

**SPECIFICATION No. HE- 2419**



**TAMIL NADU GENERATION AND DISTRIBUTION  
CORPORATION LIMITED**

**SPECIFICATION No. HE-2419**

**E\_TENDER SPECIFICATION FOR**

**REPLACEMENT OF DAMAGED PENSTOCK PIPE LINE BY  
SUPPLY, FABRICATION, ERECTION, TESTING AND  
COMMISSIONING OF 220 METER PENSTOCK PIPE LINE,  
INCLUDING CIVIL WORKS, RECONDITIONING OF  
BUTTERFLY VALVE AT VALVE HOUSE, OVERHAULING OF  
EXPANSION JOINTS AND RECTIFICATION OF DEFECTIVE  
WELD JOINTS IDENTIFIED THROUGH 100% UT AND  
ULTRASONIC THICKNESS MEASUREMENT IN EACH  
LONGITUDINAL AND CIRCUMFERENTIAL WELDMENTS IN  
THE PENSTOCK PIPELINE & PAINTING OF PENSTOCK PIPE  
LINE & TUNNEL STEEL LINER AT SURULIYAR POWER  
HOUSE IN TIRUNELVELI GENERATION CIRCLE.**

**( E-TENTERING Through NIC Tamil Nadu Government  
portal platform)**

**APRIL - 2022**

**OFFICE OF THE  
SUPERINTENDING ENGINEER  
HYDRO (ELECTRICAL)  
5<sup>TH</sup> FLOOR, EASTERN WING  
NPKRR MAALIGAI  
144, ANNA SALAI, CHENNAI - 600 002.**

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Service Provider :  
Website for online bid submission:  
**<https://tntenders.gov.in/nicgep/app>** of National informatic  
Centre's (NIC) TamilNadu Government Portal

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## **TAMILNADU GENERATION AND DISTRIBUTION CORPORATION LIMITED**

### **SPECIFICATION NO. HE – 2419**

#### **F O R E W O R D**

#### **INVITATION FOR BID**

For and on behalf of TANGEDCO, e-tenders are invited under Open Tender - Two part system for the following work:

1.	Specification No.	HE - 2419
2.	Name of work	E-Tender for replacement of Damaged Penstock pipe line by Supply, Fabrication, Erection, Testing and commissioning of 220 meter Penstock pipe line including civil works, reconditioning of Butterfly valve at valve house, Overhauling of expansion joints and and rectification of defective weld joints identified through 100% Ultrasonic Test and Ultrasonic thickness measurement in each longitudinal and circumferencial weldments in the Penstock pipe line & painting of Penstock pipe line & Tunnel steel liner at Suruliyar Power House in Tirunelveli Generation Circle.
3.	Quantity	Replacement of damaged Penstock pipe line by Supply, Fabrication, Erection, Testing and commissioning of 220 meter Penstock pipe line including civil works, reconditioning of Butterfly valve at valve house, Overhauling of expansion joints and and rectification of defective weld joints identified through 100% Ultrasonic Test and Ultrasonic thickness measurement in each longitudinal and circumferencial weldments in the Penstock pipe line & painting of Penstock pipe line & Tunnel steel liner at Suruliyar Power House in Tirunelveli Generation Circle.
4.	Method of Tender	e-Tender System (Online Part I – Techno-Commercial Bid and Part II – Price Bid Through <a href="https://tntenders.gov.in/nicgep/app">https://tntenders.gov.in/nicgep/app</a> of National Informatics Centre's (NIC) Tamilnadu government portal.)
5.	(a) Earnest Money Deposit (EMD)	Rs.20,00,000/- (Rupees Twenty lakhs only) . EMD can be paid through RTGS/NEFT or by way of account transfer to TANGEDCO's account as below: Account No. :0305002100153163 Name of Bank :Punjab National Bank, 781-785, Rayala Towers, Anna Salai, Chennai-2. IFSC Code :PUNB0030500

	b) EMD exemption for Permanent E.M.D. at TANGEDCO Headquarters.	Rs. 40,00,000 Lakhs & above
6.	URL for online bid submission for e-tender	<a href="https://tntenders.gov.in/nicgep/app">https://tntenders.gov.in/nicgep/app</a>
7.	Tender document download start date and time	25.04.2022 @ 17.00 Hrs
8.	Bid submission start date and time	05.05.2022 @ 17.00 Hrs
9.	Bid submission closing date and time	23.05.2022 @ 14.00 Hrs
10.	Last date for payment of EMD through RTGS/NEFT/ Account transfer	23.05.2022 @12:00 Hrs
11.	Date & time of opening of e-tender	24.05.2022 @14.30 Hrs
12.	Specification at website	The tender specification will be placed on TANGEDCO web site ( <a href="http://www.tangedco.gov.in">www.tangedco.gov.in</a> ) TN Govt. Website ( <a href="http://www.tenders.tn.gov.in">www.tenders.tn.gov.in</a> ) and NIC's portal ( <a href="https://tntenders.gov.in/nicgep/app">https://tntenders.gov.in/nicgep/app</a> ). The prospective bidders may download the same from the web sites free of cost.
13.	Documents to be uploaded by the Tenderers during e-submission	The Price Bid (BOQ) and all documents scanned in support of the following shall be uploaded with the bid : 1. EMD. 2. BQR 3. Schedules B to G , and other documents whichever is applicable as per the tender Specification requirements.
14.	Clarification to be sought for from	The Chief Engineer/ Hydro, Tamil Nadu Generation and Distribution Corporation Ltd., 5 <sup>th</sup> Floor, Eastern Wing, NPKRR Maaligai, 144, Anna Salai, Chennai – 600 002. Ph.044-2852 0409 E-mail: <a href="mailto:cehe@tnebnet.org">cehe@tnebnet.org</a>
15.	Place at which tender will be opened	O/o The Superintending Engineer/ Hydro (Electrical), TANGEDCO, 5 <sup>th</sup> Floor/ Eastern wing, NPKRR Maaligai,144, Anna Salai, Chennai-2. E-mail: <a href="mailto:sehe@tnebnet.org">sehe@tnebnet.org</a>

**NOTE:**

**1. EMD:**

- i. EMD can be paid through RTGS/NEFT or by way of account transfer.

- ii. In case of RTGS/NEFT/Account transfer of EMD amount, the same should be credited to TANGEDCO's Account before 2 hours of closing time of tender and the scanned copy of the e-transaction receipt/bank account scroll of bidders has to be uploaded.
  - Iii. The proof of exemption of EMD with documents in support of investment held in plant and machinery has to be scanned and uploaded.
2. The PEMD slab and the monetary limit of tender value eligible for EMD exemption against PEMD are as below,

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

PEMD holders should upload their PEMD certificate

- 3. In the event of the specified date of opening of bids being declared holiday, the bid shall be opened on the next working day at the same time and venue.
- 4. Bid document can be downloaded free of cost and submitted online through the website <http://tntenders.gov.in/nicgep/app> only by those bidders, who are having valid Digital Signature Certificate and the bid document cannot be purchased from the Office of the Chief Engineer/Hydro by remitting the cash in the office of the Chief Engineer and no pre request for issue of bid document will be entertained in the Office of the Chief Engineer /Hydro.
- 5. The Contractors who had downloaded the Bid document from the website shall submit the Bid document through NIC Website before the scheduled time of submission. The electronic bidding systems would not allow any late submission of bids.
- 6. The Tenderers shall ensure whether any Clarification/Amendment/ Corrigendum is issued to the bid, before submission of their Tender, by visiting the respective Website regularly.
- 7. For other details, refer "**Instruction to Bidders**" in the tender document.

## **E-TENDERING METHODOLOGY**

### **INSTRUCTIONS TO BIDDERS FOR ONLINE BID SUBMISSION:**

The bidding under this contract is electronic bid submission through website <https://tntenders.gov.in/nicgep/app> 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.

### **REGISTRATION:**

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

### **SEARCHING FOR TENDER DOCUMENTS**

1. 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.
2. 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. 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.

### **PREPARATION OF BIDS**

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

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.
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.
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.

#### **ELECTRONIC SUBMISSION OF BIDS:**

The bidder shall submit online the requirements under EMD, 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.

#### **PROCEDURE FOR SUBMISSION OF BIDS:**

- i. Bidder should log into the site well in advance for bid submission so that he/she 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.
- ii. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- iii. Bidder has to select the payment option as "offline" to pay the EMD amount through RTGS/NEFT by way of account transfer as applicable and enter details of the instrument.
- iv. The scanned copy of e-payment receipt of EMD amount/proof for PEMD/Proof of exemption of EMD has to be uploaded.
- v. 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 colored (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.

- vi. 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.
- vii. 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.
- viii. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- ix. 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.
- x. The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.
- xi. 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.
- xii. 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.

