the rotating equipments 3) General inspection of Conveyors in the machine for joint healthiness 4) Inspection of the idlers and pulleys in the machines 5) Inspection and clearing of chutes in the machines 6) Inspection of Skirt and scraper rubber. 7) Inspection of Hydraulic drive, power pack and lines for leakages

ii) Weekly Maintenance

Sl.No.	Equipments	Description of work
1	PCRD & CCRD	Cleaning and inspection of cable drag chain link assembly
2	Gear Boxes	Inspection of oil levels in gear boxes
3	Chutes	Inspection of chutes & rectification of damages if any

iii) Monthly Maintenance

Sl.No.	Equipments	Description of work
1	PCRD & CCRD	Inspection of chains & sprockets in the cable reeling drum
2	Hydraulic Power pack	1. Ensure that hydraulic power pack is in perfect working condition. 2. To maintain hydraulic cylinders, direction valve and adjustment 3. Check pressure relief valves in perfect working condition. 4. To maintain additional limit switches in good working condition for preventing extra lowering of Boom to avert accident. 5. Cleaning of pressure and return line filters
	Boom Slewing and Luffing Mechanism	1. To check the hydraulic control system and control panel is in perfect working condition. 2. To check that safety coupling protecting the slew drive components and the structure against overload, is in order. 3. To check that limit switches for slew angle are in good working

		<p>condition</p> <p>4. To check lubrication of bearings for gear & pinion.</p> <p>5. To check for wear & tear breakage of Gear & Pinion teeth.</p> <p>6. To check that bearings for Pinion and Gear are in good working Condition.</p> <p>7. To check all hydraulic lines and hoses for any leakages, replace the line/hose if necessary.</p> <p>8. All filters to be checked and cleaned periodically, replace if periodically.</p>
	Cabin levelling arrangement	<p>1. To check that automatic levelling of Operator's cabin by means of Hydraulic Cylinders, occurs simultaneously with the luffing of Boom.</p> <p>2. To check that adjusting facility inside the cabin is alright for maintaining level of the cabin.</p> <p>3. Inspect its seal kits and replace if necessary</p>
3	Chutes	Inspection of chutes & rectification of damages if any
4	Lubrication System	Inspection of lubrication lines and distributing blocks for proper distribution of grease
5	Brake system	Inspection of brake system in LT travels
6	Fluid coupling	Oil level inspection and top up if necessary
7	Rail Track	Removal of obstruction of coal on rails. Correct Position and good working condition of over travel limit switches
8	Long Travel Mechanism	<p>1. Check for leakage of Gear Oil and replacement of damaged oil seal, if any.</p> <p>2. Check that Brakes are working alright.</p> <p>3. To ensure that Rails clamps hold the machine in position.</p> <p>4. Lubrication of Wheel bearings.</p> <p>5. To check for wearing of Brake shoes, if any, and replace the same.</p>
9	Bucket wheel	To check that Bucket tips are in order
10	Centralized Lubrication System	<p>To check that all lubrication points are properly lubricated.</p> <p>To check for any leaks in piping and replace pipes if any.</p>
11	Cable Reeling Drums (Power and Control)	<p>1. To check that the CRDs rotate freely.</p> <p>2. To check that power and control cables are laid freely on cable trays during movement of machine.</p> <p>3. Lubrication of Bearings</p>

iv) Half yearly Maintenance

Sl.No.	Equipments	Description of work
1	Cable Reeling Drums	Inspection of the bed bolts of all the rotating equipments chains & sprockets in the cable reeling drum
2	Slew bearing	Lubrication of slew drive pinion and crown gears, pulley bearings, structure fulcrum point.
3	Rail Track	Check and carried out alignment of rails
4	Long Travel mechanism	To check that individual components of Wheel-axle drives, such as motors, gear boxes, coupling, brakes are in order

v) Annual maintenance

Sl.No.	Equipments	Description of work
1	Gear box	Checking of oil for healthiness of the
2	Fluid coupling	Oil changing if necessary
3	Cable Reeling Drums (Power and Control)	To check for damaged Bearings of CRDs, if any and replacement thereof.
4.	Hydraulic Power Packs for Slew and Luffing	<p>1. To check the hydraulic control system and control panel is in perfect working condition.</p> <p>2. To check that safety coupling protecting the slew drive components and the structure against overload, is in order.</p>

		3.To check that limit switches for slew angle are in good working condition 4. To check lubrication of bearings for gear & pinion. 5. To check for wear & tear breakage of Gear & Pinion teeth. 6.To check that bearings for Pinion and Gear are in good working Condition. 7. To check all hydraulic lines and hoses for any leakages, replace the line/hose if necessary. 8. All filters to be checked and cleaned periodically, replace if periodically.
5.	Slew Motors & Bucket Wheel Motors	1. Check for leakage of Gear Oil and replacement of damaged oil seal, if any. 2. Check that Brakes are working alright. 3. Lubrication of Wheel bearings. 4. Check the lip seal dust seal and wear rings, replace if necessary
6	LT Wheel	1. Check for leakage of Gear Oil and replacement of damaged oil seal, if any. 2. Check that Brakes are working alright. 3. To ensure that Rails clamps hold the machine in position. 4. Lubrication of Wheel bearings. 5. To check for wearing of Brake shoes, if any, and replace the same.
7.	Rail Tracks	Check and carried out alignment of rails and tightness of the bolt nuts To ensure that Rails clamps hold the machine in position.
8.	Bucket wheel	Inspection of bearing etc.,
9.	Centralized Lubrication System	Inspection of lubrication lines and distributing blocks for proper distribution of grease

5. Rotary Breaker and its auxiliaries.

i) Weekly Maintenance

Sl.No.	Equipments	Description of work
1	Gear Box	Cleaning of breather
2	Rotary breaker	Inspection of i)hopper for wear& tear of liner and mother plate ii)condition of inside crusher components such as screen plates, lifting shelf, deflector plates

ii) Fortnightly Maintenance

Sl.No.	Equipments	Description of work
1	Bearing and guide rollers	Greasing of all bearing blocks and guide rollers
2	Rotary breaker	Inspection of Rail beam fixing bolts for tightness with spider cone and cracks if any

iii) Monthly Maintenance

Sl.No.	Equipments	Description of work
1	Bearing and guide rollers	Checking the tightness of the foundation bolts of gear box and support wheel bed frame
2	Rotary breaker	Opening of side cover and checking the fixing bolts, tightness of screen bolts, lifting shelves, deflector plate plates with rail beam
3	Fluid coupling	i)checking the oil level and top up if necessary ii)cleaning of strainer

iv) Annual Maintenance

Sl.No.	Equipments	Description of work
1	Gear Box	Overhauling of gear box
2	Rotary breaker	Overhauling of Rotary breaker such as i)support wheel assembly: dismantling, inspection of Plummer

		blocks, bearings etc., ii)guide roller assembly: check for wear and tear of guide roller, bearing clearance etc., and replace if required iii)Screen shell assembly: check the tightness of all bolt7 nuts and replace the worn out bolt &nuts iv)Drive chain: clean the drive chain and correct the slackness
3	Fluid coupling	i)checking the oil level and top up if necessary ii)cleaning of strainer

6. Ring Granulator and its Auxiliaries.

(a) Ring Granulator

i) Monthly Maintenance

Sl.No.	Equipments	Description of work
1	Scoop Coupling	Checking of oil level in Fluid coupling and top up if necessary Cleaning of Y strainer in scoop coupling
2	Fluid coupling	i)checking the oil level and top up if necessary ii)cleaning of strainer
3	Ring Granulator	Checking of tightness of bolts &nuts Greasing of bearings Cage adjustment Cleaning of Screen Plate to avoid chocking

ii) Quarterly Maintenance

Sl.No.	Equipments	Description of work
1	Ring Granulator	Inspection of breaker plates, Screen plates, kick off plates, suspension bar and all liner plates

iii) Half Yearly Maintenance

Sl.No.	Equipments	Description of work
1	Ring Granulator	1.Checking of alignment of crusher 2.Checking of deflector plate

iv) Annual Maintenance

Sl.No.	Equipments	Description of work
1	Ring Granulator	Overhauling of bearings and plummer blocks
2	Fluid coupling	Checking of oil level and top up if necessary

(b) Roller Screen

1. Weekly maintenance

Sl.No.	Equipments	Description of work
1	Roller screen	1.Free rotation of roller shaft assemblies 2.Check for proper working position of scrapers 3.Checking of spider element 4.Breather cleaning in gear boxes

2. Monthly Maintenance

Sl.No.	Equipments	Description of work
1	Roller screen	1.Greasing of bearings 2.Cleaning of Comb Scrappers 3.Checking the oil level of fluid coupling and top up if necessary

3. Quarterly Maintenance

Sl.No.	Equipments	Description of work
1	Roller screen	1.Checking of main shaft assembly bearings 2.Checking of gear profile in main shaft assemblies

4. Annual Maintenance

Sl.No.	Equipments	Description of work
1	Gear Box	1.Gear box oil change if necessary 2.Check for damaged bearings, if any, and replacement thereof
2	Fluid coupling	Checking of oil level and top up if necessary

(C) Flow Divideri) Monthly Maintenance

Sl.No.	Equipments	Description of work
1	Flow divider	1.Greasing of bearings 2.Checking the oil level of gear boxes and top up if necessary
2	Ram	To check and ensure that there is no blockade of stroke or jamming of Ram
3	Load Safety System	To check for its uninterrupted functioning case External Load exceeds the pre-set limit.
4	Trunion	Lubrication Trunion for smooth angular rotation of Actuator Body.
5	Arm	Tightening of End pins and lubrication.
6	Hand wheel Attachment	Lubrication at bearing
7	Thrust Limit Switch / Position Limit Switch	To keep the Thrust Limit switch activated so that if disconnects power supply to motor when Ram reaches extreme position.
8	Bearing / Sealing	To check for damaged Bearing / Sealing, if any Lubrication of bearings.
9	Divider Liner	To check for wearing of liner and its replacement thereof.
10	Motor and gear box assembly	1. Ensuring cleaning of motor, gear box and limit switches. 2. To check for routine cleaning of motor, gear box and limit switch. 3. To check up tightness of power and control cable terminals.

ii) Annual Maintenance

Sl.No.	Equipments	Description of work
1	Gear Box	1.Gear box oil change if necessary 2.Check for damaged bearings, if any, and replacement thereof
2	Bearings	Inspection of bearings and replacement if necessary

7.DUST EXTRACTION SYSTEMi) Weekly Maintenance

Sl.No.	Equipments	Description of work
1	Compressor	1.Cleaning the compressor thoroughly 2.Check the oil level in the crank case .Replenish if required 3.Breather valve dismantled, cleaned and checked for perfect seating of the valve

ii) Monthly Maintenance

Sl.No.	Equipments	Description of work
1	Bag Filter	1. To check for i) detachment of Bag from Bag Holding Plate. ii) wear& tear of Bag. iii) formation of cake in Bag surface and remove it. 2.Cleaning of filter cloth 3.Fixing arrangement of filter cloth 4.To check against jamming of Rotary Air Lock (RAL) Valve
2	Entire assembly	Checking of tightness of bolts & nuts of dust extraction system
	Bearings	Lubrication of RAL bearings and other bearings in the system
3	Compressor	1. To check i) the condition of compressor belts. ii)for the operational noise and vibration iii)Tightness of mounting bolts and other fasteners iv)air leaks at the pipe joints and safety valve v)clean the suction filters thoroughly and renew the oil to the correct level 2. Check the suction and discharge operations and general performance

4	Fan	To check i) Impeller / Shaft balancing. ii) condition of V-belts. iii) for damage of bearings, if any and lubrication of bearings. iv) foundation bolts failure in shear, to reduce vibration. v) flange joints for leakage, if any vi) for corrosion / leakage in pipe lines.
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iii) Annual Maintenance

Sl.No.	Equipments	Description of work
1	Bag Filter and Fan	Overhauling of system
2	Pipe line	Dismantling, inspection and clearing of choking if any
3	Compressor	Overhauling of the compressor

8.DUST SUPPRESSION SYSTEM :

1.Weekly Maintenance

Sl.No.	Equipments	Description of work
1	Pumps	Greasing and tightening of gland packings Checking of line leakage and arrest if any
2	Nozzle	Cleaning of nozzles Check for jamming of Nozzles and swiveling arrangement

2.Monthly Maintenance

Sl.No.	Equipments	Description of work
1	Dust suppression system	Checking of tightness of bolts & nuts
2	Piping/fitting	Check for damaged / corroded piping /fittings, if any and replacement thereof.

4. Annual Maintenance

Sl.No.	Equipments	Description of work
1	Pumps	Overhauling of pumps
2	Sprinklers	Overhauling of Sprinklers for free operation

9.Belt Weigher

i) Daily Maintenance

Sl.No.	Equipments	Description of work
1	Idlers	To check for free rotation of idlers related to belt weigher.
2	Load cells	Check the covers for load cells are intact.
3	Tachometer	To check that the wheel rotates feely and perfectly.

ii) Weekly Maintenance

Sl.No.	Equipments	Description of work
1	Idlers	Cleaning ,inspection and greasing of moving points
2	Tachometer	Cleaning ,inspection and greasing of moving points

iii) Monthly Maintenance

Sl.No.	Equipments	Description of work
1	Idler Rollers.	To check for proper alignment of idler rollers related to belt weigher.
2	Load cells	1.To check the covers for load cells are intact. 2.Ensuring cleanness and wire connections.
3	Calibration	To verify and ensure that the calibration of the scale is alright.
4	Tachometer	To check that the wheel rotates perfectly, proportional to the belt speed.

iv) Annual Maintenance

Sl.No.	Equipments	Description of work
1	Belt Weigher	Overhauling of the system

10.Inline and Suspended Magnetic Separatorsi) Weekly Maintenance

Sl. No.	Equipments	Description of work
1	Gear Box	1.Breather cleaning 2.To check for gear box oil level and recharge if level is low

ii) Monthly Maintenance

Sl. No.	Equipments	Description of work
1	Pulley	Greasing of pulley bearings

iii) Annual Maintenance

Sl. No.	Equipments	Description of work
1	Pulley	Overhauling of pulley bearings
2	Gear box	Overhauling of gear box
3	Suspended wire rope sling and Fasteners	Cleaning, inspection and greasing of Steel wire ropes.

11.Flapp Gatei).Monthly Maintenance

Sl. No.	Equipments	Description of work
1	Ram	To check and ensure that there is no blockade of stroke or jamming of Ram
2	Load Safety System	To check for its uninterrupted functioning case external Load exceeds the preset limit.
3	Trunion	Lubrication Trunion for smooth angular rotation of actuator body.
4	Arm	Tightening of end pins and lubrication.
5	Hand wheel Attachment	Lubrication of bearing
6	Thrust Limit Switch / Position Limit Switch	To keep the Thrust Limit switch activated so that if disconnects power supply to motor when Ram reaches extreme position.
7	Gear Box	Check oil level and top up if necessary

ii).Annual Maintenance

Sl. No.	Equipments	Description of work
1	Gear Box	Overhauling of gear box
2	Actuator	Overhauling and checking the limit switch operations

12.Rack and Pinion Gatei).Monthly Maintenance

Sl. No.	Equipments	Description of work
1	Bearing / Housing	To check for damaged Bearing / Sealing, if any Bearing Lubrication.
2	Rack & Pinion	Cleaning and Lubrication
3	Guide Roller	Checking for damaged rollers, if any, and replacement thereof.