#### **LATE BIDS:**

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

#### **MODIFICATION AND WITHDRAWAL OF BIDS:**

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



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

**ASSISTANCE TO BIDDERS:**

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.
2. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

## SECTION – I

### EARNEST MONEY DEPOSIT

1. Tenderer should pay the specified amount towards Earnest Money Deposit, as follows. Earnest Money Deposit:Rs.20,00,000/- (Rupees Twenty lakhs only).
2. The Earnest Money Deposit specified above should be in the form of NEFT/ RTGS/Account Transfer paid to TANGEDCO's account as below:  
Account No. : 0305002100153163  
Name of Bank : Punjab National Bank,  
781-785, Rayala Towers, Anna Salai, Chennai-2.  
IFSC Code : PUNB0030500  
The bidders who are willing to remit EMD through Bank Account by way of account transfer of same bank are requested to place a copy of bank account scroll of bidders duly exhibiting the transaction of EMD amount with details of name of the bank, bank account number of the bidder and IFSC code. The EMD amount has to be received in "TANGEDCO's COLLECTION ACCOUNT" **through e-payment, before closing of tender. EMD amount received beyond tender closing time will be summarily rejected.**
2. The scanned copy of proof for payment of EMD (ie. e-payment receipt) has to be uploaded.
3. (i) Scanned copy of the E-receipt uploaded should duly reflect the UTR Number. The EMD amount has to be received in TANGEDCO account through e-payment, 2 hours before closing time of tender. EMD amount received beyond tender closing time will be summarily rejected.  
The bids not uploaded with EMD proof will be summarily rejected.
4. The EMD will not carry any interest.
5. The Tenderers who are having valid Permanent EMD at TANGEDCO Headquarters are exempted from payment of Earnest Money Deposit and are eligible to participate in the tender as below

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

Scanned copy of Proof of PEMD shall be uploaded. The bids not uploaded with EMD/PEMD proof will be summarily rejected.

6. If the Tenderer desires to become a Permanent E.M.D. holder, he is advised to deposit the required amount with the TANGEDCO as Permanent E.M.D. well in advance, obtain a certificate from the Financial Controller/Purchase/ TANGEDCO and upload copy of the same along with the tender.
7. The Earnest Money Deposit will be refunded to the unsuccessful tenderers on application to the Superintending Engineer / Hydro (Electrical) after intimation of the rejection/non-acceptance of their tender is sent to them.
8. Any other mode of payment of EMD other than NEFT/RTGS/Account Transfer shall not be accepted towards EMD and the tenders shall be rejected if EMD is not paid in the prescribed manner.
9. Cheque will not be accepted towards EMD.
10. The following categories of industries are exempted from payment of Earnest Money Deposit.
  - a. Departments of the Government of Tamil Nadu.
  - b. Undertakings and Corporations owned by Government of Tamil Nadu.
  - c. Labour Contract Co-operative Societies registered within Tamil Nadu.
  - d. The bidders who have uploaded Udyam Registration Certificate registered for the tendered items are eligible for EMD exemption.

**NOTE:** SSI units having provisional registration certificate are not eligible for EMD Exemption.

- 11.0 Those Tenderers who are exempted from payment of EMD (Inclusive of PEMD holders), should note that," Having examined the tender specification together with the schedules attached, the bidder is deemed to accept 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 specifications i.e in all cases where EMD paid will be forfeited. 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 EMD together with costs if any, in the event of non-fulfillment or non-observance of any of the conditions stipulated in the contract. The GST applicable for the above shall also be paid to TANGEDCO by the bidder.
- 12.0 Others viz. Central and Other State Government Departments, Undertakings and Corporations other than Tamil Nadu shall have to pay Earnest Money Deposit.
- 13.0 The tenderers shall upload the audited attested copy of Profit and Loss account/Balance Sheet along with the proof for exemption from payment of EMD in order to ensure the SSI status 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 ten crore rupees and turnover exceeds fifty crore rupees, the General Manager, District Industries Centre concerned will be requested to verify the SSI status of the firm. Till receipt of

confirmation from General Manager / District Industries Centre concerned, the exemption from paying EMD for SSI Units shall not be extended.

**14.0 Exemption from payment of EMD to Micro & Small Industries under MSMED Act 2006:**

14.1 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.

**14.2 Composite Criteria:**

A composite criteria of investment in Plant and Machinery or equipments and turnover has been specified to classify an enterprises as Micro, Small and Medium.

The composite criteria stipulated in the said notification are to be complied by **the micro and small industries for claiming EMD exemption.**

**14.3 Classification of Enterprises:**

An enterprise shall be classified as a micro, small or medium enterprises on the basis of the following criteria, namely:--

(i) a micro enterprise, where the investment in plant and machinery or equipment does not exceed one crore rupees and turnover does not exceed five crore rupees;

(ii) a small enterprise, where the investment in plant and machinery or equipment does not exceed ten crore rupees and turnover does not exceed fifty crore rupees; and

(iii) a medium enterprise, where the investment in plant and machinery or equipment does not exceed fifty crore rupees and turnover does not exceed two hundred and fifty crore rupees.

**14.4 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.

The bidders should submit the certificate from Chartered Accountant, along with the bids whose turnover includes export proceeds, for ascertaining the turnover achieved on export of goods or services or both and included in the total turnover.

**14.5 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.

**14.6 Registration of existing enterprises:**

- i. All existing enterprises registered under EM-Part-II or UAM shall register again on the Udyam Registration portal on or after the 1st day of July, 2020.
- ii. All enterprises registered till 30th June, 2020, shall be re-classified in accordance with the said notification.
- iii. The existing enterprises registered prior to 30.06.2020, through Udyog Aadhar memorandum, EM Part II etc are extended for its validity till 31.03.2022 vide Government of India, Ministry of MSME's notification No.S.O.278(E) dated 19.01.2022 .
- iv. An enterprise registered with any other organisation under the Ministry of Micro, Small and Medium Enterprises shall register itself under Udyam Registration.

**14.7 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.

**15.0 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.****

- i) The e-receipt of payment of EMD through NEFT/RTGS/Account transfer.
- ii) The proof of Permanent EMD Holder.
- iii) The attested copy of proof of exemption of EMD and documents in support of investment held in plant and machinery.

**16.0 The Earnest Money Deposit made by the tenderer will be forfeited after e-tender opening if:**

- (a) He withdraws his tender or backs out after acceptance.

- (b) He withdraws his tender before the expiry of validity period stipulated in the specification or fails to remit the security deposit.
- (c) The tenderer violates any of the provisions of these regulations contained herein.
- (d) The tenderer revises any of the terms quoted during the validity period.
- (e) In the event of the documents furnished with the offer being found to be bogus or the documents contain false particulars, the EMD paid by the tenderers will be forfeited in addition to blacklisting them for future tenders/contracts in TANGEDCO.
- (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 of the acts listed above.
- (g) The EMD forfeited will also attract GST@18% and will be additionally collected from the tenderers.

**SECTION – II**  
**BID QUALIFICATION REQUIREMENTS**

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

1. The invitation to bid is open to individual bidder / Consortium. The consortium members shall not be more than two.
- 1(a). The bidder or atleast one member in the consortium, should have previous experience in supply, fabrication, erection and commissioning of Penstock / Water conducting system made up of steel pipe of size not less than 600mm diameter rolled with plate thickness of 10mm and above in any of the State electricity Board or PSU or Govt of India or State Govt organization or Undertaking of Central Govt or State Govt.

(or)

- 1(b). Major mechanical works should have been carried out in Hydro Power Stations of any State electricity board or PSU or Govt of India or state govt organization or Undertaking of Central Govt. or State Govt.

The above works mentioned in 1(a) & 1(b) should have been carried out for a cumulative total value of not less than of Rupees 4.0 Crores (Single contract value should not be less than 50 Lakhs) during the preceding 15 (fifteen) years as on the date of tender opening. In case of consortium the above work should have been carried out for a cumulative total value of not less than Rs.4.0 Crores together by all the members subject to the condition that single contract value should not be less than 50Lakhs.

Photo copies of Works Contract order related to the above should be enclosed as evidence.

2. At least one work carried out by the bidder or any one member of the Consortium as covered by BQR1 should have met a satisfactory performance of a minimum period of two years as on the date of tender opening during any time within the preceding 15 years. The bidders should furnish the end user certificate for the above.

3. The annual turnover of the bidder shall be more than Rs.6.0 Crores in any one of the last three financial years preceding the year 2020-21 (2017-18, 2018-19 and 2019-20). In case of bidders who happen to be companies registered under companies Act-1956, attested copy of the Audited financial statements like, Profit and loss A/c and Balance sheet for the immediately Preceding 3 years (2017-18, 2018-19 and 2019-20) may be furnished and in case of others, the annual turnover certified by the practicing Chartered accountant or attested copy of income tax statements containing annual turnover for all the 3 years should be enclosed as documentary proof to ensure the above turnover.

- 3(a). In case of consortium the summation of annual turnover of all the members shall comply with the above requirements.

The consortium detailed in 1, 1(a),1(b), 2, 3a above should satisfy the conditions for consortium stipulated below

Conditions for consortium:

1	The credentials of the previous consortium shall not be claimed by any member of consortium in his individual capacity to fulfill the BQR condition
2	Any member of the consortium shall not participate in the bidding in their individual capacity or as a member of another consortium
3	The bid and contract agreement between TANGEDCO and the consortium shall be signed by all the members of the consortium.
4	The no. of consortium members shall be maximum two including the Leader of the Consortium.
5	One of the member in the consortium shall be nominated as the leader of the consortium and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the members. A certified copy of the company secretary or legal manager to the respective member shall be attached as evidence of authentication.
6.	The consortium shall furnish an undertaking jointly executed for the successful commissioning and performance of the water conducting system with bid document and in such case consortium members shall be jointly and severally liable to TANGEDCO to perform all the contractual obligations. The agreement in such case, should have been executed prior to the date of bid opening. The leader and the member shall sign in the agreement.
7	The consortium agreement in original duly certified by a Notary Public confirming the intent of all the members to form the consortium should be submitted along with the bid. It should also distinctly show the financial participation of each member of the consortium, scope of work and responsibilities of each member as regard to planning, execution and



	performance guarantee of the work under the entire scope of contract between TANGEDCO and the consortium.
8	The leader of the consortium shall abide by the general terms and conditions specified by TANGEDCO and agreed notes discussed and signed during subsequent meetings.
9	The leader of the consortium shall be the bidder and is the only one who will be authorised to receive instructions for and on behalf of the consortium, primarily responsible for the total execution of the contract including all contractual obligations and receipt of payment due in accordance with the provisions of the contract.
10	All the members of the consortium shall be liable jointly and severally for the execution of the contract in accordance with the terms and conditions of the contract and statement to this effect shall be included in the consortium agreement as well as in the contract document.
11	There shall be no conditional offer in the consortium agreement with regard to this work.
12	The consortium formed for the purpose of this project shall be valid till the closure of the works contract order at Headquarters.

**Note: 1) The end user certificate should necessarily contain the date of completion of work, date of commissioning and date of issue specifically to ascertain the period of satisfactory performance.**

**2) The bidders and members of the consortium should upload the documentary evidences for the above along with the offer only. All the above documents shall be duly attested by a competent authority like Notary public, Gazetted officer etc.**

**3) The offer of the bidders and members of the consortium who have stated to be suppliers to TNEB/TANGEDCO/TANTRANSCO will be considered for further evaluation, even though they have not enclosed copies of purchase orders or end user certificate, etc. after ensuring with concerned purchase orders placing authorities.**

**THE OFFERS OF BIDDERS NOT SATISFYING THE ABOVE BID**

SD/-  
ChiefEngineer/Hydro

### **SECTION – III** **REJECTION OF TENDERS**

**I. Tender will be SUMMARILY rejected if**

- (a) The EMD requirements are not complied with.
- (b) Bid Qualification Requirements are not fully met.
- (c) Received by Telex / Telegram / E-Mail/ Fax/in person.
- (d) The price bid/ price schedule is indicated/uploaded along with the Technical bid, in any format.
- (e) The details of e-receipt do not tally with the details available in the scanned copy and the data entered during bid submission time.
- (f) The BOQ (Price bid) file is found to be modified by the bidder.

**II. Tender is LIABLE to be rejected, if it is:**

- (a) Not covering the entire scope of Work.
- (b) If the declarations as specified in Schedule E and Schedule F are not signed and uploaded.
- (c) With validity period less than that stipulated in this specification
- (d) Not in conformity with TANGEDCO's Commercial terms and Technical Specification (Sections – V, VI & VII).
- (e) Received from a tenderer who is directly or indirectly connected with Government Service or Board Service or Service of local authority.
- (f) Documents furnished by the Tenderers along with their offer being found to be bogus or contain false particulars.
- (g) From any black listed Firm or Contractor.
- (h) Questionnaire as per **Schedule-G** is not duly filled up and properly signed by the tenderer.
- (i) From a tenderer whose past performance/Vendor rating is not satisfactory.
- (j) Not containing all required particulars as per Schedules.
- (k) Submission after the expiry of the due date and time.
- (l) Not furnished the GSTIN Nos. in the offers.
- (m) Not furnished the SAC in the offers.
- (n) Not furnished the separate main EPF & ESI code number.
- (o) Even though the Bidder meets the qualifying criteria, they are subject to disqualification if they have record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history or financial failures etc.

**III Tenderers shall furnish the Guaranteed technical particulars along with the tender to avoid rejection.**

**SECTION – IV**  
**GENERAL INSTRUCTIONS TO TENDERERS**

- 1.1 E-tender in Two Part System (I) Technical Bid with Commercial terms but without Price Bid and (II) Price Bid will be received through e-tendering for and on behalf of TAMILNADU GENERATION AND DISTRIBUTION CORPORATION LIMITED, herein after referred as TANGEDCO, so as to upload on or before the due date prescribed. All the tenders shall be uploaded and submitted strictly in accordance with the instructions set forth herein. THE TENDERERS WHO DO NOT FULFILL THE "BID QUALIFICATION REQUIREMENTS "AS PER SECTION – II NEED NOT PARTICIPATE IN THE TENDER. OFFERS NOT SATISFYING THIS "BID QUALIFICATION REQUIREMENTS" WILL NOT BE CONSIDERED AND WILL BE SUMMARILY REJECTED.
- 1.2 The Tamil Nadu transparency in Tenders Act 1998 and Tamil Nadu Transparency in Tender Rules 2000 and subsequent amendments thereof are applicable to this tender specification. The specification is available in TANGEDCO web site ([www.tangedco.gov.in/](http://www.tangedco.gov.in/)) Government website (<https://tntenders.gov.in/nicgep/app./>) Government ([www.tenders.tn.gov.in](http://www.tenders.tn.gov.in)) and may be downloaded free of cost.
- 1.3 The tenderers who have downloaded the specification from the above TANGEDCO/Government/NIC websites shall ensure whether any clarification/ amendment is issued to the specification, before submission of their tender, by visiting the above websites.

**2.0. SCOPE OF WORK:**

Replacement of damaged Penstock pipe line by supply, Fabrication, Erection, Testing and commissioning of 220 meter Penstock pipe line including civil works, reconditioning of Butterfly valve at valve house, Overhauling of expansion joints and rectification of defective weld joints identified through 100% Ultrasonic Test and Ultrasonic thickness measurement in each longitudinal and circumferential weldments in the Penstock pipe line & painting of Penstock pipe line & Tunnel steel liner at Suruliyar Power House in Tirunelveli Generation Circle as per following activities

Activity I : Replacement of damaged Penstock pipe line (Activities of fabrication works and erection at site including Civil works)

Activity II : Butterfly valve - Reconditioning works

Activity III: Expansion joints - Inspection and Overhauling works

Activity IV : Rectification of defective weld joints identified through 100% Ultrasonic test and Ultrasonic thickness measurement in each longitudinal and circumferential weldments in the Penstock pipeline & Painting of Penstock pipe and Steel pipe liner.

Tenderers are requested to inspect the site positively before tendering so as to obtain additional information if any.

**2.1.** The tenderers alone will be responsible for all the consequences for ignoring the advice of site visit and TANGEDCO will in no way be liable for any claim on this ground at a later date.

**2.2.** The tenderers are requested to contact Superintending Engineer/Tirunelveli Generation Circle regarding further technical details and field visit to inspect the site.

**2.3.** The scope of work is given in detail in Section – VII.

**3.0. SUBMISSION OF TENDER OFFER :**

**3.1.** The tenderer is expected to examine all instructions terms and Schedules detailed in the Specification and submit the Schedule of prices and other required particulars in the schedules, only as per the formats prescribed, herein.

**3.2. QUESTIONNAIRE FILLING:**

A Questionnaire is appended as Schedule-G in this specification for Bid Qualification Requirements, Commercial and Technical details. It is obligatory on the part of the tenderer to furnish all details as per the "Questionnaire" . In case, this is not filled up and signed at the bottom of each page of the questionnaire and enclosed with the offer, the Bid will be liable for rejection.

**4.0. SUBMISSION OF TENDERS:**

**TWO PART TENDER:**

The e-Tenders shall be in Two Parts as detailed below.

**i) Part I shall contain:**

(a) Proof for payment of EMD/Exemption from payment of EMD

(b) Documentary evidences to satisfy the Bid Qualification Requirement and all required technical and commercial documents as required in the Specification.

**ii) Part II shall contain the PRICE BID only.**

If the price bid/price schedule is indicated/uploaded along with the technical bid, the offer will be summarily rejected.

**4.1.** The Tender Offer consisting of Schedules-B to G 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.

**4.2.** 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 authorizing him to do so, Certified copies of which shall be uploaded.

**4.3.** Tender submitted on behalf of companies registered under the Indian Companies Act, shall be signed by person duly authorized 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.

**4.4** The tenderer should furnish the GSTIN numbers in the offer.

#### **4.5. Modifications/Clarifications to Tender Documents:**

- 4.5.1. 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 .
- 4.5.2 In case any tenderer asks for a clarification to the tender documents before 48 hours of opening of tenders, the CE/Hydro/TANGEDCO/ Chennai-2 will clarify the same.
- 4.5.3 If any tenderer raises clarifications after the opening of the tender, the clarified reply issued by the Chief Engineer/Hydro, TANGEDCO, Chennai- 600 002 on the clarifications will be final and binding on the Tender.
- 4.5.4 All tender offers shall be prepared by typing or printing in the formats enclosed with this specification.
- 4.5.5 All information in the tender offer shall be in ENGLISH only. It shall not contain interlineations, erasures or overwritings 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.
- 4.5.6 If the tenderer finds discrepancies/omissions or any ambiguity in any of the terms and conditions stipulated in this specification, he shall get it clarified, in writing at least 48 Hours before opening of the tender, from the Chief Engineer/ Hydro, TANGEDCO, 5<sup>th</sup> Floor, Eastern Wing, NPKRR Maaligai, Electricity Avenue, 144, Anna Salai, Chennai – 600002. All such clarifications/interpretations shall form a part of specification. Verbal clarifications and information obtained by the tenderer shall not in any way be binding on the TANGEDCO. If this is not done and subsequent to the opening of the tenders, it is found that the doubt about the meaning or ambiguity in the interpretation of any of the terms and conditions stipulated in the specification are raised by the tenderer, either in this tender or by a separate letter, the interpretation or clarification issued by the Chief Engineer /Hydro, TANGEDCO Limited, Chennai-2, on such of those terms and conditions of the Tender Document as may be raised by the tenderer shall be final and binding on the tenderer.
- 4.5.7 It will be the responsibility of such tenderer to fully be informed himself of all local conditions and factors which may have any effect on the equipments/materials/execution of works covered under these specification and documents.
- 4.5.8 It must be understood and agreed that such factors are properly investigated and considered while submitting the proposals. No claim for financial adjustment to any tender awarded under this specification and document will

be permitted by the TANGEDCO. Neither any change in the time schedule of the tender nor any financial adjustment arising thereof shall be permitted by the TANGEDCO, which are based on the lack of such clear information or its effect on the cost of the "Works/supply" to the tenderer.