Ii).Annual Maintenance

Sl. No.	Equipments	Description of work
1	Bearing / Housing	Overhauling of bearing and housing
2	Rack & Pinion	Cleaning, inspection for damaged teeth and replacement thereof and applying greasing
3	Guide Roller	Cleaning, inspection for damaged rollers, if any, and replacement thereof.

13.Hoists and chain blocks**i) Monthly Maintenance**

Sl. No.	Equipments	Description of work
1	Hoist & Chain block assembly	Cleaning and checking the tightness of fasteners
2	Hoist & Chain block assembly	Greasing of moving points

ii) Annual Maintenance

Sl. No.	Equipments	Description of work
1	Hoist assembly	Complete overhauling
2	Wire rope	Cleaning, inspection for damages and applying rope grease

14.Rack and pinion Lift Elevator**i) Monthly Maintenance**

Sl. No.	Equipments	Description of work
1	Lift elevator	Cleaning and checking the tightness of fasteners
2	Lift elevator	Greasing of moving points

ii) Annual Maintenance

Sl. No.	Equipments	Description of work
1	Lift elevator	Complete overhauling
2	Rack and pinion	Cleaning, inspection for damaged teeth and replacement thereof and applying greasing

ELECTRICAL:**Monthly Maintenance****I) Monthly Maintenance of battery & Battery charges:**

1. Clean battery bank of charges externally.
2. Take pilot cell readings (sp.cl and voltage)
3. Monitor voltage and current in the charger (DC 220 V, Current 15 amps maximum)
4. Check electrolyte level and top up if necessary.

II) Monthly Maintenance of HT/LT Motors**For HT Motors**

1. Clean the motor body.
2. Check for any abnormal noise & vibration.
3. Checks for any abnormal heating.

For LT Motors

1. Clean the motor body
2. Check for any abnormal noise & vibration.
3. Checks for any abnormal heating.

III) Monthly Maintenance of H.T/L.T Switchgear Panels:

1. Clean HT/LT Switchgear panels.

IV) Wagon Tippler MCC:

1. General cleaning and checking of control panels/Meters/AC Machines.
2. General cleaning and checking of wagon tippler meter resistance box.
3. General cleaning and checking of photocell projectors and receivers.
4. General cleaning and checking of welding supply terminal points.
5. General cleaning and checking of weighment indicators.

V. Monthly Maintenance of Power Transformer:

1. Record oil temperature (80° Max)
2. Record winding temperature (70° C Max)
3. Check oil level in the conservator.
4. Check silica gel in the breakers.
5. Check for any oil leak.

Weekly Maintenance:

1. Take specific gravity of all the cells. It should be 1.19- to 1.21-.
2. Take voltage readings of all the cells. It should be 1.95V to 2.2V.
3. Take temperature of the cells. It should be ambient temperature.

Monthly Maintenance:

1. Clears the battery charges internally and externally.
2. Clear the battery thoroughly.
3. Check fuses.
4. Check terminal tightness.
5. Apply petroleum jelly to the terminals of the cells.
6. Changeover of the charger.
7. Checking of cable terminal tightness in wagon tipplers, Panel, Motor, Resistance box and slip ring.
8. Checking of carbon brushes and Brush holders for wear and tear.
9. Checking and cleaning of power contactors in the panel.
10. Checking of oil level in wagon tippler brake motor.
11. Checking of earth wire continuity.
12. Checking of compressor, blower in AC Machines.

1. Quarterly Maintenance of battery & Battery Chargers:

1. Check tightness of the cells inter connections.
2. Put charger in booster mode for 4 to 5 hours.

2. Quarterly Maintenance of H.T/L.T Motors:

Both for H.T Motors LT Motors subject to availability of line clearance.

1. Check the tightness of the terminals.
2. Check the earth connections.

3. Lubricate the bearings with grease.
4. Check the IR. Value (For HT Motors 50 Mega ohms for LT Motors 30 Mega ohms)

3. Quarterly Maintenance(LT Modules)

1. Clean, Check the tightness of the all bolts and nuts and lubricate all move parts.
2. Check the tightness of power and control cable terminals.
3. Check the Lyra contacts power contracts and auxiliary contacts.
4. Measure the IR value.

4. Quarterly Maintenance (HT Breakers):

1. Clean Check the tightness of all the bolts & nuts & lubricate all the moving parts.
2. Check the healthiness of the finger contacts.
3. Check the healthiness of the spring charging mechanizing.
4. Check the breaker operation both closing and tripping electrical and mechanical in test position.
5. Measure the IR Value.

Quarterly Maintenance of Power Transformers:

1. Clean the HT & LT Terminals.
2. Check the tightness of the HT & LT Terminals.
3. Measure the IR Value (it should be 30 to 50 Mega ohms)
4. Check bushels relay for any gas accumulation.
5. Check relief vent diaphragm.
6. Cleaning of NG Resistance box and checking the tightness of the connections.
7. Check the earth connection.

Quarterly Maintenance(General)

1. Renewal of grease in bearings
2. Belt Bolt tightness checking.
3. Checking of insulation value of cable and motor.
4. Checking of slip ring for grooving and wear and tear
5. Calibration of weigh bridges of wagon Tippler 5 & 6

Annual Maintenance of HT Motors

1. Measurement of DC resistance and ensure it is equal in all the three phases or within 5% deviation.
2. Measure P.I. Value min 1:3
3. Tan-Delta test for HT motors.
4. Check motor protection relay

Annual Maintenance of HT Breakers

1. Check vacuum in the vacuum bottle Needle to be in the green zone in the vacuum testing kit.

Annual Maintenance of HT BUS

1. Clean the bus bars and compartments.
2. Check the tightness of all the joints.
3. Measure the contact resistance (loop resistance)

Annual Maintenance of LT BUS

1. Clean the bus bars and compartments.
2. Check the tightness of all the joints, power and control cable termination.
3. Check any arcing in the vertical droppers.
4. Measure the IR Value of the LT bus.

Annual Maintenance of Power Transformers

1. Test transformer oil at R&D lab/Chennai as directed by EE/R&D the oil should be reconditioned or replaced if necessary.
2. Measure winding capacitance and tan delta. Tan delta value should be around 4%
3. Measure DC resistance (equal in all three phases)
4. Measure PI VALUE (1.5)
5. Get WT 1 AND OT 1 calibrated at C & I
6. Check bucholz relay operation.

Breakdown Maintenance (Mechanical and Electrical)

- Any type of breakdown jobs in respect of CHP Mechanical, electrical and C&I parts (As per Equipment list) has to be carried out by the contractor in normal working hours and beyond normal working hours i.e. any time in the day including Sundays and holidays without any extra cost while at the same time complying to the factories Act.
- Breakdown of systems to be attended on priority basis to restore the system in least possible time. Additional manpower required if any will be the scope of contractor. The time period for shut down of the plant of for any plant will be according to the direction of EIC.
- Apart from breakdown activities, contractor has to ensure smooth running of equipments by providing maintenance support services round the clock to attend running defects in all three shifts.
- The TANGEDCO will not bear any extra cost for any additional requirement to complete the job.
- The contractor shall maintain complaint log book and all non compliance by EIC will invite penalty.

C. SCOPE /RESPONSIBILITY:

Maintenance of all the field instrumentation, control system, control panel, PLC and which includes preventive, routine maintenance, repair, new installations (for replacement and improvement jobs), Routine, Non routine calibrations, trouble shooting, dismantling, fabrication, mounting, lubrication, covering, cleaning, checking and replacement, addition, deletion of instrumentation process connections, cable testing, removing, laying(whenever required) with conduit, tray and painting of instruments(whenever required) etc., and maintaining track, record of all the activities as per ISO standards.

- a) All the above mentioned jobs are to be carried out by the contractor and the activities are to be supervised, executed professionally by Engineer in charge of maintenance agency. TANGEDCO will not provide any supervision.
- b) Any failure, breakdowns to be attended and rectified by the contractor immediately without affecting the feeding to the bunkers/unloading of wagons and without affecting the operation/routine and preventive maintenance. If this requires any additional manpower the same has to be taken care of by the contractor.
- c) Detailed analysis of report on failure, breakdown should be submitted to the TANGEDCO by contractor within two days and required corrective measures to be done immediately to avoid recurrence of the same.
- d) All the jobs and consumables related to PLC & UPS systems are to be carried out by the contractor as per the guidelines of TANGEDCO engineer.
- e) Regular consumables like fasteners, clamps, cir-clips, screws, gaskets, cleaning agents, cotton waste, insulation tape, Teflon tape, thread sealant tape, adhesives, sprays, leakages sealants(like anabond-666 or sealastic), emery sheets etc., are of contractors scope.
- f) Contractor has to arrange temporary electric power supply, air supply, lighting, working platform(whenever required), scuff holding, ladder, lifting and shifting arrangements etc., to execute all the above mentioned activities in scope. And the materials, hardware required for the same in contractor scope.
- g) Inspection and testing of new equipments, instruments are to be done by the contractor.
- h) Contractor must be equipped with all the tools, tackles, tubing and instrumentation tools and field testing equipments. And the periodic test certificates for the tools, tackles field testing tools to be submitted.
- i) Contractor should be equipped with minimum following field test/ calibrating instruments from the date of commencement of contract.
 1. Multimeter (industry approved- 4 1/2 digit – 2 Nos, 3 1/2 digit -2 Nos.)
 2. Megger- 300V – 1 No, 500V- 2 Nos, 5000V -1 No.
 3. Clamp meters

4. Temperature calibrator
5. Vibration Checking Kit
- j) Daily, weekly, monthly field checklist and periodic maintenance checklist to be maintained by the contractor. Preventive maintenance schedule to be made and to be followed from the first day of the commencement of contract (present preventive maintenance schedule will be given by TANGEDCO for reference).
- k) Contractor should have adequate man power for electrical and instrumentation (weekly off not considered) and records should be produced.

4. CONTRACTOR'S SCOPE OF WORK:

(A) WORKS GENERAL

The contractor should maintain the Coal Handling Plant of MTPS-I & II / Mettur Dam without any interruption of coal unloading through Wagon Tippler/ coal feeding to bunkers/stacking at Coal Stock Yard/Reclaiming and feeding to bunkers/Emergency stacking/Emergency Reclaiming/Handling of coal rakes right from Shunting of load wagons/Marshalling of load wagons from load lines and Placing the load wagons on the tippler/ decoupling of load wagons/tipping through wagon tipplers 1 to 6/Collection and coupling of empty wagons in outhaul side of wagon tipplers 1 to 6/Formation in MTPS lines for handing over to Railways/ Placing of all Locos one by one from Wagon Tipplers 1 to 6 to Loco shed for maintenance works on Locos ie checking Locos oil level, brakes etc and return/Placing the Locos from Wagon Tipplers to Diesel Bunk for filling of Diesel and return as per the conditions specified in the tender specification.

1. The contractor should collect the work details daily from Engineer in charge and has to carry out the works as accordingly.
2. The contractor should have daily interaction with TANGEDCO authorities regarding plant maintenance and to ascertain the quantities of coal to be discharged as per plant requirement.
3. The contractor shall do the maintenance as per the maintenance manual of individual equipment and the system requirement.
4. The contractor shall do the daily inspection and periodical maintenance of individual equipment as per the ISO approved procedures.
5. The contractor should engage qualified shift Engineers for overall co-ordination for maintenance, as per Board's norms.
6. The required technical and non-technical staffs have to be engaged by the contractor for effective maintenance of Coal Handling Plant/MTPS-I & II System equipments.
7. The Contractor has to register the firm with the Factory Inspectorate or any other statutory bodies.
8. The contractor has to follow the Safety rules and regulations as per the Factory Act. The contractor has to keep himself apprised and be thoroughly conversant with the rules and regulations of Factory Act.
9. Weekly Fire and Safety classes are to be conducted in Coal Handling Plant/ MTPS-I & II Mettur Dam in the working spot itself without affecting the work.
Safety appliances, personal protective equipments viz., helmet, shoes, safety belts etc are to be provided to all workmen. Penalty will be imposed for any safety violations to the tune of Rs.500/= for each violation.
10. All the men and consumables required for the work should be arranged by the contractor, at his Cost.
11. All the floors and equipments at Wagon Tippler complex, PCH, SCH, Junction Towers, Stacker cum Reclaimers, Bunker Top, Emergency Stacking system and Emergency Reclaiming System including surrounding areas and the systems should be kept neat and tidy.
12. The Contractor has to arrange the transportation for men to the work spot, materials from stores to site and vice-versa, at his Cost.
13. All the breakdown works should be carried out after getting proper permission/Line clear from the Engineer-in-charge. The breakdown works should be taken up immediately without any delay and completed within permitted / L.C. time by engaging sufficient staff even during night hours.

14. Necessary workmen's insurance and labour license have to be arranged by the contractor and comply with all labour/PF rule as applicable.
15. The devolution of retrieved/scrap materials to MTPS- I&II stores shall be made by the contractor immediately after execution of each work.
16. The workmen compensation due to any accident has to be borne by the contractor, and if any compensation is given, the same must be intimated to the Board with necessary documentary evidences.
17. The contractor should not engage women workers during night hours.(except control room)
18. A vehicle should be parked at the site round the clock for transporting of men and materials for attending any emergency.
19. Obtaining/renewal of all statutory certificates for conveyors, hoists, Lift/Elevator and lifting equipments etc., is under contractor scope.
20. Sufficient man power should be employed to carry out the work in the above location
21. The work should be done carefully and without any disturbance to other agencies
22. For any damage to the equipments during the work, the contractor will be solely responsible and loss due this should be borne by the contractor.
23. The workers engaged by the contractor for this work should have suitable educational qualifications, age limit, Previous experience in this work and Physical and mental fitness, Trained persons for their respective work as per the requirements specified in the Indian Railway rules and the Factories act 1948.

(B) WORKS – TECHNICAL

The contractor has to execute the following nature of works then and there to maintain uninterrupted coal unloading at Railway siding, wagon Tippler, Locomotives and feeding to MTPS-I & II Bunkers/Stacking at Coal Stock Yard/Reclaiming and feeding to the bunkers and to carry out the O&M works in the equipments/machineries in the Coal Handling Plant/MTPS-I & II/Mettur Dam.