4.5.9 The offer shall contain full information asked for in the accompanying schedules and elsewhere in the specification.

4.5.10 Tenderer 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.

4.5.11 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.

4.5.12 The Tenderers are requested to furnish the exact location of their factories with detailed postal address, Pin Code, Telephone and Fax Nos., e\_mail etc., in their tender so as to arrange inspection by the Corporation if considered necessary.

4.5.13 Tenders received from Agents will not be considered.

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

4.5.15 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.

#### **4.6 QUOTATION OF RATES:**

4.6.1 Rates should be quoted in figures i.e., integers only.

4.6.2 Offers giving lumpsum price, without giving their breakup as per details required in the attached Price Schedule-A shall be liable for rejection.

#### **4.7 PRINTED TERMS AND CONDITIONS IN TENDERS:**

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

#### **4.8 INCOMPLETE TENDERS:**

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

### **5 TENDER OPENING:**

#### **5.1 OPENING OF COMMERCIAL & TECHNICAL BIDS WITHOUT PRICE (PART-I):**

5.1.1 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/ Hydro

(Electrical), 5<sup>th</sup> Floor, Eastern Wing, NPKRR Maaligai, 144, Anna Salai, Chennai-600 002, through <https://tntenders.gov.in/nicgep/app> at scheduled date and time and this could be viewed by bidders online on the date and time mentioned as above.

- 5.1.2 In all cases, the amount of bid security and validity of the bid shall be scrutinized. Receipt of original instrument of bid security shall be confirmed by the Employer. Thereafter, the bidders' names, the presence or absence of Bid security and such other details as the Employer may consider appropriate, will be recorded as bid opening summary and the same will be uploaded on the e-procurement portal after techno commercial bid opening.

## **5.2 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 fulfill the BQR criteria and whose bids are found to be commercially and technically acceptable.

- 5.2.1 The Bidders' names, the Bid prices and such other details as the Employer may consider appropriate, will be recorded as bid opening summary and uploaded by the Employer on the e-procurement portal. Any bid price, which is not submitted through the e-procurement system, will not be taken into account in Bid Evaluation.
- 5.2.2 If the date set for tender opening happens to be a holiday, the tenders will be opened on the succeeding working day without any changes in the timings indicated.

## **6.0 INFORMATION REQUIRED AND CLARIFICATIONS:**

- 6.1 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.
- 6.2 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.
- 6.3 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.
- 6.4 After acceptance of the tender by the Tender Accepting Authority, the details will be arranged to be published in the Tender Bulletin of Tamil Nadu

Government.

- 6.5 Mere submission of any Tender offer connected with these documents and Specification shall not constitute any agreement. The tenderer shall have no cause of action or claim, against the TANGEDCO for rejection of his offer. The TANGEDCO shall always be at liberty to reject or accept any offer or offers at its sole discretion and any such action will not be called into question and the Tenderer shall have no claim in that regard against the TANGEDCO.

**7.0. PROCESS TO BE CONFIDENTIAL:**

- 7.1. Information relating to the examination, clarification, evaluation, and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid.

**8.0 EXAMINATION OF BIDS AND DETERMINATION OF RESPONSIVENESS:**

- 8.1. Prior to the detailed evaluation of Bids, the Employer will determine whether each Bid (a) meets the eligibility criteria, (b) has been properly signed, (c) is accompanied by the required securities and documents and (d) is substantially responsive to the requirements of the Bidding documents.
- 8.2. A substantially responsive Bid is one which conforms to all the terms, conditions, and specifications of the Bidding document, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the works; (b) which limits in any substantial way, inconsistent with the Bidding documents, the Employer's rights or the Bidder's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.
- 8.3. If a Bid is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

**9.0. CORRECTION OF ERRORS:**

The e- Procurement system automatically calculates the total amount from the unit rates and quantities and the system also automatically populates the amount in words from the amount in figures and therefore there is no scope of discrepancy and need for arithmetic correction.



## **10.0 EVALUATION AND COMPARISON OF TENDER OFFERS:**

- 10.1 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.
- 10.2 The tender offers received for consideration will be examined to determine whether they are in complete shape, all required data have been furnished, the tender offer is properly signed and are generally in order and whether the tender offer conforms to all the terms and conditions of the Tender document without any deviation.
- 10.3 For the purpose of evaluation of the tender offers, the following factors will be taken into account for arriving at the evaluated price.
  - a) The rate of CGST, SGST, and IGST as applicable both in percentage and amount shall be indicated in the offer along with HSN code (Harmonised System of Nomenclature Code).
  - b) The evaluated price shall be arrived in compliance with the provisions of GST on the Transaction value i.e. (Ex works price of material + Packing & Forwarding+ Freight & Insurance + Labour Charges) + GST. In case of import of goods would be treated as interstate supplies and would be subject to IGST in addition to applicable customs duty.
  - c) 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.
- 10.4 Tenderers shall quote for the tendered items to have a composite offer for evaluation.
- 10.5 The price quoted for the works will be arrived at as detailed in Clause 10.3. From this arrived rates. The lowest tenderer will be arrived as a whole package.
- 10.6 The rates quoted by the eligible lowest tenderer in the open tender 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 and the rate will be determined. All eligible bidders who accept the rate shall be enlisted.
- 10.7 The evaluation of lowest offer shall be arrived as a whole package.

## **11.0 VALIDITY:**

- 11.1 The Tender offer shall be kept valid for acceptance for a period of **180 days** from the date of opening of offers. The offers with lower validity period are liable for rejection.
- 11.2 Further, the tenderer shall agree to extend the validity of the bids without altering the substance and prices of the bid for further periods, if any required by the TANGEDCO.

## **12.0 RIGHTS OF THE TANGEDCO:**

Notwithstanding anything contained in this specification, the TANGEDCO reserves the right to:

- (a) Accept the lowest tender.
- (b) Revise the quantities at the time of placing orders to the extent of + or – 25%.
- (c) to vary the completion period/delivery period based on the requirement and contingencies at the time of placing the purchase order
- (d) Reject any or all the tenders or cancel without assigning any reasons thereof.
- (e) Recover losses if any sustained by TANGEDCO, from the successful tenderer who pleads his inability to supply and backs out of his obligation after award of contract. The Security Deposit cum performance guarantee paid shall be forfeited in such cases.
- (f) To cancel the orders for not keeping up the delivery schedule.
- (g) To split the tender quantity & place orders on one or more than one firm to meet the delivery requirement.
- (h) After negotiation with the tenderer and before placing the order accepting the tender, if the tender accepting authority decides that the price quoted by such tenderer is high, the tender is liable for rejection
- (i) To Relax or waive or amend any of the conditions stipulated in the tender specification wherever deemed necessary in the best interest of the TANGEDCO.
- (j) The purchaser reserves the right to request for any additional information and also reserves the right to reject or accept the proposal of any tenderer, if in the opinion of the purchaser, the qualification data is incomplete or in the opinion of the TANGEDCO the bidder is found not qualified to satisfactorily perform the contract.

### **NOTE :-**

In the event of the documents furnished with the offer being found to be bogus or the documents contain false particulars, the EMD paid by the tenderers will be forfeited in addition to blacklisting them for future tenders/ contracts in TANGEDCO.

### **13.0 DEVIATIONS:**

- 13.1 The tenderer shall furnish, if there are any deviations in the commercial and technical terms in the Schedules B & C Annexed. Deviations mentioned elsewhere other than Schedule B & Schedule C will not be considered. If no deviations are furnished in said schedules, it will be construed that the tenderer is accepting all terms specified in the specification. Similarly, if any deviations are furnished in the said schedules, it will be construed that these are the only deviations and the tenderer is accepting all other terms of the specification and the offer will be taken for evaluation accordingly.
- 13.2 THE OFFERS OF THE TENDERERS WITH DEVIATIONS IN COMMERCIAL TERMS AND TECHNICAL TERMS OF THE TENDER DOCUMENT ARE LIABLE FOR REJECTION.
- 13.3 NO ALTERNATE OFFER WILL BE ACCEPTED.
- 13.4 Any attempt by any tenderer to bring/ to bear extraneous pressure on Tender Accepting Authority shall be sufficient reasons to disqualify the tenderer.

### **14.0. BAR OF JURISDICTION:**

Save as otherwise provided in Tamil Nadu Transparency in Tender Act 1998 no order passed or proceeding taken by any officer or authority under this Act shall be called in question in any Court, and no injunction shall be granted by any court in respect of any action taken or to be taken by such officer or authority in pursuance of any power conferred by or under the above Act.

### **15.0. APPEAL:**

Any tenderer aggrieved by the order passed by the Tender accepting Authority under Section-10 of the Tamil Nadu Transparency in Tenders Act 1998 may appeal to the Government within 10 (Ten) days from the date of receipt of order.

### **16.0 PERMANENT ACCOUNT NUMBER (PAN) & GSTIN REGISTRATION NUMBER :**

The tenderers are requested to furnish the Permanent Account Number and **GSTIN** Registration number in their offer.

- 17.0** The tenderer who is an industrial company shall state clearly whether the company is a potentially sick Industrial Company in terms of Section 23 or 25 of the sick Industrial Companies act 1985.

## **SECTION: V COMMERCIAL**

### **1.0 PRICE:**

- 1.1 The tenderers are requested to quote only FIRM Price valid for the entire duration of contract.
- 1.2 The prices quoted should be Unit all inclusive price for the works as follows  
Activity I : Replacement of damaged Penstock pipe line (Activities of Fabrication works and erection at site including Civil works )  
Activity II : Butterfly valve - Reconditioning works  
Activity III : Expansion joints - Inspection and Overhauling works  
Activity IV : Rectification of defective weld joints identified through 100% Ultrasonic test and Ultrasonic thickness measurement in each longitudinal and circumferential weldments in the Penstock pipeline & Painting of Penstock pipe and Steel pipe liner

The prices quoted should be Unit all inclusive price including Ex-works, Packing and Forwarding, Freight and Insurance charges to cover transit risk and storage for 90 days, for delivery & unloading at site for the supply portion of the work. Erection portion of the works should include labour charges and insurance towards risk during erection, testing & commissioning till handing over to TANGEDCO. Applicable GST (CGST, SGST or IGST) shall be quoted separately. A format for price is given in Schedule 'A' and the price shall be quoted online only in the BOQ (Price schedule) in .xls format.

The present applicable rate of GST for composite supply of Works Contract as defined in Clause (119) of section 2 of CGST Act as per Entry 6 of Schedule II to the CGST Act shall be quoted.

- 1.3 All the tests specified shall be conducted at TENDERER'S COST.
- 1.1 The L1 tenderer shall furnish the declaration in respect of passing of Input Tax Credit (ITC) benefit in the format as stipulated in Annexure-IV of this specification. Further in the event if the L1 tenderer specifies the ITC benefit as nil, the same shall be supported with certificate from the Chartered Accountant.
- 1.5 PERMANENT ACCOUNT NUMBER AND GSTIN NUMBER:

The Tenderer shall indicate the Permanent Account No. in Schedule 'G' of the specification and should enclose the details of PAN issued by Government of India, Income Tax Department and GSTIN number of the firm with proof with the tender.

### **2.0 Goods and Services Tax [GST] :**

- i. Goods and Services Tax [GST] as a modern law, has been brought after Article 366(12A) of the Constitution as amended by 101st Constitutional Amendment Act, 2016. GST is an indirect tax system, commonly used by both the Central Government and the State/UT to final consumption with credit of taxes paid at previous stages available as set off. In a nutshell, only value addition will be taxed and burden of tax Governments on goods and services. GST is a destination based tax on consumption of goods and services. It is

*proposed to be levied at all stages right from manufacture up is to be borne by the final consumer.* GST has been rolled out w.e.f. 01.07.2017, across India.

- ii. The GST to be levied by the Centre on intra-State supply of goods and / or services would be called the Central GST (CGST) and that to be levied by the States/Union territory would be called the State GST (SGST)/ UTGST. Similarly, Integrated GST (IGST) will be levied and administered by Centre on every inter-state supply of goods and services.
- iii. Any supplier of goods and service Provider of services who makes a taxable supply with an aggregate turnover of over Rs.20 lakhs in a financial year is required to obtain GST registration. In special category states, the aggregate turnover criteria is set at Rs.10 lakhs. in simple words Every business whose taxable supply of goods or services under GST (Goods and Service Tax) and whose turnover exceeds the threshold limit of Rs.20 lakh/10 Lakh as applicable will be required to register as a normal taxable person.
- iv. *GST Registration Number:* TANGEDCO has migrated into GST regime on 15.06.2017 by duly uploading various mandatory data as required by the GST portal. The provisional ID issued to TANGEDCO is 33AADCT4784E1ZC. The details are also posted in TANGEDCO web portal.
- v. GST Registration Number or GSTIN is 15 Digit identification number which is allotted to each applicant who applied for GST Registration. GST Number is completely based on the Pan Number and State code. First two digit represent the state code and another 10 digit represent the PAN number of the client, one digit represent the entity code (Like proprietorship or partnership etc), one digit is blank and last one is represent check digit.
- vi. *Transaction Value:* The value of a supply of goods or services or both shall be the transaction value, which is the price actually paid or payable for the said supply of goods or services or both where the supplier and the recipient of the supply are not related and the price is the sole consideration for the supply. Sec 15(1) states that value of supply of goods and service shall be the transaction value i.e. the price actually paid or payable.  
The conditions for accepting the transaction value are  
a) Supplier and the recipient of the supply are not related.  
b) Price is the sole consideration for the supply.
- vii. *Composition Scheme:* Composition scheme specifies that registered person whose turnover in the preceding financial year is below certain specified limit (Currently Rs.75 lakhs) may intimate the proper officer to pay in lieu of tax payable by him an amount calculated at such rate may be specified.

*Eligibility for composition scheme:* Sec10(2) of the central Goods and Services Tax Act, 2017 states that the registered person shall be eligible to opt under sub- section (1), if-

- . He is not engaged in the supply of services other than supplies referred to in clause (b) of paragraph 6 of Schedule II;
- . He is not engaged in making any supply of goods which are not leviable to tax under this Act;
- . He is not engaged in making any inter-State outward supplies of goods;
- . He is not engaged in making any supply of goods through an electronic commerce operator who is required to collect tax at source under section 52; and
- . He is not a manufacturer of such goods as may be notified by the Government on the recommendations of the Council.

viii. *Supply of Service and Goods:* When there is a combined supply of many goods /services, it has to be determined whether it is a Composite supply or mixed supply of goods or services

(a) *COMPOSITE SUPPLY:* A composite supply is the one where all the goods or services or a combination has to be supplied together i.e., naturally bundled and there would be a Principal Supply that could be identified (Ex. Supply of Machinery with packaging, insurance and freight – the principal supply is machinery). In this case, the rate of principal supply will be applied on entire value.

(b) *MIXED SUPPLY:* A mixed supply is where the goods or services or the combination thereof which could be individually supplied (like Pizza and Coke) but sold together at a single price. In this case, the highest rate to the good in that mix is applied on all the goods. The GST shall be applicable at appropriate prevailing rates as notified by GST Act. In the event of delay in execution of contract, the GST rate prevailing on the scheduled period or on the actual date of execution, whichever is less only will be admitted.

The bidders should have registered under GST Act and furnish GSTIN. In the event of contractor is within TN, SGST & CGST shall apply and if the contractor is outside TN, IGST shall apply.

## 2.1 Goods and Services Tax:

2.1.1 The amount of CGST, SGST, and IGST as applicable shall be indicated in percentage payable and amount separately in the tender offer.

2.1.2 In case of delayed completion, the GST prevailing on the date of completion or on the last day of the contractual completion period whichever is LESS will be admitted. For both the cases, the contractor shall furnish documentary evidence while submitting the bills for payment.

2.1.3 It is the responsibility of the tenderer to make sure about the correct rates of duty liveable on the material/labour 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.

2.1.4 Any Variation in GST due to statutory Variation within the contract delivery date shall be considered by the TANGEDCO Ltd.

2.1.5 In case of delayed completion, the GST prevailed on the date of actual completion period applicable or on the date of contractual date of completion whichever is less shall be admitted.

2.1.6 TDS under GST is applicable in the proposed contract at the rate of 2% on each and every invoice of contract.

**2.2 GST ON LD AND FORFEITURE OF EMD,SD & SD Penalty:**

2.2.1 Liquidated damages collected/recovered on purchase of goods and service will attract GST@18%. GST will be additionally recovered from the Supplier in addition to the stipulated LD rates in the purchase order/contract.

2.2.2 Forfeiture of EMD/Security Deposit if any arises, will attract GST @ 18% and the GST will be collected additionally from the Supplier.

**2.3 Verification of GSTR-2A:**

The GSTR-2A for verification of GST remittance will be verified at the time of P.O closure. In case of non-filing of GSTR-1 by the suppliers, the release of SD and retention amount will be withheld.

**2.4 TDS under section 194 Q of IT Act:**

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 the 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.50 Lakhs 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 provisions 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 194Q. 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 provisions 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 to determine the applicability of TDS rate u/s 206 AB.

In case any procurement of goods/materials are made by TANGEDCO from overseas supplier and the payment is not taxable to the overseas supplier in India, the TDS under section 194Q will not apply.

### **3.0 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.

### **4.0 INSURANCE:**

- 4.1 Contracting firms shall arrange insurance for the equipment and all its accessories being supplied by them, through any of the authorized insurance companies. The equipment shall be insured to cover transport (from Warehouse) and 90 days storage risk at site. The damages, if any, during transit will be reported within 30 days of receipt of materials. It will be the responsibility of the successful tenderer to replace the defective / damaged materials and make good the shortages and other losses in transit, free of cost, lodge and recover claim from Insurance, Under-writers/Carriers.
- 4.2 Contracting firms shall also arrange insurance for panting, erection & commissioning of the equipments on the above lines.