1. Carrying out the operation of all Railway siding, Locomotives, Conveyors, Reversible Belt Feeders, Belt Feeders, Flap Gates, Apron Feeders, Dribble Conveyor, Stacker cum Reclaimers, Rotary Breakers, Ring Granulators, Roller Screens, Flow Dividers, Traveling Trippers, Inline Magnetic Separators, Suspension magnetic Separators, Belt Weighers, Metal Detectors, Rack and Pinion Gates, Rod Gates, Vibro Feeders, Telescopic Chute, all DE & DS systems at all the Junction Towers & Operation of Bull Dozers.
2. Cleaning of all equipments, floors and clearing spillage coal from all Junction Towers, Conveyors, and its allied equipments and equipments such as Wagon Tipplers, Apron Feeders, Dribble Conveyor, Stacker cum Reclaimers, Rotary Breakers, Ring Granulators, Roller Screens, Flow Dividers, Traveling Trippers, Inline Magnetic Separators, Suspension Magnetic Separators, Belt Weighers, Metal Detectors, Rack and Pinion Gates, Rod Gates, Vibro Feeders, Telescopic Chutes & all DE & DS systems.
3. Oil topping and greasing of all Railway track lines, Locomotives, Conveyors, Reversible Belt Feeders and Belt Feeder's Pulleys and all the allied equipments of Conveyors, Crushers.
4. Adjustment of skirt rubber / replacement in the discharge chutes to prevent spillage of coal.
5. Adjusting and cleaning of Pre-scrapper, Main scrapper, and V-Scrapper in all the Conveyors, Belt Feeders, Reversible Belt Feeders and Stackers cum Reclaimers and replacement of spares if any.,
6. Tightening of all fasteners of all running equipments like Motors, Fluid couplings, Gear boxes, Pumps, Conveyor pulleys, Travelling Trippers and Vibrators.
7. Cleaning of internals of Flow Dividers, Sector Gate, Rod gates and Rack and pinion gates for free operation.
8. Checking of cleated rubber belt, tightening of drive gear box fixing bolts, cleaning of tramp iron chute, checking of suspension chain slings and fasteners of Inline Magnetic separator and Suspended Magnetic Separators.
9. Checking of bearings, impellers, shaft, aligning pin-bush coupling & replacement if any.

Checking of valve leakages, cleaning of sprinkler nozzles tips, pipeline leakages in Dust Suppression, Sprinkler and Sump pumps.

10. Checking and attending any leakages in the hydraulic lines, power packs of boom luffing and Slewing mechanism, adjustment of pressure relief valves, hydraulic pump, cleaning of oil filters and checking of pressure control valves in Stackers Cum Reclaimers.
11. Checking and attending any leakages in the hydraulic lines, power packs, adjustment of pressure relief valves, hydraulic pump, cleaning of oil filters and checking of pressure control valves in Wagon Tipplers and Clamping Cylinders.
12. Checking and attending any leakages in the hydraulic lines, power packs, adjustment of pressure relief valves, hydraulic pump, cleaning of oil filters and checking of pressure control valves in Apron Feeders and Locomotives.
13. Checking alignment of long travel gear box and correction of the same. Check for wearing of brake shoes and replace the same and adjustment of Thruster brake in Stacker Cum Reclaimers & Travelling Trippers.
14. Checking and adjustment of chain and sprocket of Power and Control Cable Reeling Drums for smooth operation of Travelling Tripper A/B and Stacker Cum Reclaimers I & II.
15. Cleaning of Roller Screen discharge chutes for coal choke and clear the packed coal in between Roll Bodies for free rotation of roller assembly, cleaning of comb scrappers, tightening of bolts & nuts and clearing of coal chocking inside the Ring Granulators.
16. Tightening of bolts & nuts and screws of breaker plates, screen plates, kick off plates, liner plates of Ring Granulators. Clearing of Tramp iron trap and clearing of chokes in the Ring Granulators.
17. Inspection of internals of Ring Granulators and conducting trial run.
18. Tightening of bolts & nuts and screws of Wagon Tipplers and conducting trial run.
19. Cleaning of Wagon Tipplers hopper and inspection of gratings and attending repair if any.
20. Tightening of bolts & nuts and screws of Apron Feeders and Dribble Conveyor and clearing of coal choke in the Chutes.
21. Tightening of bolts & nuts and screws of Screen plates, lifting shelves and check for tightness of Cover bolts, support and Guide wheel's fixing bolts of Rotary Breakers and clearing of coal choke if any.
22. Inspection of internals in Rotary Breakers for any damages and conducting trial run.
23. Checking & detachment of Bag holding plate for wear & tear of bag, formation of cake in bag surface and remove it, check rotary air valve, check impeller/shaft balancing, condition of ducting of Dust Extraction Systems
24. Checking of Compressors of Dust Extraction System for vibration, performance and oil level
25. Periodical checking of alignment between Fluid Coupling and Gear Box and Gear Box and Slow speed Coupling in Conveyors / Reversible Belt Feeders / Belt Feeders / Travelling Trippers/Stacker cum Reclaimers/Roller Screens/Reject Conveyor and Dribble Conveyors conducting trial runs and normalizing the system.
26. Periodical checking of alignment between Fluid Coupling and Gear Box and Gear Box and Slow speed Coupling in Conveyors with Scoop Coupling / Rotary Breakers/Ring Granulators and conducting trial runs and normalizing the system.
27. Periodical checking of drive alignment in Flap Gates/ILMS/SMS/Rack and Pinion Gates and normalizing the system.
28. Periodical inspection of Locomotive air systems, hydraulic system, engine lubrication system and drive mechanism of the system.
29. Periodical Overhauling of Gear Boxes in Conveyors/Reversible Belt Feeders, Belt Feeders and normalizing the system.
30. Periodical overhauling of gear boxes in Flap Gates/ILMS/SMS/Rack and Pinion Gate, Rack & Pinion Elevators and normalizing the system.
31. Periodical checking of Pulley bearings(Head, tail, bend ,deflector pulley)in Conveyors, and bearings in Rotary Breakers, Ring Granulators and normalizing the system.
32. Periodical checking of Pulley bearings (Head, tail, deflector pulley) in Belt Feeders/Reversible Belt Feeders/ILMS/SMS and normalizing the system.

33. Overhauling of Flap Gates(Junction Towers and Crusher houses), Flow Dividers in Secondary Crusher house), Rack & Pinion Gates and Rod Gates in ERH and Sector gate in Primary crusher house which includes removing, overhauling, fixing & trial run.
34. Clearing of cob web in Wagon Tippler Complex, Transfer house, Tunnels Conveyors, Junction Towers and Primary and Secondary Crusher houses, Conveyor Galleries and Emergency Reclaim Hopper areas.
35. Cleaning the spillage coal in the walk way of Conveyors (SCR Machines/Coal yard), pedestal area, sprinkler trench area and removal of hard and stiff coal in the return idler area of Conveyors return side etc.,
36. Calibration of 12 Nos. injectors of engine model VTA 1710 L & Bull dozers including spare replacement etc., if required.
37. Overhauling of lube oil cooler etc., if required.
38. Replacement of TC oil cooler etc., if required.
39. All electrical wiring replacement in SAN Locomotives power cable replacement, control cable replacement, bulb replacement including all electrical works in SAN Locomotives etc., if required..
40. Repairing of valves by replacing repair kit including materials etc., if required.
41. Replacement of final drive assembly with wheel and axle in SAN Locomotive etc., if required.
42. Overhauling of ELGI make air compressors etc., if required.
43. Overhauling of Ingersoll rand air compressors etc., if required.
44. Overhauling of Overhauling of Locomotive engine etc., if required.
45. Overhauling of Locomotive alternator etc., if required.
46. Overhauling of Bulldozer Engine etc., if required.
47. Replacement of worn out/damaged Carrying idlers, Return idlers, Impact idlers, guide rollers, all types of Idler frames and patch up works in seal plates & deck sheets.
48. Replacement of damaged/worn out Pre-Scraper / Main Scraper assembly and checking the operation during the operation of Conveyors/Reversible Belt Feeders/ Belt Feeders.
49. Clearing of coal chokes in the Conveyors/ Reversible Belt Feeders/Belt Feeders/Flap Gates/Rack and Pinion Gates/Emergency Reclaim Hoppers/Flow Dividers/Roller Screens/Ring Granulators/Rotary Breakers/Apron Feeders/Wagon Tippler Hoppers / Vibro Feeders in Emergency Reclaim Hoppers and Chutes in Stacker cum Reclaimers.
50. Replacement of drive pulley/bearings in all the conveyors and equipments.
51. Replacement of Plummer block/Bearings in Reversible Belt Feeders and Belt Feeders including loosening of tension screw, removing of Plummer block, lifting of pulley from its position dismantling of damaged Plummer block / bearing and replacement with new Plummer block / bearing, positioning of pulley and fixing, tensioning the belt by tension screw and conducting trail run.
52. Replacement of Drive / Non-drive end pulley in Reversible Belt Feeders and Belt Feeders including dismantling skirt board idler frames removing of damaged pulley transporting of new pulley dismantling of Plummer block, bearing, positioning the new pulley with Plummer block bearings re fixing of idler frames skirt boards alignment of pulleys, and conducting trail run.
53. Replacement of new belt tensioning device in Reversible Belt Feeders and Belt Feeders.
54. Making preparatory arrangements for conveyor belt joining in all the conveyor and equipments.
55. Making preparatory arrangements for conveyor belt jointing in Reversible Belt Feeders and Belt Feeders.
56. Replacement of fluid coupling with a spare Fluid Coupling in all conveyors, Belt Feeders, Reversible Belt Feeders, Roller Screens, Ring Granulators, Rotary Breakers Stacker cum Reclaimers etc.,
57. Replacement of failed gear boxes in all the conveyors, Belt Feeders, Reversible Belt Feeders, Roller Screens, Ring Granulators, Stacker cum Reclaimers, Rack and Pinion Elevators.
58. Replacement of failed hydraulic cylinder and wheel bogie assembly with a spare one in Stacker cum Reclaimer.
59. Overhauling of control cable and power cable reeling device and strengthening the movable trolley guide structure after overhauling the trolley guide rollers in Stacker cum Reclaimer machine 1&2.

60. Attending/replacement of failed Hydraulic Drive of Slewing mechanism in Stacker Cum Reclaimer, Wagon Tiplers and Apron Feeders. **(Supply, testing and commissioning by TANGEDCO)**
61. Attending/replacement of failed Hydraulic Drive of Bucket wheel in Stacker Cum Reclaimer. **(Supply, testing and commissioning by TANGEDCO)**
62. Attending all breakdown in ILMS and Suspended Magnetic Separators) like replacement of cleated belt / pulley with new one and including renewal of bearing pillow block circular flange unit in the pulleys of ILMS rectification of defects and to maintain trouble free operation of ILMS inclusive of housing of ILMS belt, and tightening of belt after completing the works and conducting trial run.
63. Overhauling of Sump Pumps, Dust Suppression Pumps, Dust Extraction System equipments and Sprinkler Pumps.
64. Replacement of damaged Plummer block / bearing & preliminary arrangement for providing rubber lagging in all conveyor of non-drive pulley.
65. Replacement of damaged non-drive pulley in all conveyor and equipments.
66. Replacement of damaged buckets with new / reconditioned buckets in Stacker cum Reclaimers.
67. Replacement of failed travel gear box in Stacker Cum Reclaimer and Travelling Tripper's gear box.
68. Removing of worn-out M.S. Mother plate, welding the new mother plate in all the discharge chutes with proper supports and stiffeners.
69. Replacement of worn out SS liner plates / wear plates in all discharge chutes after removing of damaged / worn-out liner plates, marking, shearing, lifting, transporting and welding with dissimilar welding electrodes.
70. Dismantling of locked Apron Feeder Pans-6 Nos.(Top side-2 Nos., bottom side-4 Nos near by the head shaft assembly) by cutting and removing the worn out bolts & nuts by using cutting gas and also applying hydraulic jack & supporting arrangements etc, including clearing the coal in Wagon Tippler hopper.
71. Removal of worn out sprocket sector (5 Nos/1set) bolts & nuts clearing the holes in head shaft and refixing the new sprocket sector bolts & nuts over the head shaft assembly.
72. Rolling, positioning Rotary Breaker manually, cleaning, inspecting rail beam, screen plate, deflector plate, lifting shelf and checking, tightening / renewal of worn-out bolt & nut of various sizes provided in the Rotary Breaker rail beams, screen plates, lifting shelf / deflector plates by using torque wrench.
73. Arranging hydraulic jack, lifting Rotary Breaker A/B spider assembly dismantling support wheel assembly Plummer block cleaning, inspecting the bearings, sleeve tightness and renewal of the same if required, normalizing the same after completion of work, greasing, alignment checking.
74. Removal of worn-out lifting shelf / deflector plate from Rotary Breaker, removal of guide roller, cleaning, inspecting bearing, sleeve and renewal of damaged bearing, sleeve / lifting shelf / deflector plate if required and assembling the same.
75. Opening the top cover for inspection of Ring Granulators by using hydraulic arrangements after loosening the bolts and nuts, closing the top cover, fixing and tightening of all the bolts and nuts and conducting trial run of Ring granulator.
76. Inspection & if necessary dismantling of suspension bars from Rotor end disc, removal of all toothed ring hammers replacement of worn out / broken toothed ring hammers with new one, checking the weight of all toothed ring hammers including new hammers in each row for balancing, fixing the suspension bar along with all hammers in rotor end disc and tightening of dummy plug of Ring Granulators.
77. Inspection, balancing the rotor of the Ring Granulators without replacement of worn-out / broken toothed ring hammers if new hammers are not available, removal of all toothed ring hammers in each row for equally balancing the rotor of ring granulators fixing the suspension bars along with hammers in rotor end disc and tightening of dummy plug of ring granulators.
78. Renewal of worn out / distorted kick off plate (lower & upper) and distorted liner plate in Ring Granulators, inclusive of removing worn out / distorted kick off plate / liner plate,

- assembling new / rectified kick off plate inspection, tightening of all fasteners inclusive of transportation and scaffolding arrangement.
79. Renewal of worn-out / damaged breaker plate with new one / reconditioned in the Ring Granulators.
 80. Removal of worn out / distorted screen plate in the Ring Granulators by providing scaffolding arrangements, preparing the seating surface on the cage frame, transportation of new screen plate from stores, leading, lifting, fixing in position, tightening and checking.
 81. Roller shaft assembly overhauling in Roller Screens inclusive of removal of roller shaft assembly, dismantling, renewal of worn out roll body / worn out shaft spares, fixing of roller shaft and checking alignment.
 82. Removal of bevel gear casing, top-up and draining of oil in Roller Screens, cleaning, reassembling, filling of oil and conducting trial run.
 83. Overhauling of Roller Screens, inclusive of removing bevel gear casing top and cleaning, removing of roller shaft assembly and longitudinal drive shaft assembly including flexible coupling unit, special geared couplings, inspection of gear casing, dismantling of all roller shaft assembly, inspection of roller shaft spares renewal of worn out items and assembly of all roller shaft, dismantling of longitudinal shaft assembly / inspection rotation of bearing / spiral bevel gear if any assembly, inspection of bearing / spiral bevel gear assembly of longitudinal shaft.
 84. Renewal of worn-out gear case from Roller Screens with new one /reconditioned in Roller Screens including transport from stores, lifting, leading, preparation of gear case, positioning the gear case, fixing on to the Roller Screen and normalizing.
 85. Removing the failed/defective thrust brake/brake drum and fixing of spare thrust brake/ brake drum including alignment checking, replacement of brake liners, bush bolts & nuts, for Stacker Cum Reclaimer & Traveling Tripper.
 86. Welding of gratings at Bunker Top after clearing the coal.
 87. Transporting of new belt from stores to work site, laying & positioning.
 88. Replacement of wornout/damaged conveyor belts, replacement of damaged rubber lagging of pulleys.
 89. Cold vulcanizing of 1000/1200/1400/1600/1800/2000mm width conveyor belt including splicing of belt, buffing, applying cold vulcanizing solution, over lapping and joining the belt.
 90. Patch vulcanizing of conveyor belts including buffing, preparation of conveyor belt patch, applying vulcanizing solution, and patch jointing.
 91. Providing rubber lagging by using 10mm/12mm thick plain/diamond grooved rubber to pulleys of various conveyors, Belt Feeders and Reversible Belt Feeders by cleaning the pulleys free from the patches of old lagging, polishing the pulleys, marking and cutting the new rubber lagging sheet to required size and providing lagging to pulley.
 92. Overhauling of Rack and Pinion type Elevator in Primary and Secondary Crusher house.
 93. Removal of 6 nos. Roller Shafts in Roller Screens after dismantling of top cover, side covers, 2 Nos. top gear casings and re-fixing the same for by-passing of Roller Screen and assembling of 6 nos. Roller Shafts in roller screens after dismantling of top cover, side covers, 2 nos. top gear casings and re-fixing for normalizing the by-pass arrangement of Roller Screens.
 94. All types of alignments during every replacements and normalizing.
 95. Belt Training activities, inspection of belt joints and adjustments including tightening of Screw take-ups devices and repairing in Counter weight structures and take up arrangements.
 96. Patch-up and replacement works in MS Mother Plates of all transfer chutes, rectification and replacement of worn out/bent liner plates with new liner/Wear Plates.
 97. Vibration checking in all the drive arrangements and arresting.
 98. Maintenance & repairs of all brake systems and lubrication systems.
 99. Maintenance & repairs in pipe line & valves of CW Systems of Coolers of hydraulic drives.
 100. All Maintenance, repairs and rectification works related Traveling Trippers at Bunker floor including Rectification during derailment of Trippers.
 101. Daily thorough clearing of accumulated coal due to spillage and deposits in the

walkways, Deck sheets, seal plates, all floors, equipments, pulleys, junction towers, counter weight arrangements, take-up areas, rail track and adjacent sides, intricate cable racks & trays, chocked and built up coal in all transfer chutes and surrounding areas nearby in respect of Conveyors, Flow Divider's, Flap Gates, Bunker floors & Traveling Trippers.

102. Regular collection and devolution of all types of Scrap & foreign materials in the total CHP to Central Stores/MTPS-I & II respectively.
103. Collection and dumping of stones, foreign materials and other flammable materials to remote, safe, low lying areas as per the instruction of Engineer in charge.
104. Regular checking, topping up lubricants in all gear boxes, fluid couplings, hydraulic drives, greasing of all pulleys and other equipments wherever necessary and changing of required lubricants (liquid & solid) as per the Lubrication schedule instructed by the Engineer in charge.
105. Periodical maintenance of equipments of CHP of MTPS-I & II as per ISO Maintenance schedules and production of daily weekly and monthly reports of the activities carried out with due authentication by the respective field Engineers.
106. The rejects collected from ILMS, Metal Detectors & Suspended Magnets shall be segregated and disposed off/devoluted to Central Stores as per the instruction of Engineer in charge.
107. Entry of foreign materials to Mill Bunkers should be controlled to avoid Mill outages. Otherwise contractor will be penalized only if the reason is solely attributable to the contractor.
108. Proper welding permits must be obtained through the field Engineers before doing any sort of welding and gas cutting works.
109. Maintenance, repairs, replacements and renewals of worn-out internals in all the Sump Pumps, DS pumps, DE System, Exhaust Fans (Fans, Compressor, Filter bags, gauge assembly, Valves) etc.,
110. Required man power must be deployed round the clock for quenching any spontaneous combustion or fire in the Coal Stock yard of MTPS-I & II and the fire or combustion must be quenched then and there.
111. Required Manpower must be deployed in three locations in both streams in shift duties for stone picking in Conveyors while feeding coal to the bunkers from Wagon Tippler/Stacker cum Reclaimer/Emergency Reclaiming and also while stacking of Coal.
112. Required Dozer Operators must be provided round the clock for ramming of coal, dosing of coal for stacking and reclaiming, for facilitating fire quenching and dosing of coal while stacking from the Emergency Stacking via telescopic chute and dosing into the Emergency Reclaim Hopper as and when required.
113. Any other works for maintenance of the Coal Handling System of MTPS-I & II should be attended as and when warranted and instructed by Engineer-in-charge.
114. All finish machining of the pilot bores to the required sizes of flexible couplings between gearbox & fluid couplings, motors & fluid couplings, Pumps & motors, Brakes & motors etc.
115. Hauling of loaded wagons from load lines for wagon tipplers for coal Unloading, marshalling of load wagons from load lines.
116. Placing of coal wagons one by one on the wagon tippler table.
117. Wagon tipping at wagon tippler including recording of coal weight.
118. Coupling of empty wagons after unloading of coal.
119. Collection of empty wagons from Wagon Tippler outhaul side and make empty formation at empty line, shunting of empty wagons if required.
120. Placing of all Locos one by one from Wagon Tipplers to Loco shed for maintenance works on Locos ie checking Locos oil level, brakes etc and return/Placing the Locos from Wagon Tipplers to Diesel Bunk for filling of Diesel and return
121. Any other works for Routine maintenance of the Locomotives of Coal Handling System of MTPS-I & II should be attended as and when warranted and instructed by Engineer in-charge.

DOZER:Breakdown Maintenance works:

122. Removal of Bulldozer blade assembly with frames from lifting cylinders and truunion assembly in the dozer and reassembling the same, as directed by the Engineer in-charge at site.
123. Dismantling the track shoe assembly by removing the locks and master pin etc. in LH or RH of the Bulldozer and assembling the same, then tensioning the track shoe assembly by applying grease, as directed by the Engineer in charge at site.
124. Removal of front idler wheel assembly from LH (or)RH side in the Bulldozer, cleaning, inspection and replacement of damaged or wornout items if any and reassembling the same, as directed by the Engineer in-charge at site.
125. Removal of Bulldozer carrier roller assembly with support from LH (or) RH of the dozer, cleaning, inspection and replacements of damaged (or) worn out items if any and reassembling the same, as directed by the Engineer in charge at site.
126. Removal of Bulldozer track frame assembly from LH or RH side of the bulldozer by lifting of cross bar, carrier roller, Idler wheel by using Jack and providing proper support for the dozer and assembling the same after completion of repair works as directed by the Engineer in charge at site.
127. Dismantling of Bulldozer track roller assembly by removing of Track roller guards, cleaning, inspection and replacing if any got damaged (or) worn out items and assembling as directed by the Engineer in charge at site,
128. Removal of Bulldozer grease seal piston assembly by lifting of cross bar, removing, idler wheel by means of proper support and removing the carrier roller bed etc., cleaning, inspection and replacing the grease seal and assembling the same as directed by the Engineer in charge at site.
129. Removing Bulldozer the recoil spring complete assembly from spring housing by removing the cover assembly by means of Hydraulic Jack. Cleaning, inspection of recoil spring Tension, Position etc., and also replacing the oil, as directed by the Engineer in charge at site,
130. Replacement Bulldozer of Hydraulic lifting cylinder Operating lever Seal in Hydraulic tank assembly by draining the oil and opening the Hydraulic tank, cleaning and assembling the same after changing the oil seal, as directed by the Engineer in charge at site.
131. Removal of Bulldozer cover assembly, lock nut, collar, support sprocket, sprocket nut, bushing, sprocket wheel assembly etc., cleaning, inspection and replacing the sprocket wheel assembly if found worn out (pinions and bearings) and assembling the same after replacement of sprocket wheel seal ring assembly, as directed by the Engineer in charge at site.
132. Replacement Bulldozer of existing seal ring assembly between sprocket wheel assembly and final drive support sprocket assembly by a new one, as directed by the Engineer in charge at site.
133. Removal of Bulldozer Universal joint assembly by removing of all accessories such as sunshade hood, platform, driver seat, battery cover, cross bar, linkages of brake and steering system and other required oil lines etc., from the dozer. Cleaning, inspection and replacing all bushes, Universal joint assembly, if existing got damaged and assembling the same, as directed by the Engineer in charge at site.
134. Complete overhauling of one set(RH or LH) of hydraulic blade lifting cylinder assembly, piston assembly, valve assembly, etc., by dismantling, cleaning, inspection and replacing the service kit contains 'O' rings, piston rings, dust seals, 'U' packing, Back up rings, snap ring etc., and refitting the same. Replacing all 'O' rings in Hydraulic cylinder oil line hoses and piping in Bulldozer as directed by the Engineer in-charge at site.
135. Dismantling, the blade cutting edges by removing the old bolts and nuts, replacing the cutting edges (or) blade crack welding and reassembling the same in the Bulldozer as directed by the Engineer in-charge at site,
136. Replacement of steering pump/ clutch pump/hydraulic pump/booster assembly by dismantling the platform and required oil pipelines in the dozer and assembling the same Bulldozer, as directed by the Engineer in-charge at site.
137. Dismantling Bulldozer 1 set(RH & LH) of track shoe link by removing the track shoes assembly and pin through gouging and then assembling the same in the dozer, as directed by the Engineer in-charge at site.

138. Removal of Bulldozer sprocket assembly, lock nut, collar, support sprocket etc., cleaning inspection and replacing the seal ring assembly between cover assembly and sprocket nut assembly then assembling the same, as directed by the Engineer in-charge at site.
139. Removal of Bulldozer steering control valve system assembly by dismantling of all accessories like diesel tank, cross bar, battery box and all required oil lines, links etc., in the dozer and assembling the same after completion of repair works, as directed by the Engineer in-charge at site.
140. Removal of Bulldozer brake band assembly, steering clutch assembly from the dozer and replacing the steering clutch assembly, Ring seals, 'O' rings, Gaskets and assembling the same, as directed by the Engineer in-charge at site.
141. Removing and replacement of Bulldozer tilting cylinder service kit contain oil seals, 'O' rings, snub ring U packing dust seal etc. and re assembling the same as directed by the Engineer in-charge at site.
142. Removal of Bulldozer parts in under guard assembly and Top guards assembly by removing of all electrical connections cable assembly, brake liner assembly, gear lever assembly, Driver seat etc., cleaning of all deposited coal powder in all system of torque convertors, gear box, engine side, and bottom of under carriage side and re assembling the same as directed by the Engineer in-charge at site.
143. Removing of Bulldozer Arms assembly, Ball joint assembly internal & external, Lock plate with pins, shaft of blade assembly, cleaning and inspection of internal square threads and external threads and ball joint assembly, and reassembling the same in the dozer as directed by the Engineer incharge at site.
144. Removal of Bulldozer water pump assembly by removing of Blade assembly, Lifting Cylinder assembly with Oil lines, Front Radiator Guards assembly, Engine top cover assembly, Air Doom assembly, silencer assembly with fan assembly. Cleaning and inspection of the water pump assembly (or) replacement of new one etc. as directed by the Engineer incharge at site.
145. Removal of stay assembly and Yoke assembly after removing the lifting cylinder and required Oil lines from the Dozer. Cleaning and inspection and servicing of Yoke threading and replacement of Oil seals, worn out Bushes LH (or) RH side. Assembling same in the dozer as directed by the Engineer incharge at site.
146. Removal of Bulldozer Hydraulic Oil pump by draining of hydraulic oil, removing of oil lines, hydraulic hoses, engine top cover assembly, cleaning and inspection of hydraulic oil pump, bearing, body gasket, gear unit and replacing if necessary and reassembling of the hydraulic Oil pump, assembling in the Dozer, fixing of all hydraulic hoses, filling with hydraulic oil etc., as directed by the Engineer incharge at site.
147. Cylinder head repair works in Cummins Engine/PD 220Y-1 Bulldozers.
148. PT Pump repairing and calibration in Cummins Engines/PD 220Y-1.Bulldozers.
149. Injector repairing and calibration in Cummins Engine/PD 220Y-1 Bulldozers.
150. Complete radiator servicing, overhauling and pressure testing in Cummins Engines/PD 220Y-1. Bulldozers.
151. Draining the hydraulic oil, clutch oil and dismantling of hydraulic oil lines, lifting cylinder lever assembly, hydraulic lifting cylinder RH,LH side, cylinder support assembly, clutch oil cooler lines, gear box oil lines and clutch system etc., and reassembling the same after overhauling the Cummins Engines /PD 220Y-1 Bulldozers.
152. Removing the Engine installation, testing and commissioning the engine assembly by aligning the engine, clutch assembly, universal joint assembly and engine bed etc., in Cummins Engines/PD 220Y-1. Bulldozers.
153. Complete electrical system inspection and servicing of damaged wire, head light fused bulbs, starting switch, self motor and alternator etc. in Cummins Engines /PD220Y-1Bulldozer.Carrying out all the other allied minor works to keep the dozer in operating Condition as directed by the Engineer in-charge at site.

Works in Locomotives:-

154. Replacement of brake collar assembly and brake cylinder etc.,
155. Replacement of wheel bearing etc.,

156. Repairing of Self starters 32V/24V etc.,
157. Repairing of turbo charger etc.,
158. Changing of coil spring for SAN Locomotive etc.,
159. Changing of spring bearing assembly for SAN Locomotive etc.,
160. Cardon shaft replacement etc.
161. Replacement of coupling, supporting pad and coupling bracket. etc.,
162. Spare engine replacement etc.,
163. Replacement of silencer assembly (2 Nos. for 1 Locomotive) etc.,
164. Replacement of Radiators. etc.,
165. Reconditioning of Locomotive radiators etc.,
166. Re-railment of empty wagon etc.,
167. Re-railment of load wagon etc.,
168. Re-railment of Locomotives etc.,
169. Any other activity not listed above but required for safe and successful operation for the coal handling equipments, Wagon tippers, locomotives and Bull dozers shall be deemed to have been included in the contractor's scope.

ELECTRICAL

1. Routine and statutory maintenance required for the following electrical equipments shall be carried by the contractor.
 - ❖ 3.3KV, 6.6 KV & 415V Switchgears in CHP MCC, Bunker MCC, Wagon Tippler MCC , Wagon tippler Operator Desk and allied equipments and Stacker Cum Reclaimer-I & II MCC. Annual testing of all types of HT breaker Relays, Circuit breakers, meters as per format of Test report Prescribed by TANGEDCO. 3.3KV & 6.6 KV HT motors of various capacities. 440V LT motors of various capacities. 3.3 KV & 6.6 KV HT Breakers of various types. 440V LT Breakers of various types. LT Modules/Feeders of various types. HT & LT Power transformers of various capacities. LT Dry Type transformers of various capacities. Wagon Tippler, Apron Feeder, Stacker Cum Reclaimer and Travelling Tripper and its auxiliaries. HT (11KV, 3.3 KV & 6.6 KV) & LT(440 V) Power cables of various sizes/types, including HT power cable from Unit Switch Gear to CHP MCC, Incomer Switch gear panels, including cable dressing and provision of required clamps wherever necessary and HT power cables from Switch gear to Motors/Equipments and LT cables from Switch gear to Motors/Equipments. All control cables, instrumentation cables of various sizes, types including cable dressing and provision of cable clamps wherever necessary. HT/LT Trailing cables in Stacker cum Reclaimers and Travelling tippers. Programmable Logic Control system (with related equipment such as processor, Input / Output modules etc.,) Uninterrupted Power Supply system with battery equipments in Wagon Tippler operator cabin, CHP MCC, Stacker Cum Reclaimer-I & II MCC.
 - ❖ Maintenance of Battery Bank, Battery Charger and DCDB. Dust Extraction System, Dust Suppression System, Belt weighers, Load Cells/ Weighing System in Wagon Tippers, Metal Detectors, ILMS, SMS components, Hooter systems and various Limit switches, MLDB etc., Electrical Maintenance of Blinking Light at Wagon Tippler Area. Electrical Maintenance of Caution Signal Lamp at Wagon Tippler Area. Electrical Maintenance of all indoor lighting maintenance at all MCC. Electrical Maintenance of Track Signal Lamp at Wagon Tipple Area.