### **5.0 PACKING AND FORWARDING:**

The equipment and all its accessories shall be securely packed so as to withstand handling during transport & subsequent storage and dispatched, freight paid, duly insured, at successful tenderer's risk and cost. The packing may be in accordance with the manufacturer's standard practice. The successful tenderer is responsible for ascertaining the facilities that exist for road transport to site. Each package shall be clearly marked and contain detailed packing list, such as gross weight, net weight etc. The successful



tenderer is solely responsible for any loss or damage during transport. The dispatch of materials shall be made only after the approval of test certificates by the TANGEDCO. The equipment / Materials shall be unloaded at destination Site by the successful tenderer free of cost. Proper instructions for storage at site may also be furnished to the consignee well in advance.

## **6.0 PAYMENT:**

- 6.1 a) Payment for the supplies/works will be made as by RTGS/NEFT on any one of the Nationalized Banks/Scheduled Banks approved by Reserve Bank of India in Tamil Nadu. The Bank charges involved in making the payment will be to the account of the Tenderer.

(b) The successful Tenderer has to furnish the following details of the Bank account to which the payment be credited.

1. Name of the Account Holder
2. Name of the Bank
3. Branch
4. Account No
5. IFSC code of the Branch

- 6.2 Payments will not be made for equipments/materials damaged during transit. All defective materials shall be replaced by the successful tenderer free of charge.

### **6.3 (a) For the works completed within the contractual delivery period:**

95% of the all inclusive price of the contract will be paid within 90 days after successful completion of entire scope of work as per section VII technical in tender specification in all respects as per Activities and on receipt of contractor's bill with required documents and the balance 5% will be made within reasonable time after completion of the execution of contract and after closure of work Contract order.

### **(b) For the works completed beyond the contractual delivery period:**

95% of the all inclusive price of the contract after deducting the appropriate amount of L.D will be paid within 90 days after successful completion of entire scope of works as per section VII technical in tender specification in all respects as per Activities and on receipt of contractor's bill with required documents and

the balance 5% will be made within reasonable time after completion of the execution of contract and after closure of work Contract order.

(C) For delayed payments, if any, simple interest for the delayed payment shall be paid by TANGEDCO to vendors at the SBI three months MCLR rate for the delayed period.

The simple interest shall be calculated for the delayed period by adopting the 3 months MCLR of SBI prevailed at the time of signing of agreement and in the cases where no agreement is signed, only P.O/WCT is issued, the date of the P.O/WCT shall be taken as base date to ascertain the interest rate.

- 6.4 In case of delay in supply, the materials will be accepted subject to the following conditions.
- (a) There should be no declining trend in prices.
  - (b) Payment will be released as per the recent purchase order rate or lowest rate obtained during the recent tenders opened subject to levy of liquidated damage for belated supplies.
  - (c) TANGEDCO reserves the right to accept or reject the delayed supplies without assigning any reason therefore and take action as per the other terms and conditions of this specification.
- 6.5 The bills for payment will be passed only after the approval/ acceptance of the following:
- (a) Security Deposit cum Performance guarantee for 5% value of the order.
  - (b) Guarantee Certificate.
  - (c) Test certificate
  - (d) Undertaking towards Jurisdiction for Legal Proceedings.
  - (e) Acceptance of the Proof for payment of contributions – both Employer's and Employee's contributions made to the EPF & ESI Organizations, by SE/Tirunelveli GC in accordance with the **Clause 43(e)** of this section.
  - (f) Acceptance of the undertaking as per **Annexure-VII** to ensure the remittance of EPF & ESI, Employee and Employer contribution made to the EPF & ESI Organizations, by SE/Tirunelveli Generation Circle, in accordance with the **Clause 43(f)** of this section.
- 6.6 The successful tenderer should dispatch the materials only after getting dispatch clearance. If the successful tenderer dispatches the materials without the prior approval of the purchaser, then the purchaser shall not be responsible for any demurrage or wharfage or both and only the successful tenderer should bear any expenditure arising out of such unapproved dispatches.
- 6.7 The contractor has to obtain the Statutory Compliance Clearance Certificate for the works contract from the online compliance service provider. The required documents should be submitted online by the contractor. Such application with documents for the Statutory Compliance Clearance Certificate will be allocated to one of the online compliance service provider, in the panel, in an automatic digital rotation method.

The following charges will be applicable for obtaining the Statutory Compliance Clearance Certificate,

a. Rate per Man day /per Month = Rs.2.00/- (or)

Minimum Charges = Rs.400/-

b. Maximum Charges = Rs.3,200/-

c. Re-audit charges due to reasons attributable to the contractor = Rs.300/-

Payment of the above charges is to be made online by the contractor, to the online compliance service provider. Any other terms and conditions, revised charges and procedures as applicable anytime during the entire tenure of the contract, has to be accepted by the Contractor.

6.8 The works contract order will be closed on completion of the entire scope of work.

## **7.0 SECURITY DEPOSIT CUM PERFORMANCE GUARANTEE:**

7.1 The successful tenderer will have to furnish 5% value of total contract value (All-inclusive) as Security Deposit cum Performance Guarantee in the form of electronic mode of payment/Banker's Cheque/D.D. (or) Pay order/Irrevocable Bank Guarantee before commencement of supply/work.

7.2 The successful tenderer will have to furnish the Security Deposit cum performance guarantee as per clause 7.1 within **30 days** from the date of receipt of Works contract order/Purchase Order failing which TANGEDCO will be cancel the order placed on the firm. **The Security Deposit cum Performance Guarantee will not carry any interest.** The belated payment of security deposit shall not be accepted. **In the event of failure to remit security deposit within the prescribed period, EMD shall be forfeited and the order will be cancelled.**

7.3 The Bank Guarantee shall be valid for a period of 64 months from the anticipated date of completion of entire scope of work as per section VII Technical specification at site in good condition in all respect. In case of delay in completion of the entire scope of work as per section VII technical specification the SD cum Performance Bank Guarantee should be extended suitably. The Security Deposit cum Performance Bank Guarantee shall be returned only after the expiry of guarantee period after ensuring that defects/damages during the guarantee period are rectified/ replaced. The SD cum PG shall be returned to the tenderer only if the tender is completed to the satisfaction of the TANGEDCO.

7.4 The extended Bank Guarantee shall be submitted to TANGEDCO within the date of expiry of existing Bank Guarantee. In case of failure to submit such extended Bank Guarantee within the due date, TANGEDCO shall invoke the Bank Guarantee by addressing the Bank directly.

- 7.5 If the purchaser incurs any loss or damage on account of breach of any of the clauses or any other amount arising out of the contract becomes payable by the successful tenderer to the purchaser, then the purchaser will in addition to such other dues that he shall have under the law, appropriate the whole or part of the Security Deposit cum Performance Guarantee and such amount that is appropriated will not be refunded to the successful tenderer.
- 7.6 Failure to comply with the terms regarding Security Deposit cum Performance Guarantee set out in the works contract order within the stipulated time by the successful tenderer will entail in cancellation of the order without any further reference to the successful tenderer.

**No tenderer is exempted from payment of Security Deposit cum Performance Guarantee.**

- 7.7 If the supplier failed to replace/rectify the defects within time and non compliance of guarantee clause, TANGEDCO reserves the rights to invoke the SD cum Performance guarantee.
- 7.8 The SD forfeited will also attract GST@18% and will be additionally collected from the tenderers.

**8.0 COMPLETION PERIOD:**

Replacement of damaged Penstock pipe line by Supply, Fabrication, Erection, Testing and commissioning of 220 meter Penstock pipe line including civil works, reconditioning of Butterfly valve at valve house, Overhauling of expansion joints and rectification of defective weld joints identified through 100% Ultrasonic test and Ultrasonic thickness measurement in each longitudinal and circumferential weldments in the Penstock pipeline and painting of Penstock pipe line & Tunnel steel liner should be completed within 120 days from the date of receipt of Works Contract Order. The activities to be carried out simultaneously are listed below

**Activity I :** Replacement of Penstock pipe line includes fabrication works and erection at site including civil work shall be completed as per section VII Technical specification.

**Activity II :** Reconditioning of Butterfly valve

**Activity III :** Expansion joints - Inspection and Overhauling works to be carried out after replacement of expansion joints – 2Nos and Manhole

**Activity IV :** Rectification of defective weld joints identified through 100% Ultrasonic test and Ultrasonic thickness measurement in each longitudinal and circumferential weldments in the Penstock pipeline & Painting of Penstock pipe and Steel pipe liner.

The above completion period shall be guaranteed by the tenderer under liquidated damages clause governed by clause 10 of this Specification.

- 8.1 Only the date of completion of entire works as per technical specification section VII will be reckoned as date of commissioning of entire Penstock for this purpose.

8.2 **E-WAY BILL:**

E-Way Bill is an electronic document to be generated to cover movement of goods more than Rs.1,00,000 and such generation needs to be done in e way bill portal. Consequently, transporters of goods are required to carry an e way bill under GST provisions for the movement of such goods. The value of goods shall be the value declared in an invoice, a bill of supply or 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 the transporter.

It is the responsibility of Supplier/Contractor to ensure the delivery at the destination stores/sites of TANGEDCO. Therefore, it is the responsibility of the Supplier/Contractor or their transporters to generate e-way bill before transporting goods for delivery at TANGEDCO's premises.

9.0 **LOSS OR DAMAGE:**

- 9.1 External damages that are prima facie, the results of handling in transit or due to defective packing and shortages will be intimated within one month from the date of receipt of the materials at site. Internal defects, damages or shortages of integral parts, which cannot ordinarily be detected on a superficial visual examination, though due to handling in transit or defective packing, would be intimated within 2 months from the date of receipt of materials at stores. In either case, the defective materials shall be replaced / rectified by the successful tenderer, free of cost as per Clause 13-1.
- 9.2 If during the period of supply, it is found that goods already supplied are defective in material or workmanship or do not conform to specification or are unsuitable for the purpose for which they are purchased, then it will be open to the purchaser either to reject the goods or repudiate the entire contract and claim such loss that the purchaser may suffer on that account or require the successful tenderer to replace the defective goods, free of cost.
- 9.3 Similarly, if during the guarantee period any of the goods are found to be defective in materials or workmanship or do not conform to specification, are unsuitable for the purpose for which they are purchased, it will be open to the purchaser either to repudiate the entire contract and claim damages or accept such parts of the goods that are satisfactory and require the successful tenderer to replace the balance or to claim compensation for the entire loss sustained by the purchaser on that account.

- 9.4 In the event of supplies being received damaged/ or of any shortage at the destination site, the cost of such materials, applicable taxes (if payable) and other charges payable thereof will be paid only proportionate to the value of materials received in good condition, unless the damaged goods or short supplies are made good free of cost by the successful tenderers. The defective materials shall have to be taken back from site at your risk and cost. In any case, damaged or defective materials should be replaced free of cost to the TANGEDCO.
- 9.5 For all legal purposes, the materials shall be deemed to pass into the TANGEDCO's ownership at the destination, where they are to be delivered and accepted.

#### **10.0 LIQUIDATED DAMAGES:**

- 10.1 The completion period as specified should be guaranteed by the successful tenderer under the liquidated damages clause given below:
- a) If the successful tenderer fails to complete the entire scope of works as per section VII technical specification within the time specified in the contract or any extension thereof, the purchaser shall recover from the successful tenderer as liquidated damages, a sum of HALF PERCENT (0.5%) of the total value for the works for each completed week of delay.
  - b) Liquidated Damages will be levied for delay in replacement / repair of defective /damaged supply.
  - c) The total Liquidated Damages shall not exceed ten per cent (10%) of the contract price.

Only the date of completion of entire scope of works as per section VII technical specification will be reckoned as date of completion .

- 10.2 If the works are completed by the successful tenderer beyond the period of completion and they are accepted by the TANGEDCO, such acceptance is without prejudice to TANGEDCO's right to levy liquidated damages for the delay in completion of works.
- 10.3 If the work is not carried out at all, the purchaser shall recover from the successful Contractor, as liquidated damages a sum equal to TEN PERCENT (10%) of the contract price of the works contract besides forfeiture of SD cum Performance BG.
- 10.4 The successful tenderer is liable to pay the amount of loss sustained by the TANGEDCO in the event of non-execution of orders, if any placed on him to the satisfaction of the TANGEDCO under the terms and conditions of contract and in the event of placing orders for such quantities on some others at a higher price.

- 10.5 Tenderers not giving clear and specific acceptance to the above clauses are liable for rejection.
- 10.6 If there is any downward trend in prices on account of belated completion of works, the Contractors have to accept the same with the levy of liquidated damages, for belated completion of works.
- 10.7 Liquidated damages as per the terms of W.C.T. will be recovered from the respective bills itself for the delayed completion of works.
- 10.8 In case of part work completion which would affect the commissioning of the equipment then LD will be levied for the entire contract value of that particular equipment and not on the value of the delayed portion only.
- 10.9 The TANGEDCO will also be at liberty to cancel the W.C.T. if the supply is not completed within the accepted delivery period notwithstanding the liquidated damages clause applicable for the belated supplies. Any charge for canceling the W.C.T will not be accepted under any circumstances.
- 10.10 In the event of cancellation of the WCT for non-completion of supply by the supplier then the short supplied items may be ordered afresh. The excess price if any between the original and new WCT will be recovered from the original supplier from the amount due to the original supplier either from this contract or from any other contract.
- 10.11 A liquidated damage if any arises is subject to GST @ 18 %. GST will have to be additionally recovered from the supplier in addition to the stipulated LD rates in the purchase order.

#### **11.0 FORCE MAJEURE:**

- 11.1 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 exist.
- 11.2 Provided that if the performance in whole or part by the successful tenderer 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 the contract by a notice in writing.

- 11.3 Power cut shall not be considered under the Force Majeure condition. The period of extension shall be decided only by the authority who placed the order after verifying the evidence for the cause of delay.
- 11.4 The termination of the contract as aforesaid shall not absolve the supplier/ supplier of his liability to pay damages to the Corporation for the breach of the contract to deliver the goods or complete the performance of the contract within the time fixed by the purchaser/ suppliers.

## **12.0 GUARANTEE:**

- 12.1 The entire scope of works as per section VII Technical shall be guaranteed for satisfactory operation and good workmanship for a period of 60 months from the date of commissioning of the penstock after rectification works..Successful tenderer shall furnish an undertaking for the above.  
The guarantee certificate shall be furnished in the format enclosed as Annexure-V.

- 12.2 The tenderer shall give guarantee for the following items.

- a. Quality and strength of the materials used.
- b. Satisfactory operation of the equipment.
- c. Safe stresses in all parts under all conditions of operations.
- d. Protection of equipments against vibration and corrosion.
- e. Workmanship.

The tenderer shall correct, at his own expense, the defects, if any, during the guarantee period. Within five years after commissioning if any part of the replaced damaged Penstock pipe line , reconditioned Butterfly valve at valve house, Overhauled of expansion joints and rectified defective weld joints identified through 100% Ultrasonic test and Ultrasonic thickness measurement in each longitudinal and circumferential weldments in the Penstock pipeline & painting of Penstock pipe line & Tunnel steel liner is found defective because of workmanship or material or otherwise, the contractor shall at his own expense, furnish and install new part and materials approved by the purchaser.

The tenderer shall assume all responsibility for direct damages causing personnel injury or property damage caused by any manufacturing defects resulting in the failure of the equipment being supplied under these specifications.

- 12.3 Any defects noticed during this period shall be rectified free of cost to the TANGEDCO within 2 (Two) months from the intimation of defect/failure. Irrespective of number of failures and repairs, the contractors are responsible for free replacement of the defective materials till the guarantee period. If they are not rectified or replaced within this period the contractor shall pay Liquidated Damages as per Liquidated Damages clause in the contract for the delay from the date of receipt of intimation for the defects or failures.



- 12.4 The incidental expenses, insurance and freight charges for the replacement of defective materials within the guarantee period shall also be borne by the contractor.

### **13.0 REPLACEMENT OF DEFECTIVE/DAMAGED MATERIALS:**

- 13.1 Notwithstanding anything contained in the liquidated damages clause when the whole or part of the work carried out by the successful tenderer are found to be defective/damaged or are not in conformity with the specification or template, such defects or damages in the work shall be rectified within two months from the date of intimation of such defect/damage either at the point of destination or at the successful tenderer's works, at the cost of successful tenderer, against proper security and acknowledgement. In the alternative, the defective or damaged materials shall be replaced free of cost within two months from the date of receipt of the intimation from the purchaser of such defects or damages. If the defects or damages are not rectified or replaced within this period, the successful tenderer shall pay a sum towards liquidated damages as per liquidated damages clause 10.0 above, for the delay in rectification/replacement of the defects or damages. The above liquidated damages are in addition to the liquidated damages for the delay in delivery of materials covered in Clause – 10.0
- 13.2 In the event of supplies being received damaged or short at the destination stores, the cost of such materials with applicable taxes and other charges payable thereof will be paid only proportionate to the value of the materials received in good condition unless the damaged goods or short supplies are made good free of cost to the TANGEDCO by the supplier.
- 13.3 If even after such rectification or replacement of the damaged or defective part, the works executed are not giving the satisfactory performance as per the contract, then it will be open to the purchaser either to reject the goods and recover the entire cost of such goods and claim such loss sustained by the TANGEDCO.
- 13.4 Notwithstanding any other remedies available, the purchaser shall be entitled to dispose of the defective/damaged materials in as is where is condition without further notice, if the contractor/supplier fails to rectify the defects/damaged materials within such period as may be notified by the purchaser through notice and the sale proceeds of such disposal shall be appropriated towards the dues to the Corporation such as Liquidated Damages, ground rent etc. as may be determined by the purchaser.

### **14.0 FAILURE TO EXECUTE THE CONTRACT:**

Successful tenderer failing to execute the works contract order placed on him to the satisfaction of the TANGEDCO under terms and conditions set forth therein, will be liable to make good the loss sustained by the 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 into

and the price at which fresh works contract order have been placed. This is without prejudice to the imposition of Liquidated Damages and forfeiture of Security Deposit cum Performance Guarantee.

**15.0 NON-ASSIGNMENT:**

The successful tenderer shall not assign or transfer the contract or any part thereof without the prior approval of the purchaser.