2. Carrying out the operation of Switchgears in CHP MCC, Bunker MCC, Wagon Tippler MCC and Stacker Cum Reclaimer-I & II MCC.
3. Cleaning, checking of tightness and attending any other abnormalities of electrical equipments and its allied equipments such as HT/LT Motors, HT/LT Breakers, Junction Boxes, Local/Remote Push buttons stations, terminal boxes, Pull Chord Switches, Belt Sway Switches, Zero Speed Switches, Under Belt switches, Receptacles, UPS, Battery Banks, Belt Weighers, Load Cells/Weighing System in WT, Inline and Suspension Magnetic Separators, Rack and Pinion Elevators, Sump Pumps, Dust Suppression and Sprinkler System, Welding Points, Lighting DB's, all lightings at all Junction towers, Primary and Secondary Crusher house, Drive Houses, Galleries, Wagon Tippler complex/MCC, Stacker cum Reclaimer I & II, CHP MCC, Bunker MCC, Dozer shed, High Mast Tower Lights, SCR walkway lights Earthing System, etc., of Coal Handling Plant/ MTPS-II.
4. Maintenance of all HT/LT transformers in CHP MCC, Bunker MCC, Wagon Tippler MCC and Stacker Cum Reclaimer-I & II MCC of Coal Handling Plant /MTPS-I&II .
5. Releasing, Overhauling, Rewinding, renewal of bearings, metalizing, assembling, re-fixing, testing and commissioning of all HT Motors in Conveyors, Rotary Breakers and Ring Granulators of CHP/MTPS-I & II.
6. Releasing, Overhauling, Rewinding, renewal of bearings, metalizing, assembling, re-fixing, testing and commissioning of all LT Motors in CHP/ MTPS-I & II.
7. Releasing, re-laying/laying of HT Cables in various locations of Coal Handling Plant/MTPS-I & II.
8. Releasing, re-laying/laying of LT Cables in various locations of Coal Handling Plant / MTPS-I & II.
9. Releasing, re-laying/laying of Control Cables, OFC in various locations of Coal Handling Plant / MTPS-I & II Releasing, re-laying/laying of Cable Trays in various locations of Coal Handling Plant / MTPS-I & II Providing of HT/LT Cable joints with necessary cable joint kit and accessories.
10. Rectification of failed LT modules/feeders in CHP MCC, Bunker MCC, Wagon Tippler MCC and Stacker Cum Reclaimer-I & II MCC including testing and commissioning.
11. Rectification of failed HT/LT - Breakers/Feeders in CHP MCC, Bunker MCC, Wagon Tippler MCC and Stacker Cum Reclaimer-I & II MCC including testing and commissioning
12. Maintenance of I/O, D/O, D/I, power supply modules, VFD Drives, etc., and trouble shooting of PLC Units in Coal Handling Plant / MTPS-I & II
13. Reconditioning of transformer oil by hot oil circulation, testing and commissioning of the Transformers.
14. Calibration of belt weighers in Conveyers, Weighing System in Wagon Tipplers, troubleshooting, including materials, servicing, inspection, routine checking, preventive maintenance and breakdown maintenance.
15. Maintenance of all indoor/outdoor light fittings in all Junction towers, Conveyor Gallery, mobile machines, Primary and Secondary Crusher house, Wagon Tippler complex, Stacker cum Reclaimer, Bunker Top and High Mast Tower including repairing and replacement of accessories with energy saver lamps of respective makes in Coal Handling Plant / MTPS-I & II.
16. Routine and periodical maintenance of Electrical Hoists in Coal Handling Plant/ MTPS-I & II.
17. Routine and periodical maintenance of Rack and Pinion Elevators in Coal Handling Plant/ MTPS-I & II
18. Reconditioning of all ILMS & SM coils, Testing and commissioning in CHP/ MTPS-I & II.
19. Maintenance of electrical equipments related to ETP/STP pumps and panels provided in the CHP area.
20. Overhauling and load testing of Mono rails and hoists, of various capacities including certification etc.,

Any other activity not listed above but required for safe and successful operation for the plant shall be deemed to have been included in the contractor's scope.

3.0. LIST OF CONSUMABLES TO BE CONSIDERED IN THE CONTRACTOR SCOPE:

1. Lubricating Oil.
2. Grease.
3. All Welding Electrodes.
4. Cotton Waste, Dungy Cloth, Gada Cloth.
5. Gland Ropes.
6. Spider element for coupling.
7. Cutting Gases.
8. Sealing Components.
9. All Fasteners.
10. Rubber bushes for Half Couplings.
11. Asbestos Ropes.
12. Oil Seals & Gaskets.
13. Alumina for Compressor Air - Dryer.
14. Wire brushes.
15. Emery Sheet.
16. Oil Stones.
17. Silica gel.
18. Contactors, MCBs, MCCBs, MPCBs, Relays, Fuses, lugs (Various ratings) etc.,
19. Push buttons, indication lamps, Transducers, E-Stop.
20. Proximity Sensor, Motor terminal blocks,.
21. Safety appliances such as Facemask, Earplug, Dust Respirator, Gloves, Rain Coat, Gaggles and First Aid box with Medicines, etc.,
22. Stainless steel Shim Sheets.
23. Anti-corrosive, Anti-wear components.
24. Belt clamps, Fire hoses, water hoses, hydraulic hoses and fittings.'
25. All types of Keys and Pins..
26. Other consumables if any, but not covered in the above list should also be arranged by the contractor as per the instruction of Engineer-in-charge.

3.1. LIST OF SPARES TO BE CONSIDERED IN THE CONTRACTOR SCOPE:

All the spares (excluding OEM Spares, Hydraulic Spares, Iron & Steel, Gear Box Spares etc., as listed in Annexure - I & II) is under the contractor's scope.

ANNEXURE-I (MTPS-I)

NOTE: The following list of materials and works are excluded in this estimate and covered under TANGEDCO scope

- 1 Renovation of wornout structural and paintings
- 2 Complete replacement of chutes and pipes
- 3 Improvement and Revamping works
- 4 Supply and replacement of VCB/ACB
- 5 Supply and replacement Station Battery & Battery Charger
- 6 Supply and replacement of complete PLC system and UPS
- 7 Supply and replacement of Power Transformers
- 8 Supply of HT & LT Power cables
- 9 Complete replacement of drag chain assembly
- 10 Supply and replacement of complete SCADA System
- 11 Reconditioning and supply of Hydraulic system other than consumables
- 12 Iron & Steel
- 13 All types of Gear Boxes / Internals other than consumables
- 14 All types of Fluid / High speed / Low speed Couplings other than consumables
- 15 HT & LT Motors (above 5 KW)
- 16 Bogie wheel for Travelling Tripper
- 17 Flap gate actuator assembly
- 18 IMS & SMS coil

Locomotives

- 19 Spares for Hydraulic transmission unit of M/s SAN locomotives
- 20 Final drive gear boxes for M/s SAN locomotives
- 21 Traction motor for M/s. BHEL locomotives
- 22 Various sizes of Cardon shaft for M/s SAN locomotives
- 23 Engine head of locomotives
- 24 Major spares of Alternator M/s BHEL locomotives
- 25 Rails for Railway track line
- 26 Tongue rails, check rails, CMS crossings
- 27 Diesel will be supplied by BOARD as per previous consumption pattern (Diesel for both Loco and Dozer)
- 28 PSC Sleeper for point & crossing.

Wagon Tippler

- 29 Link Chain
- 30 Apron Pan
- 31 Split spur wheel assembly
- 32 Rack segment with HSFG bolt & nut with washer
- 33 Top stop locking gear rack
- 34 Flanged roller assembly
- 35 Pivot shaft

Primary Crusher

- 36 Feed end spider cone with tire rim & sprocket on feed end cone for PCR
- 37 Special beam with fasteners and washers

- 38 Adjustable lifting shelf
- 39 3" pitch quadruplex drive chain for PCR
- 40 Deflector plate clock wise
- 41 Deflector plate anti clock wise
- 42 Screen plate without butt strip
- 43 Screen plate with butt strip
- 44 Blank plate
- 45 Counter balance plate
- 46 Guide roller assembly
- 47 Support wheel with fitted shaft
- 48 Support wheel plummer blocks
- 49 Discharge end spider cone with rim
- 50 3" pitch x 30 teeth quadruplet sprocket.

Secondary Crusher

- 51 Rotor shaft / Rotor shaft assembly
- 52 Cage frame assembly
- 53 Counter shaft assembly
- 54 Roller shaft / Roller shaft assembly
- 55 Drive shaft assembly
- 56 Gear casing (Top & Bottom)
- 57 Spiral bevel gear and drive shaft gears for roller screen

Stacker Cum Reclaimer Machine

- 58 Drive / Non Drive Bogie wheel assembly
- 59 Hydraulic Spares
- 60 Buckets / Bucket wheel assembly
- 61 Slew ring assembly

62 Bulldozer OEM spares other than consumables

ANNEXURE-II (MTPS-II)

The following list of materials and works are excluded in this estimate and covered under TANGEDCO scope

Renovation of wornout structural and paintings
 Complete replacement of chutes and pipes
 Supply and replacement of VCB/ACB
 Supply and replacement Station Battery & Battery Charger
 Supply and replacement of complete PLC system and UPS
 Supply and replacement of Power Transformers
 Supply of HT & LT Power cables
 Complete replacement of drag chain assembly
 Supply and replacement of complete SCADA System
 Reconditioning & supply of Hydraulic system other than consumables
 Iron & Steel
 All types of Gear Boxes / Internals other than consumables
 All types of Fluid / High speed / Low speed Couplings other than consumables
 Improvement and Revamping works
 HT & LT Motors (above 5 KW)
 Bogie wheel for Travelling Tripper

Wagon Tippler

Link Chain
 Apron Pan
 Split spur wheel assembly
 Rack segment with HSFG bolt & nut with washer
 Top stop locking gear rack
 Flanged roller assembly
 Pivot shaft

Primary Crusher

Feed end spider cone with tire rim & sprocket on feed end cone for PCR
 special beam with fasteners and washers
 Adjustable lifting shelf
 3" pitch quadruplex drive chain for PCR
 Deflector plate clock wise
 Deflector plate anti clock wise
 Screen plate without butt strip
 Screen plate with butt strip
 Blank plate
 Counter balance plate
 Guide roller assembly
 support wheel
 Discharge end spider cone with rim
 3" pitch x 30 teeth quadruplet sprocket.

Secondary Crusher

Rotor shaft / Rotor shaft assembly
 Cage frame assembly
 Counter shaft assembly
 Roller shaft / Roller shaft assembly
 Drive shaft assembly
 Gear casing (Top & Bottom)

Stacker Cum Re claimer Machine

Drive / Non Drive Bogie wheel assembly

Hydraulic Spares other than consumables

Buckets / Bucket wheel assembly

Slew ring assembly

Bulldozer spares other than consumables**Locomotives**

Spares for Hydraulic Transmission unit of M/s. SAN Locomotives

Final Drive Gear Boxes for M/s. SAN Locomotives

Engine Head for M/s. SAN Locomotives

Major spares of alternator of M/s. SAN Locomotives

Various sizes of carbon shaft for M/s. SAN Locomotives

4.0. MINIMUM STAFF TO BE MAINTAINED DURING NORMAL OPERATION**1. MTPS-I:**

Sl No	Designation	No of persons to be engaged
1)	Technical Assistant (Grade – I – B.E. Holders)	6 Nos.
2)	Technical Assistant (Grade – III – I.T.I. holder)	54 Nos.
3)	Dozer Operator	4 Nos.
4)	Mazdoor II Gr	271 Nos.
	Total	335 Nos.

2. MTPS-II:

Sl No	Designation	No of persons to be engaged
1)	Technical Assistant (Grade – I – B.E. Holders)	3 Nos
2)	Technical Assistant (Grade – III – I.T.I. holder)	45 Nos
3)	Driver (Heavy Duty) Class II	36 Nos
4)	Mazdoor II Gr	231 Nos
	Total	315 Nos.

Recovery shall be made from the contractors bills, if the above minimum staff are not maintained, as below (For 1st year of the contract)

1	Technical Assistant – Grade – I	Rs.1049.00 per shift
2	Technical Assistant – Grade – III	Rs. 799.00 per shift
3	Driver (Heavy Duty)	Rs. 708.00 per shift
4	Mazdoor II Gr	Rs. 461.00 per shift

For subsequent years the escalation @ 5% per Annum to the first year value shall apply.

Note:- If the minimum staff required is to be reduced based on the TANGEDCO direction in line with G.O for any reason such as pandemic, natural calamity, war and other national emergency etc., recovery will be made for the actual short supply of labour at the above rates. Liquidated Damages will not be applicable for that period.

5.0. JOINT RESPONSIBILITY OF CONTRACTOR AND TANGEDCO:

I. In case of emergency in conveyor system, if the materials/spares are not available at MTPS-I/II stores, then the O&M contractor shall arrange to supply the spares at prevailing purchase order with due escalation / market rate whichever is lower, without delay. Such cost of spares shall be reimbursed to the O&M contractor by TANGEDCO after approval from the Competent Authority.

II. In case any emergency work in conveyor system, then the O&M Contractor have to execute the emergency work as per previous awarded rate/ Cost data rate with due escalation, whichever is lower, without delay. The payment shall be reimbursed to the O&M Contractor by TANGEDCO after approval from the Competent Authority.

6.0. TANGEDCO SCOPE OF WORK :

1. Supply of OEM Spares & Hydraulic spares and Gear Box spares will be supplied by TANGEDCO.
2. All Iron and Structural Materials, SS and other liner plates, Pipes will be supplied by TANGEDCO.
3. Diesel required for judicial usage as admitted by the Engineer in charge for operation and maintenance for locomotives and Dozers will be supplied by TANGEDCO
4. Renovation of worn-out structural, Pipes and chutes, Painting work will be in TANGEDCO's scope.
5. In case of any improvement, modification, civil, road work, renovation and additional works which are necessary to be carried out for smooth and continuous operation of the system, will be in TANGEDCO scope.
6. Reconditioning and overhauling of equipment's such as fluid couplings, crushers, ED screen, All Hydraulic system, Gear boxes will be in TANGEDCO scope.
7. Supply and complete replacement HT & LT switchgear, HT Motors & PLC, C&I systems and rewinding of transformers.
8. Initial revamping, repair / rectification work for MTPS I & II will be done by TANGEDCO.

Sd/xxx
SE/M-II/MTPS-II

Sd/xxx
SE/M-II/MTPS-I

SECTION VII GENERAL CONDITIONS OF CONTRACT

1.0. SUB-LETTING:

No part of the contract shall be sublet without prior written permission of the TANGEDCO nor shall transfer to be made by Power of attorney authorizing others, to receive payment on Contractor's behalf.

In case of the Contractor engaging contract labourers with the prior approval mentioned above in writing, the following should be strictly adhered to.

a) The Contractor should fulfill strictly all the conditions as stipulated in the contract labour (Regulation and abolition) Act, 1970 and the rules made there under.

b) The Contractor should take out a license at his cost, under section 12 of the above said act within the specified period as mentioned by the Management/ Principal employer at the time of awarding the contract.

2.0. POWER SUPPLY:

Power supply will be provided to the contractor from the nearest available TANGEDCO's power supply point, for the contractor's offices & stores on chargeable basis as per the prevailing rate. Free power supply for the works will be provided to the nearest point available. The contractor should make his own arrangement to extend the power to the area of work and also maintain such extension lines at his cost.

3.0 WATER SUPPLY:

Water Supply for site office will be provided at one point on chargeable basis as per TANGEDCO rate. The contractor should make his own arrangement to extend the water supply to their office and also maintained the such extension lines at his cost. However water supply for the maintenance works will be provided by the Board at free of cost.

4.0 INTERCOM FACILITY:

The intercom facility will be provided to site office of the contractor free of charge.

5.0. ERECTION OF SHEDS:

The Contractor will be permitted to erect their own sheds for offices at the place approved by the TANGEDCO on chargeable ground rent. TANGEDCO will not allow any land for putting up labour sheds and living quarters for their working staff and the Contractor has to arrange for the same. On completion of work, the contractor shall demolish his office and stores shed at his own cost.

6.0. COMMUNICATION FACILITIES:

The Contractor shall install, maintain and operate such other communication and signal facilities as are necessary for the safe and efficient execution of the work. All such communication and signal facilities shall be subject to the approval of the Engineer. Authorized employees of the TANGEDCO shall have free use of such facilities installed by the Contractor for the transmission of official messages.

7.0. ILLUMINATION:

Adequate illumination is to be provided by the Contractor at his cost. Wherever any

works are carried out at night, the area of works to be illuminated adequately by flood lights. The voltage of hand lamps is to be reduced to 24 V AC and suitable transformers & Switch boards have to be installed at the Contractor's expenses.

For power supply to worksites, Contractor's offices and stores, the Contractor has to provide his own distribution system at his own cost from the points of take off from the nearest mains provided by the TANGEDCO. The Contractor shall construct and maintain at his own expenses the necessary circuit for distributing the power in order to provide voltages regulations.

8.0. **CLEANING UP:**

During the execution of work, the Contractor shall remove from the vicinity of the work all, rubbish, unused materials, and other materials, belonging to him or used under his discretion and in the event of his failure to do so, the same will be removed by the TANGEDCO, and the relevant expenditure recovered from the Contractor.

9.0. **WASTE MATERIALS:**

All waste materials as decided by the site Engineer should be lift out of the compound at Contractor's cost and the Contractor should keep the site always clean during contract period.

10.0. **SAFETY, SECURITY AND LIGHTING:**

Except as hereinafter provided, the Contractor shall unless otherwise specified be responsible for the proper fencing, guarding, lighting around the works area to avoid accidents. Similarly proper security arrangement shall be made by the contractor during stormy weather and high tide conditions of the sea to avoid any loss of property and life.

11.0. **HEALTH AND SANITARY RULES FOR WORKERS:**

The Contractor's special attention is invited that he is required to provide at his own expenses the following amenities to the satisfaction of the Engineer at site.

12.0. **DRINKING WATER:**

Water of good quality fit for drinking purposes shall have to be provided for the workers.

13.0. **CANTEEN:**

The canteen facility already available in MTPS-I/II on chargeable basis may be utilized.

14.0. **PRECAUTION DURING WORKING:**

The contractor should take all precautions necessary and as specified by the Engineer for works. He should at his expenses provide helmets for all the workmen working. Any special precautions that may be required by the Acts of Rules of the Tamil Nadu Government from time to time shall also be taken by the contractor at his own cost. During inclement weather, the contractor shall protect from injury all works already in progress, just then completed. Should the work be suspended by reason of rain, strikes lockouts or any other cause, the contractor shall take all precautions necessary for protection of works and make good, at his own expense, any damage arising from any of these causes.

15.0. **FIRST AID:**

The contractor should maintain at the works spot, the first aid appliances and medicines. The appliances shall be kept in good order and shall be placed under the charge of a responsible person who shall be readily available at the works site.

16.0. **INSPECTION OF WORKS:**

The OWNER or his duly authorized person shall have at all times, full power to inspect the plant where the contractor is carrying out the Operation and Maintenance. The written instruction issued by the ENGINEER should be properly carried out by the CONTRACTOR.

17.0. **CONTRACTOR TO KEEP INVENTORY OF PLANT ETC:**

The Contractor shall prepare and maintain an inventory of all materials, temporary rolling stock, plant purchased or hired for employment or for any of the purposes of this Contract and such inventory or a copy thereof shall at all times be available for inspection by the Engineer, on the completion of the contract, all such materials, rolling stock and plant as shall have been hired shall be removed forthwith by the Contractor.

18.0. **TOOLS AND PLANTS FOR THE EXECUTION OF THE CONTRACT:**

All tools and plants, equipments and tackle required for the complete execution of the contract shall be arranged for by the Contractor only at his own cost. The Contractor, may however, specify in his tender the terms under which or concessions, if any, that would require for procuring and using the tools and plant and equipment on the work except those that are to be supplied on hire or free of charge.

19.0 **EMPLOYMENT OF QUALIFIED TECHNICAL STAFF IN EXECUTION:**

The contractor should engage qualified persons for the above O & M works. The minimum O & M Staff to be considered for the above works are furnished in Clause 4.0. Section - VI

B.E. Degree Holders & Minimum 2 Years experience in Diploma Holders similar nature of work. The contractor should see that one of the technically qualified persons is always available at the site of work, during working hours, to check all items of work. If the contractor fails to employ the minimum staff as specified, then penalty shall be levied as per the rates indicated in the Clause 4.0. Section – VI for the period of such non-employment of minimum staff.

20.0. **EMPLOYMENT OF CONTRACT LABOUR:**

The contractor should fulfil strictly all the conditions as stipulated in the contract labour (Regulation and Abolition) Act 1970 and the rules made there under. The Contractor should take out license under Section 12 of the above said Act, within the specified period as mentioned by the Management/ Principal Employer at the time of awarding the contract.

The contract shall be terminated if the Contractor fails to obtain a license under Section 12 of the contract labour (Regulation and Abolition) Act 1970 within 30 days of award of contract.

As per the Contract Labour Rules 1975, the Contractor should disburse the wages of the contract labours in the presence of authorized representative of the Principal Employer and it should be certified that the amount so paid as wages by such

representatives as furnished below:

"Certified that the amount shown in Column No. has been paid to workmen concerned in my presence." The wages of contract labour should not be less than that of minimum wages prescribed by the Minimum Wages Act for Contract labour.

21.0 HANDING OVER OF THE PLANT:

- i) HANDINGOVER OF PLANT TO THE CONTRACTOR: The Coal Handling Plants at MTPS-I & II shall be handed over to the contractor in good condition and during handing over of site, the site condition will be assessed jointly by the Contractor and TANGEDCO.
- ii) HANDING OVER OF PLANT AFTER COMPLETION OF CONTRACT PERIOD: The entire coal handling plant shall be handed over to TANGEDCO in good working condition. The defects if any or replacement of any worn-out parts at the time of handing over shall be carried out by the contractor before handing over of the plant to TANGEDCO.
If the contractor fails to attend the defects or to replace the worn-out parts, TANGEDCO shall recover the relevant cost from the payment due to the contractor.

22.0. LIABILITY FOR ACCIDENTS TO PERSONS:

The Contractor shall indemnify and save harm to the TANGEDCO against all sections, suits, claims, demands, cost of expenses arising in connection with injuries suffered, prior to the date when the works or plant shall have been taken over, by person employed by the Contractor or his sub- contractor on the works whether under the general law or under the workmen's compensation Act 1923, or any other statute in force on the date of the contract, dealing with question of liability of employer for injuries suffered by employees and to have taken steps properly to insure against any claims there under.

On the occurrence of an accident which results & in the death of the workmen employed by the Contractor or which is due to the contract work and of so serious as to be likely to result in the death of any such workmen, the Contractor within 24 hours of happening of such accident intimate in writing to the concerned Engineer and such officers required by the provision of the Workmen's Compensation Act the fact of such accident. The Contractor shall indemnify TANGEDCO against all loss or damage sustained by TANGEDCO resulting directly or indirectly from his failure to give intimation the manner aforesaid including the penalties or fines, if any payable by TANGEDCO as a consequence, of the TANGEDCO's failure to give notice under the Workmen's Compensation Act or otherwise to conform to the provisions of the said Act in regard to such accident.

In the event of any claim being made, or action brought against the TANGEDCO involving the Contractor and arising out of the matters referred to and in respect of which the Contractor is liable under clause, the Contractor shall be immediately notified thereof, and he shall with the assistance, if he so require, of the TANGEDCO but at the sole expense of the Contractor, conduct all negotiations for the settlement of the same or any litigation that may arise there from. In such cases, the TANGEDCO shall, at the expense of the Contractor, afford all available assistance for any such purpose.

In the event of an accident in respect of which compensation may become payable under Workmen's Compensation Act VII of 1923 and any subsequent amendment thereof whether by the Contractor, or by TANGEDCO, as principal it shall be lawful for the Engineer to retain out of money due and payable to the Contractor such sum or sums of money as may be in the opinion of the said Engineer be sufficient to meet such liability. The opinion of the Engineer shall be final in regard to all matters arising under this clause and will not be subject to any arbitration.

Liability for damage or loss to third party including inspection officers due to act of the Contractor or his sub-contractor connected with the execution of the contract shall be fully borne by the Contractor. The Contractor shall maintain such detailed records to furnish information regarding entertainment and discharge of all workmen employed under this contract as to be adequate for the timely and full settlement of claims under the Workmen's Compensation Act. All cases of accidents or injuries shall be reported to the Engineer with all the full details required for the settlement under the Workman's Compensation Act.

Liability for damages or loss to third party including inspection officers due to act of the CONTRACTOR or his SUB-CONTRACTOR connected with the execution of this contract shall be fully borne by the CONTRACTOR. The CONTRACTOR shall maintain such detailed records to furnish information regarding entertainment and discharge of all workmen employed under this contract, which are adequate for the timely and full settlement of claims under the Workmen's Compensation Act. All cases of accidents or injuries shall be reported to the ENGINEER with full details required for the settlement under the Workmen's Compensation Act.

The Contractor should report about all accidents within 24 hours to the Assistant Engineer of TANGEDCO in the preliminary accident form. He should furnish other particulars such medical certificates, wage particulars, fitness, etc., in due course without delay.

23.0. INSURANCE:

- 23.1 It is incumbent on the part of the Contractor to see that it shall be his sole responsibility to protect the public and his employees, against any accident from any cause and he shall indemnify the Tamil Nadu Generation and Distribution Corporation against any claim for damages for injury to person or property resulting from any such accident and shall also where the provisions of workmen's compensation act apply take steps to properly insure against any claim there under by way of accident, risk, insurance demand for all purposes of relief, failing the same or otherwise, Contractor alone will be responsible to meet the compensation awarded under the said act.
- 23.2 The Contractor should satisfy the field Executive Engineer that 'Accident Risk Insurance Policy' is taken before taking over the site for taking up the work and also to satisfy the field Executive Engineer, that the policy/ policies is/ are kept in force till the contract is completed.
- 23.3 Recoveries will be made from Contractor's bill for any liability for the accidents and refund of the same considered later after the claim is fully settled by the Insurance Authorities.

24.0. NEGLIGENCE:

If the Contractor shall neglect to execute the work with due diligence and expedition, or shall refuse or neglect to comply with any reasonable orders given to him in writing by the Engineer in connection with the work or shall contravene the provision of this contract, the TANGEDCO may give seven days' notice in writing, to the Contractor to make good the failure, neglect or contravention complained of any should the Contractor fail to comply with the notice within the reasonable time from date of service thereof in the case of failure, neglect or contravention capable of being made good within that time or otherwise within such time as may be reasonably necessary for making it good, then and in such case, the TANGEDCO shall be at liberty to employ other workmen and forthwith perform such work as the Contractor may have neglected to do, or if the TANGEDCO shall think fit, it shall be lawful for him to take the work, wholly or in part off the Contractor's hands and re-contract at a reasonable price with any other person or persons or provide any other materials, tools and tackles or labor for the purpose of completing the work or any part thereof and in

that event the TANGEDCO shall, without being responsible to the Contractor for the fair wear and tear of the same, have the free use of all the materials, tools, tackles, or other things which may be on the site for use at any time in connection with the work to the exclusion of any right of the Contractor over the same and the TANGEDCO shall be entitled to retain and apply and balance which may be otherwise use to the contract by him to the Contractor or such part thereof as may be necessary to the payment of the cost of executing suchwork as aforesaid.

If the cost of executing the work as aforesaid shall exceed the balance due to the Contractor and the Contractor fails to make good the deficit, the said materials, tools, tackles, construction plant, or other things which are the property of the Contractor may be seized and sold by the TANGEDCO and the proceeds applied towards the payment of such differences and the cost of and incidental to such sale. Any outstanding balance existing after crediting the proceeds of such sale, shall be paid by the Contractor on the certificate of the Engineer, but when all expenses, costs, and charges incurred in the completion of the work are paid by the Contractor, all such materials, tools tackle, or other things remaining unused to be removed by the Contractor. The actual difference in price where ever the TANGEDCO gets executed through other agencies at a higher rate is payable by the contractor to TANGEDCO.

25.0. LIABILITY FOR DAMAGE TO WORKS OR PLANTS:

The Contractor shall during the progress of the work properly cover up and protect the work and plant from injury by exposure to the fire or weather and shall take every reasonable proper, timely and useful precaution against accident or injury to the same from any cause and shall be and remain answerable and liable for all accidents or injuries there to which until the same, be or be occasioned by the acts or omissions of the Contractor or his workmen or his sub-contractors and all losses and damages to the works or plant arising from such accidents or injuries as aforesaid shall be made good in the most complete and substantial manner by and at the sole cost of the Contractor and to the reasonable satisfaction of the Engineer. Such loss or damage happen to units of works or plant or materials failing outside the scope of this contract and due to the contract, those shall be replaced or compensated for by the Contractor to the satisfaction of Engineer.

In the case of loss or damage to any portion of the work occasioned by other causes, the same shall, if required by the TANGEDCO be made good by the Contractor in like manner but at the cost of the TANGEDCO at a price to be agreed between the contractor and the TANGEDCO and the TANGEDCO shall pay to the Contractor the contract value of the portion of the work so lost or damaged or any balance of such contract value remaining unpaid as the case may be.

Until the work shall be deemed to be taken over as aforesaid, the Contractor shall also be liable for and shall indemnify the TANGEDCO in respect of all damage or injury to any person or to any property of the TANGEDCO or of others occasioned by Act of the Contractor or his work men or his sub-contractors or by defective design, work or material but not due to cause beyond his reasonable control. Provided that the Contractor shall not be eligible under the contract for any loss of profit or loss of contracts or any claims made against the TANGEDCO not already provided for in the contract, nor for any damage or injury caused by or arising from acts of the TANGEDCO or of others (save as to damage by fire, as hereinafter provided) due to the circumstances over which the Contractor has not control nor shall his total liability for loss, damage or injury exceed the total value of the contract.

26.0. SUSPENSION OF WORK:

The Engineer may from time to time by direction in writing for any valid reasons, without in any way vitiating this contract, direct the Contractor to suspend the work or any part thereof at such time or times and for so long as the Engineer may deem desirable, and the Contractor shall not, after receiving such written notice proceed with the works therein ordered to be suspended until he shall have received written notice or authority to the effect from the Engineer. The Contractor shall not be entitled to claim from the TANGEDCO compensation for any loss or damage sustained by him by reason of the suspension of works as aforesaid.

No compensation shall be payable for idle labour, staff and machinery (hired or otherwise) due to occasional power failure or any causes beyond the control of TANGEDCO and for prearranged shutdowns in electricity supply for which prior notice may be given.

27.0. DEATH, BANKRUPTCY ETC:

If the Contractor, shall die or commit any act of bankruptcy or being a Corporation commence to be wound for reconstruction purposes or carry on its business under a receiver, the executors, successors or other representatives in law of the Estate of the Contractor or any such receiver, liquidator or any person in whom the contract may become vested, shall forthwith give notice thereof in writing to the TANGEDCO and shall for one month, during which he shall take all reasonable steps to prevent a stoppage of the works, have the option of carrying out this contract subject to his or their providing such guarantee as may be required by the TANGEDCO but not exceeding the value of the work for the time being remaining un-executed. In the event of stoppage of the works, the period of the option under this clause shall be fourteen days only. Provided that, should the above option be not exercised, the contract may be terminated by the TANGEDCO by notice in writing to the Contractor, and the same power and provisions reserved to the TANGEDCO in the proceeding clause on the taking of the work out of the Contractor's hands shall immediately become operative.

28.0. NOTICES: HOW TO BE GIVEN:

Whereas legal or other notice or any other documents is to be given to or served up to the Contractor it shall be deemed to be duly given or served, if it shall have been either delivered to him personally or to his recognized agent (including in the case of the company the Secretary of such company) or delivered at or sent through the post addressed to the contractor at the contractor's office in the site or sent through the post addressed to the last known place of business or abode of the Contractor or in the case of a Company to its Registered Office and in the case of a firm of Contractor notice or other documents, which shall be so given to or so served on any one of the partners in such firm, shall be deemed to have been given to or served on all of them.

29.0. SPECIAL CONDITIONS TO BE FOLLOWED REGARDING ENVIRONMENTAL ANGLE:

The labourers should be instructed to follow Thermal Station rules. Any failure to observe and obey these rules will be a serious offence and the labour will be expelled from worksite.

Sd/xxx
SE/M-II/MTPS-II

Sd/xxx
SE/M-II/MTPS-I

SCHEDULE-A

Name of the Work : MTPS-I (4 x 210MW) & MTPS- II (1 x 600MW) – Operation and Maintenance of Coal Handling Plants Complete System , Operation & Maintenance of Locomotives, Railway siding, Wagon Tippers and Bulldozers including supply of all spares (excluding OEM Spares, Hydraulic Spares, Iron& Steel, Gear Box Spares etc., and certain works as listed in Annexures- I & II) , consumables, T&Ps and PPE etc., to meet out the stations' generation requirements.

SCHEDULE OF PRICES FOR 1st YEAR

Specification No: - CE/MTPS-I/SE/M.II/OT.No.62 /2022-23.

Sl.No	Quantity	Description of Work	Qty/Unit	Rate in Rs
1	12 Months	Charges for Operation and Maintenance of Coal Handling Plants Complete System , Operation & Maintenance of Locomotives, Railway siding, Wagon Tippers and Bulldozers including supply of all spares (excluding OEM Spares, Hydraulic Spares, Iron & Steel, Gear Box Spares etc., and certain works as listed in Annexures- I), consumables, T&Ps and PPE etc., to meet out the stations' generation requirements as instructed by the Engineer In charge at MTPS-I, For feeding of Coal to Unit Bunkers (For a quantity Up to 2664500MT for 1 Year)	Rate/ Month	Price to be quoted online only
2	1 Year	Charges for Operation and Maintenance of Coal Handling Plants Complete System , Operation & Maintenance of Locomotives, Railway siding, Wagon Tippers and Bulldozers including supply of all spares (excluding OEM Spares, Hydraulic Spares, Iron & Steel, Gear Box Spares etc., and certain works as listed in Annexures- I), consumables, T&Ps and PPE etc., to meet out the stations' generation requirements as instructed by the Engineer In charge at MTPS-I, For Feeding of Coal to Unit Bunkers (Quantity From 2664501MT to 3730300 MT)	LS (Billing on Pro-rata Basis)	Price to be quoted online only
3	12 Months	Charges for Operation and Maintenance of Coal Handling Plants Complete System , Operation & Maintenance of Locomotives, Railway siding, Wagon Tippers and Bulldozers including supply of all spares (excluding OEM Spares, Hydraulic Spares, Iron & Steel, Gear Box Spares etc., and certain works as listed in Annexures- II), consumables, T&Ps and PPE etc., to meet out the stations' generation requirements as instructed by the Engineer In charge at MTPS-II, For feeding of Coal to Unit Bunkers (For a quantity Up to 2007500 MT for 1 Year)	Rate/ Month	Price to be quoted online only

4	1 Year	Charges for Operation and Maintenance of Coal Handling Plants Complete System , Operation & Maintenance of Locomotives, Railway siding, Wagon Tippers and Bulldozers including supply of all spares (excluding OEM Spares, Hydraulic Spares, Iron & Steel, Gear Box Spares etc., and certain works as listed in Annexures- II), consumables, T&Ps and PPE etc., to meet out the stations' generation requirements as instructed by the Engineer In charge at MTPS-II, Feeding of Coal to Unit Bunkers (Quantity From 2007501 to 2810500 MT)	LS (Billing on Pro-rata Basis)	Price to be quoted online only
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(The Above charges shall include EPF & ESI, GST EXTRA.)

NOTE : Quantity may vary from the order to the extent of 25% on either way of the requirement indicated in the tender documents as per Tamilnadu Transparency in Tender Rule 2000 Chapter IV, 14.Commercial Condition, Clause-9)

Note:

1. The price quoted in LS should be kept firm for the first year. The Annual Escalation for the awarded amount is applicable for the balance period of contract commence from the 2nd year of contract @ 5% per year on the first year amount upto 5th Years and any extension thereof.
2. For additional coal quantity fed to unit Bunkers for MTPS-I from 2664501 MT to 3730300 MT, charges will be paid on tonnage pro-rata basis in the quoted price in the Schedule 3 after reconciliation at the end of the year
3. For additional coal quantity fed to unit Bunkers for MTPS-II from 2007501 MT to 2810500 MT, charges will be paid on tonnage pro-rata basis in the quoted price in the Schedule 4 after reconciliation at the end of the year

COMPANY SEAL

SIGNATURE :
NAME :
DESIGNATION :
DATE :

Sd/xxx
CE/MTPS-I

Sd/xxx
CE/MTPS-II

SCHEDULE-B

SPECIFICATION NO: CE/MTPS-I/SE/M.II/OT.No.62 /2022-23

DEVIATIONS FROM TECHNICAL SPECIFICATION

All technical deviations from the specification shall be filled in by the tenderer, clause wise, in the schedule.

Sl no	Section No	Clause No	Deviation

The tenderer hereby certifies that the above mentioned are the only deviations from the technical specification and the tender conforms to the specification in all other aspects.

COMPANY SEAL

SIGNATURE :
NAME :
DESIGNATION :
DATE :

SCHEDULE- C

SPECIFICATION NO: CE/MTPS-I/SE/M.II/OT.No.62 /2022-23

DEVIATIONS FROM COMMERCIAL TERMS

All deviations from the commercial terms shall be filled in by the tenderer, clause wise, in this schedule.

Sl no	Section No	Clause No	Deviation

The tenderer hereby certifies that the above mentioned are the only deviations from the commercial terms and the tender conforms to the specification in all other aspects.

COMPANY SEAL

SIGNATURE :
NAME :
DESIGNATION :
DATE :

SCHEDULE- D

SPECIFICATION NO: CE/MTPS-I/SE/M.II/OT.No.62 /2022-23

**STATEMENT OF SUPPLY/ORDERS/EXECUTED/UNDER EXECUTION SO
FAR DURING THE PAST THREE YEARS AS ON THE TENDER OPENING**

SI No	Name &Address of The Organisation including other State EBs	Name of the Work	PO No.and Date	Value of Order in Rs in Lakhs (*)	Scheduled Date of Completion of Order	Actual Date of Completion of Order

Note: 1) (*) Split up details such as price, may be enclosed separately.

2) Copies of orders received shall be enclosed.

COMPANY SEAL

SIGNATURE :
NAME :
DESIGNATION :
DATE :

SCHEDULE – E

SPECIFICATION NO: CE/MTPS-I/SE/M.II/OT.No.62 /2022-23

DECLARATION FORM
(To be signed by the tenderer)
Strike off, whichever is not applicable:

To
 The Chief Engineer,
 Mettur Thermal Power Station-I,
 Metturdam - 636 406, Tamil Nadu

Dear Sir,

Having examined the above specification together with the accompanying schedules etc., we hereby offer to manufacture and supply the equipments/ materials covered in this Specification at the rates entered in the attached schedule of prices.

1. We hereby guarantee the particulars entered in the schedules attached to the Specification.

2. In accordance with the Security cum Performance guarantee clause-10.0, Section-V, of the specification, we agree to furnish security cum performance in the form of DD/Bankers Cheque/Bank Guarantee to the extent of 5% of the order value (All-inclusive price) of each and every indent issued during the contract period till the expiry of the Guarantee.

3. Our company is not a potentially Sick Industrial Company or a Sick Industrial Company in terms of Section- of Section- of the Sick Industrial Companies (Special Provisions) Act, 1985.

Yours faithfully,

PLACE	:	SIGNATURE	:
DATE	:	DESIGNATION	:
COMPANY SEAL	:	COMPANY	:

SCHEDULE – F**UNDERTAKING FOR PAYMENT OF DUES TO TNEB**

THIS DEED OF UNDERTAKING EXECUTED AT MTPS-I/METTUR DAM ON THIS THE
BY Messers.

Hereinafter called the "TENDERER" (Which expression where the context so admits mean and include their agents, representatives, Successors – in – office and Assigns)

TO AND IN FAVOUR OF

THE TANGEDCO, a body corporate incorporated under companies Act, having its office at NPKRR Maaligai, 800, Anna Salai, Electricity Avenue, Chennai – 600 002, hereinafter called the "BOARD" (Which expression shall where the context so admits mean and include the successors in – office and assigns).

WHEREAS the Board has called for an undertaking from the Tenderer empowering the Board to recover the dues if any.

NOW THIS UNDERTAKING WITNESSETH that the Board is empowered to recover any dues against this contract in any bills / Security Deposit / E.M.D. due to the Tenderer either in this contract or any other contracts with the Board. Further, the Tenderer hereby authorizes the Board to recover, any dues against any other contract of the Tenderer with the Board with the available amount due to the Tenderer against this contract and to recover the difference in cost of the item, between the price offered by the failed tenderer and the prospectively new tenderer becoming lowest bidder in a fresh P.O issued for the same item subsequently

IN WITNESS WHERE OF Thiru. Acting for and behalf of the
Tenderer has signed this deed on the day, month and year herein before first mentioned.

SIGNATURE OF THE TENDERER

NAME :
DESIGNATION :
DATE :
COMPANY SEAL :

SCHEDULE-G**UNDERTAKING TOWARDS JURISDICTION OF LEGAL PROCEEDINGS**

This undertaking executed at on this..... (Date)..... (Month) TWO THOUSAND and TWENTY TWO by M/s. Registered under Companies Act, 1956 having its registered office at hereinafter called the contractor (which expression shall where the context so admits mean and include its successors in office and in favour of Tamil Nadu Generation and Distribution Corporation Limited, a Body Corporate, incorporated under Companies Act 1956, having its registered Office at No.144, Anna Salai, NPKRR Maaligai, Chennai - 600 002 herein after called the Purchaser (Which expression shall where the context so admits means and includes its successors in Office and assigns).

WHEREAS a contract for the supply of..... has been awarded in favour of the contractor under the Purchase Order No. Dated.....

AND WHEREAS in accordance with terms of the above mentioned Purchase Order, the contractor has to furnish an undertaking to the effect that no suit or any proceedings in regard to any matter arising in any respect under this contract shall be instituted in any court other than in the Madras High Court, Chennai or District Court at Salem or Sub-court at Mettur Dam or at the District Munsif Court at Mettur Dam as the case may be.

IN CONSIDERATION of TANGEDCO having agreed to accept the undertaking the contractor hereby undertakes that no suit or any proceedings in regard to any matter arising in respect of this contract shall be instituted in any Court, save in the Madras High Court, Chennai or District Court at Salem or Sub-court at Mettur Dam or at the District Munsif Court at Mettur Dam as the case may be. It is agreed that no other court shall have jurisdiction to entertain any suit or proceedings, even though, part of the cause of action might arise within their jurisdiction. In case any part of the cause of action might arise within the jurisdiction of any other Courts in Tamil Nadu, and rest within the jurisdiction of Courts outside the State of Tamil Nadu, then it is agreed to between the parties that such suits on proceedings shall be instituted in a Court within the State of Tamil Nadu and no other Court outside the State of Tamil Nadu shall have jurisdiction.

IN WITNESS WHEREOF Thiru..... of M/s..... hereby put his hand and seal for due observance of the Undertaking in the presence of the following witnesses.

COMPANY SEAL:

DESIGNATION :
COMPANY :
DATE :

SIGNATURE :

WITNESSES:

- 1)
- 2)

SCHEDULE-H**TENDER ACCEPTANCE LETTER (e-tender)**

**To be signed with company seal on letter head and uploaded
in the technical Bid**

TENDER ACCEPTANCE LETTER (To be given on Company Letter Head)
Date:

To

The Chief Engineer,
Mettur Thermal Power Station I/
Tamil Nadu Generation and Distribution Corporation,
Mettur Dam - 636406, Tamil Nadu.

Dear Sir,

Sub: Acceptance of Terms & Conditions of Tender.

Tender Ref. No: CE/MTPS-I/SE/M.II/OT.No.62 /2022-23

Opening Due on : 30.08.2022

Name of Tender/Work: TANGEDCO - MTPS-I (4 x 210MW) & MTPS- II (1 x 600MW) – Operation and Maintenance of Coal Handling Plants Complete System, Operation & Maintenance of Locomotives, Railway siding, Wagon Tippers and Bulldozers including supply of all spares (excluding OEM Spares, Hydraulic Spares, Iron& Steel, Gear Box Spares etc., and certain works as listed in Annexures- I & II), consumables, T&Ps and PPE etc., to meet out the stations' generation requirements, I/We have downloaded/ obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely: As per your advertisement, given in the above mentioned website(s).

2. I/We hereby certify that I/We have read the entire terms and conditions of the tender documents from page No.----- to -----(including all documents like annexure(s), schedule(s), etc.,) which form part of the contract agreement and I/We shall abide hereby the terms / conditions / clauses contained therein.
3. The corrigendum(s) issued from time to time by your Department/ Organization too has also been taken into consideration, while submitting this acceptance letter.
4. I/We hereby unconditionally accept the tender conditions of above mentioned tender document(s) corrigendum(s) in its totality / entirety.
5. We hereby guarantee the particulars entered in the schedules attached to the Specification.
6. In accordance with the Security cum Performance guarantee clause-8.0, Section-V, of the specification, we agree to furnish security cum performance guarantee to the extent of 5% of the contract value (All-inclusive price) valid till the expiry of the Guarantee.
7. Our company is not a potentially Sick Industrial Company or a Sick Industrial Company in terms of Section-23 of Section-15 of the Sick Industrial Companies (Special Provisions) Act, 1985.
8. In case any provisions of this tender are found violated, then your department/organization shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the bidder, with official Seal)

SCHEDULE-I**Declaration to be submitted by the L1 bidder in Non Judicial Stamp Paper of value not less than Rs.80/-**

To

Date :

The Chief Engineer,
Mettur Thermal Power Station-I,
Mettur Dam - 636406.

We hereby declare and confirm that we are registered vendor under GST Act having GSTIN _____ in State of _____. Our applicable GST @ _____ % Extra / GST @ _____ % Inclusive against this Tender specification No. / Enquiry No _____, dt. _____ is under HSN / SAC code _____.

We hereby declare and confirm that we are registered vendor under composite scheme having GSTIN.

We are aware that as per Sec 171 of CGST Act, any reduction in rate of tax on any supply of goods or services or the benefit of input tax credit should be passed on to TANGEDCO by way of commensurate reduction in prices and as such we hereby declare that we are extending of _____ % as rebate in my awarded price against input tax credit benefit.

(OR)

We hereby declare that we do not have any input tax credit benefit on account of GST applicable against this Tender specification No. / Enquiry No _____, dt. _____. If it is established that we have availed input tax credit benefit against this job, the differential tax benefit will be returned to TANGEDCO failing which TANGEDCO may take appropriate action.

Signature of bidder with Company Seal

Note:

1. Each page should be signed.
2. Bidder may strike out the para not applicable.

SCHEDULE-J**UNDERTAKING**

(The undertaking should be submitted by the Contractors in Rs.80/- Stamp paper for the respective Works while claiming the Part/ Final Bills)

Nature of the Work :

Order No :

1. I/ We hereby state that, the EPF & ESI Employee and Employer Contribution has been remitted for all the Workers engaged for execution of the respective contracts.
2. I/ We hereby state that, there are no EPF & ESI dues to be remitted in respect of the period of execution of the respective contracts, and in case, if there is any shortfall of discharging the EPF & ESI obligations on our part (Contractor) at later date, TANGEDCO/ TANTRANSCO shall not be responsible for the consequent Legal/ Financial obligations.

Date :

Place :

**Authorized Signatory
(Contractor with seal)**

SCHEDULE-K**BANK GUARANTEE FOR COMBINED SECURITY DEPOSIT CUM PERFORMANCE GUARANTEE**

Beneficiary:-----

Date:-----

Bid Guarantee No:_____

We have been informed that (insert name of bidder) (herein after called „the bidder“) has submitted to you its bid dated (insert date) (herein after called „the bid“) for TANGEDCO - MTPS-I (4 x 210MW) & MTPS- II (1 x 600MW) – Operation and Maintenance of Coal Handling Plants Complete System, Operation & Maintenance of Locomotives, Railway siding, Wagon Tippers and Bulldozers including supply of all spares (excluding OEM Spares, Hydraulic Spares, Iron& Steel, Gear Box Spares etc., and certain works as listed in Annexures- I & II), consumables, T&Ps and PPE etc., to meet out the stations' generation requirements at Mettur Thermal Power Station I & II/TANGEDCO LTD, Mettur Dam, Tamil Nadu under Open e-tender/ Two part system.

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.

At the request of the bidder, we (name of the Bank) hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of (amount in figures)_____(amount in words) _____ upon receipt by us of your first demand in writing accompanied by a written statement stating that the bidder is in breach of its obligation(s) under the bid conditions ,because the Bidder:

a) has withdrawn its bid during the period of bid validity specified by the Bidder in the Form of Bid; (or)

b) having been notified of the acceptance of its Bid by the Employer during the period of validity (i) fails or refuses to execute the Contract Form, if required, or ii) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Bidders.

This guarantee will expire:(a) if the bidder is the successful Bidder, upon our receipt of copies of the contract signed by the Bidder and the Performance Security issued to upon the instruction of the Bidder and (b) if the bidder is not successful Bidder, upon the earlier of (i) our receipt of copy of your notification to the Bidder of the name of the successful Bidder; or (ii) twenty eight days after the expiration of the Bidder's Bid.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC publication No 758.

Signature

With seal of the Bank

(Name in block letter)

In the presence of witness:

1 . (Name in capital and address)

2 . (Name in capital and address)

SCHEDULE-L
BANK GUARANTEE FOR EMD

(B.G for EMD shall be executed on Non judicial stamp paper of Rs. 100/-)

Beneficiary:-----

Date:-----

Bid Guarantee No:_____

We have been informed that (insert name of bidder) (herein after called „the bidder“ has submitted to you its bid dated (insert date) (herein after called „the bid“) for the TANGEDCO - MTPS-I (4 x 210MW) & MTPS- II (1 x 600MW) – Operation and Maintenance of Coal Handling Plants Complete System, Operation & Maintenance of Locomotives, Railway siding, Wagon Tiplers and Bulldozers including supply of all spares (excluding OEM Spares, Hydraulic Spares, Iron& Steel, Gear Box Spares etc., and certain works as listed in Annexures- I & II), consumables, T&Ps and PPE etc., to meet out the stations' generation requirements at Mettur Thermal Power Station I & II/TANGEDCO LTD, Mettur Dam, Tamil Nadu under Open e-tender/ Two part system.

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.

At the request of the bidder, we (name of the Bank) hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of (amount in figures)_____(amount in words) _____ upon receipt by us of your first demand in writing accompanied by a written statement stating that the bidder is in breach of its obligation(s) under the bid conditions ,because the Bidder:

- a) has withdrawn its bid during the period of bid validity specified by the Bidder in the Form of Bid; (or)
 b) having been notified of the acceptance of its Bid by the Employer during the period of validity (i) fails or refuses to execute the Contract Form, if required, or ii) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Bidders.

This guarantee will expire:(a) if the bidder is the successful Bidder, upon our receipt of copies of the contract signed by the Bidder and the Performance Security issued to upon the instruction of the Bidder and (b) if the bidder is not successful Bidder, upon the earlier of (i) our receipt of copy of your notification to the Bidder of the name of the successful Bidder; or (ii) twenty eight days after the expiration of the Bidder's Bid.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC publication No 758.

Signature

With seal of the Bank

(Name in block letter)

In the presence of witness:

1 . (Name in capital and address)

2 . (Name in capital and address)

SCHEDULE-M
SEPARATE SCHEDULE
QUESTIONNAIRE – A (COMMERCIAL TERMS)

INSTRUCTIONS:

- a) Strike off, whichever is not applicable.
b) Separate sheets should be used, wherever necessary

Sl. No	Particulars	Bidder's Response
1	Name & Address of the Firm / Company	
a.	Registered Office	
b.	Factory / works Address	
c.	Fax No.	
d.	Telegraphic Address	
e.	TIN No.	
2	Name, Designation & Address of the person signing the tender	
3 a.	Whether the Company is Small Scale / Medium Scale / Large Scale Unit	YES / NO
b.	If so, write registration No.	
c.	Is SSI Unit registered with DIC/ Tamil Nadu or NSIC period of validity to be mentioned	YES / NO
d.	Permanent Account Number(PAN)	
4 a)	The bidder should have minimum experience for a continuous period of 3 years as on the date of tender opening in successful Operation and Maintenance of PLC based Coal Handling Plant in Thermal Power Plant /Port in any Govt. Organization / Govt. Undertaking / State Electricity Board in India consisting of Main Control Room, Mechanical & Electrical maintenance works including Stacker & Reclaimers /Stacker Cum Reclaimer and Conveyor System Capacity of 1500 T/Hr or above for a value of not less than Rs.100 Crores in a single order within last ten years. The bidder shall upload scanned originals of the work order for the above. The date of acceptance order will be reckoned for ascertaining the eligibility of the tender.	YES / NO
	If so whether documentary proof of the above has been uploaded.	YES / NO
b).	The bidder should have minimum experience for a continuous period of 3 years as on the date of tender opening in successful operation & maintenance of coal handling terminal at any port in India (including mechanical & electrical maintenance) having Stacker and Reclaimer / Stacker cum Reclaimer and conveyor system capacity 1500 T/Hr and all related equipments or above under DBOMT / BOOT basis for minimum 3 year with cumulative revenue of minimum Rs.100 Crores within last ten years and the bidder should furnish auditor's certificate for the above cumulative revenue of Rs.100 Crores.	YES / NO
	If so whether documentary proof of the above has been uploaded.	YES / NO
c).	The Bidder shall upload the scanned original of the End User's certificate for the satisfactory performance for the above. In case the work was carried out in TNEB/TANGEDCO, the End User's performance certificate will be obtained by the tender inviting authority. However in case of the other organizations, End User's certificate should be obtained and uploaded by the bidder during	

	E- Tendering.	
	Whether the documentary proof of the above has been uploaded.	YES / NO
d).	The bidder should have average annual turnover of more than Rs.100 Crores during the last three financial years (2018-19, 2019-20 & 2020-21). The bidder shall upload the attested copy of audited Balance sheets duly certified by Chartered Accountant for all the above three financial years. The net worth of the bidder based on the latest audited accounts shall not be less than Rs.100 Crores as on date of techno commercial bid submission. The bidder must have earned net profit after tax for the last three financial years.	
	Whether the documentary proof of the above has been uploaded.	YES / NO
5	Whether the currently valid ISI Certificate enclosed	YES / NO
6	EARNEST MONEY DEPOSIT	
a.	Mode	NEFT/ RTGS
	EMD Amount : Rs.3,99,00,000/- (Rupees Three Crores and Ninety Nine Lakhs only)	Rs.
	The EMD amount has to be received in TNEB / TANGEDCO account through NEFT/RTGS Mode/Account Transfer and the timings for having paid the EMD in UTR receipt, shall be before the closing time of tender.	YES / NO
b.	If exempted, state whether the bidder is SSI Unit of Tamil Nadu / Small Scale Unit Registered with NSIC. Reference of documentary evidence regarding exemption is uploaded.	YES / NO
c.	Whether undertaking in stamp paper of value Rs.80/- has been uploaded	YES / NO
	<u>NOTE:</u> If item (a) or (b) or (c) is not furnished uploaded along with the tender offer, the Commercial & Technical Bids will not be read out.	
7	TEST CERTIFICATE:	YES / NO
	Test certificate as per specification shall be furnished along with supply.	
8	Whether the Specification has been down-loaded from TANGEDCO Website.	YES / NO
9	VALIDITY: Whether your offer is valid for a period of 180 days from the date of opening of Commercial / Technical Bids offers with Validity period of less than 180 days are liable for rejection.	YES / NO
10	PRICE:	
a.	Whether the price quoted is FIRM	
b.	Whether the following break ups for the quoted Unit Price (All-inclusive price including GST) have been mentioned in Schedule-A of the Specification	YES / NO
i	Unit Ex-Works Price	YES / NO
ii	Packing & Forwarding Charges	YES / NO
iii	Freight & Insurance Charges	YES / NO
iv	GST applicable on Ex-Works Price (Percentage & Amount)	YES / NO
v	Whether percentage & Amount applicable has been mentioned separately.	YES / NO
vi	Whether you are agreeable, in case of delayed delivery, the GST prevailed on the date of actual delivery or the GST applicable on the date of contractual date of delivery whichever is less shall only be payable.	YES / NO

	NOTE: If no breakup details for the quoted price are given, the offer will be liable for rejection.	
11	IT – PAN, STCC & TIN :	
a.	Whether PAN No. issued by IT Dept. is furnished.	YES / NO
b.	Whether GST clearance Certificate enclosed with the offer. Mention the year for which the above is enclosed.	YES / NO
c.	Whether GSTIN and ARN of the firm and HSN code of the materials / SAC code for works furnished.	YES / NO
12	Whether you are agreeable for the following clauses specified under Section-V of the Specification:	
a.	Payment Terms (Clause-33.0)	YES / NO
b.	Security Deposit cum Performance Guarantee (Clause-8.0)	YES / NO
c.	Liquidated Damages (Clause-29.0)	YES / NO
d.	Guarantee (Clause-10.0)	YES / NO
e.	Rectification of defective workmanship(Clause-43.0)	YES / NO
f.	Force Majeure (Clause-39.0)	YES / NO
g.	Jurisdiction for Legal Proceedings (Clause-44.0)	YES / NO
h.	Arbitration (Clause-45.0)	YES / NO
13	Quantity Offered as per Schedule A	YES / NO
14	Whether copy containing all pages of Section– V Commercial &Section– VI Technical with dated signature of the Tenderer in all pages has been enclosed with the Offer.	YES / NO

Date :
Place :

Signature of the Tenderer:
Name:
Status in the Company:
(Affix Seal of the Company):

UNDERTAKING

I , Sole Proprietor / Partner of M/s.give undertaking that details given in the above QUESTIONNAIRE - A are correct to the best of my knowledge and I agree to abide by all your Tender / Order terms & conditions.

Date :
Palce :

Signature of the Tenderer:
Name:
Status in the Company:
(Affix Seal of the Company)

ANNEXURE – 1**INDEMNITY BOND AND CERTIFICATE FOR EPF & ESI**

The contractor should indicate and produce the following certificate with list (Annexure) of employees employed by them for the works of the month and their contribution towards EPF/ESI.

EPF Code No. of the firm:

ESI Code No. of the firm:

ANNEXURE

Sl. No.	Name with father's name of the labour engaged	Wages paid inRs.	EPF Amount Paid			ESI amount paid		
			Employer contribution	Employee contribution	Date of payment	Employer contribution	Employee contribution	Date of payment

Summary:

1. Date of payment made to the employee.
2. Date of payment for EPF/ESI subscription along with the copy of challan.

Certified that I have remitted the monthly subscription of EPF (Employee Contribution) / ESI (both employers and employee) to all the workers employed by me in TANGEDCO/TTPS for works, for the month of

Certified that all necessary returns to the EPF/ESI organization have been submitted within the stipulated time as required under the said EPF/ESI & MP Act 1952.

Certified that the employer's contribution of the mentioned workers in respect of EPF will be availed from PMRPY scheme or it would be borne by us.

INDEMNITY BOND:-

Agree to comply the provisions of the EPF/ESI& MP Act 1952 or any modification there of any other law relating thereto and rules made there under from time to time.

Signature of bidder with Company Seal

ANNEXURE – 2**CERTIFICATE**

To

(Name and address of the selling
Dealer)

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TNGST NO.

**It is hereby certified that the goods listed below are purchased by us for use
in generation, transmission and distribution of electrical energy.**

Sl.No.	Invoice No./Date	Description of Goods	Qty.	Value (Rs.)

(Rupees only).

Place :

Date :

(SIGNATURE)

Name :

Status :

Seal of Office :