**16.0 EFFECTING RECOVERIES:**

Any loss, arising due to non-fulfillment of this contract or any other contract, will be recovered from the Security Deposit cum Performance Guarantee held and or any other amount due to the successful tenderer from the TANGEDCO from this Contract as well as from other contracts.

**17.0 PATENT RIGHTS ETC:**

The successful tenderer shall indemnify the purchaser against all claims, actions, suits and proceedings for the infringement or alleged infringement of any patent, design or copy right protected either in the country of origin or in India by the use of any equipment supplied by the successful tenderer other than for the purpose indicated by or reasonably to be inferred from the specification.

**18.0 JURISDICTION FOR LEGAL PROCEEDINGS:**

No suit or any proceedings in regard to any matter arising in any respect under this contract shall be instituted in any court, save in the appropriate Civil Court of Chennai or the Court of Small Causes at 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 cause of action might arise within the jurisdiction of any of the courts in Tamil Nadu but not in courts at Chennai and rest within the jurisdiction of courts outside Tamil Nadu, then it is agreed to between parties that such suits or proceedings shall be instituted in court within Tamil Nadu and no other court outside Tamil Nadu shall have jurisdiction, even though any part of the cause of action might arise within the jurisdiction of such courts. An UNDERTAKING in this regard should be furnished on receipt of Works Contract Order in a non judicial stamp paper value of Rs.100/- agreeing to be above conditions.

**19.0 ARBITRATION:**

The TANGEDCO will not accept any 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 provisions of Arbitration and Conciliation Act 1996 in the event of any dispute between the parties.

## **20.0 DEVIATIONS FROM SPECIFICATION:**

If the tenderer wish to deviate from any of the clauses of this specification, he shall list out such deviations, in the format enclosed (Schedule B & C) and submit full particulars and reasons thereof. Unless this is done, the equipment offered shall be considered to comply, fully in every respect with the terms and conditions of this specification.

## **21.0 TESTS AND TEST CERTIFICATES:**

The inspection report and test certificates towards materials, paints etc. are to be furnished to the Superintending Engineer / Tirunelveli Generation Circle for approval.

The materials will be rejected if the test results are not satisfactory.

## **22.0 RESPONSIBILITY:**

The tenderer is responsible for safe delivery of the materials at the destination stores/site and safe execution of works entrusted to him covered under this Specification. The tenderer should provide packing and secured protection of the materials to be supplied by them so as to avoid damages or loss in transit.

## **23.0 MAXIMUM WEIGHTS AND DIMENSIONS OF PACKINGS:**

The successful tenderer is responsible to make sure about the facilities that exist for Road and Rail transport to site, the maximum packages which can be conveyed by the railways and crane lift available at the destination railway station. The successful tenderer is also responsible for any loss or damage during transport and storage for 90 days. Each case or package should be clearly marked and should contain detailed packing list.

## **24.0 INSPECTION:**

- 24.1 During the work carried out at site, the works shall be inspected by TANGEDCO's Engineers at any time during the works. In case the works are not carried out to the satisfaction of TANGEDCO's inspecting Engineers, further work should be proceeded only after attending the defects if any pointed out by the TANGEDCO's Engineers during inspection, free of cost.
- 24.2 The authorized representatives of the purchaser shall have free access to the successful tenderer's or sub-vendor's works at any time during working hours, for the purpose of inspecting the manufacture of the materials and for testing the equipment / materials covered by this specification. The successful tenderer or the sub-vendor shall provide all facilities for the above.
- 24.3 Tenderers are requested to furnish in their tenders the exact location of their factory with detailed address to enable inspection by TANGEDCO if considered necessary.

- 24.4 Not less than 15 days advance intimation shall be given for inspection by the TANGEDCO's officers. The arrangement for inspection shall be made by successful tenderer in such a way that the delivery schedule is kept up. The materials shall not be despatched without acceptance of test certificate and instruction from TANGEDCO.
- 24.5 In case the works are not carried out to the satisfaction of TANGEDCO's inspecting Engineers, further work should be proceeded only after attending the defects if any pointed out by the TANGEDCO's Engineers during inspection, free of cost.
- 24.6 TANGEDCO reserves the rights to waive the inspection if found necessary.

**25.0 COMPLETENESS OF TENDER:**

The tender should include all accessories even though not specifically mentioned in this specification but which are essential for the completeness of the materials / works ordered. The tenderer shall not be eligible for any extra charges in respect of such minor accessories though not included in the tender.

**26.0 INTERCHANGEABILITY:**

All similar parts and removable parts of similar items shall be interchangeable with each other.

**27.0 CLIMATIC CONDITIONS:**

The materials are for use in Tamil Nadu and should be satisfactory for operation under tropical conditions in Tirunelveli Generation area as detailed below.

The ambient temperature will be within the range of  $\pm 2$  Degree Centigrade to + 40 Degree Centigrade.

**28.0 ELECTRICITY RULES :**

All works shall be carried out in accordance with the latest provisions of the Indian Electricity Act/Electricity Supply Act and the Indian Electricity Rules there-under unless modified by this specification.

**29.0 MATERIALS AND WORKMANSHIP:**

- 29.1 All materials, equipments and spare parts thereof shall be new, unused and originally coming from manufacturer's plant to the destination stores. Those including used, rebuilt or overhauled materials/equipments will not be accepted.
- 29.2 All the materials used for the works shall be of the best class and capable of satisfactory operation in the tropics with humid atmospheric conditions without distortion or deterioration. Unless otherwise specified the equipment

shall conform to the requirements of the appropriate Indian or I.E.C. or other international Standards. Where a specification covering the equipments in question has not been published, the tenderer should specify to what extent they would be in a position to accept the various provisions in the specification.

- 29.3 The workmanship shall be of the highest grade and the entire construction in accordance with the best modern practice. The whole of the work shall be of the highest class throughout well finished and of approved make. The entire design and construction shall be capable of withstanding the severest stresses likely to occur in actual service and of resisting rough handling during transport.
- 29.4 The Replacement of damaged Penstock pipe line by Supply, Fabrication, Erection, Testing and commissioning of 220 meter Penstock pipe line, reconditioning of Butterfly valve at valve house, Overhauling of expansion joints and rectification of defective weld joints identified through 100% Ultrasonic test and Ultrasonic thickness measurement in each longitudinal and circumferential weldments in the Penstock pipeline & painting of Penstock pipe line & Tunnel steel shall be to the entire satisfaction of the field engineers.

### **30.0 RECOVERIES OF DUES:**

The TANGEDCO is empowered:

- a) To recover any dues against this contract in any bills / Security Deposit cum performance guarantee / Earnest Money Deposit due to the successful tenderer either in this contract or any other contracts with TANGEDCO, TANTRANSCO and TNEB.
- b) To recover any dues against any other contract of the successful tenderer with TANGEDCO, TANTRANSCO and TNEB, with the available amount due to the successful tenderers against this contract.
- c) The EMD/SD forfeited will also attract GST and will be additionally collected from the tenderers.

### **31.0 PAST PERFORMANCE:**

- 31.1 The intending tenderers shall furnish the documentary evidence with details of various orders placed on them during the last fifteen years as on the date of tendering in the proforma enclosed to the Tender Specification and also proof for having executed the works and for their satisfactory performance from State Electricity Board.
- 31.2 The Bidders shall furnish copies of Balance Sheet, Profit and Loss Account for the last three financial years 2017-18, 2018-19, 2019-20 certified by the Auditor.

In case Accounts for the last financial year are not finalized, the Bidders shall furnish Annual Turnover Statement for the year duly certified by Auditor.

- 31.3 The Bidders shall furnish documentary evidence for the constitution of the firm such as Memorandum and Articles of Association, Attested copy of Registered Partnership Deed with details of Name, Address, and Telephone of the manufacturing plants.
- 31.4 The details furnished by the Contractors 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 Contractors in future and will entail forfeiture of EMD.

### **32.0 RAW MATERIALS:**

It is the responsibility of the Contractor to make his own arrangement to procure the necessary raw materials required for the entire scope of works as per technical specification at Suruliyar Power House

### **33.0 SPECIAL CONDITIONS:**

- 33.1 POWER FACILITY:** 415 V 3 phase AC supply if required for works at site will be provided by TANGEDCO at appropriate applicable tariff for temporary supply at the rate prevailing during the currency of contract. Necessary cables switchboard etc. shall be arranged by the contractor. In case of any power failure, the contractor shall make their own arrangement to execute the work using DG sets.
- 33.2 TOOLS & PLANTS AND INSTRUMENTS:** All instruments and tools & plants and consumables required for the work shall be arranged by the contractor.
- 33.3 Subject to availability, unfurnished accommodation will be provided at applicable rental charges. The energy consumed in such accommodation shall be billed at appropriate domestic tariff rate. Food shall be the responsibility of the successful tenderer.
- 33.4 **MAN POWER REQUIREMENT:** Required number of skilled and unskilled man power to be arranged by the contractor.

### **34.0 SAFETY OF PERSONNEL:**

The Tenderer is solely responsible for arranging the following for his workmen.

- a) Safety during the erection, testing and commissioning work at spot. The Tenderer's workers should wear necessary safety appliances during the work.
- b) Insurance of workman and other personnel working under him. The Tenderer should cover his employees under accident Insurance Plans of

General Insurance Company of India to cater for the workmen's Compensation Act, 1923, with all later amendments.

- c) Compensation to workmen as per workman compensation act in case of accidents or injuries.

### **35.0 LIABILITY FOR ACCIDENTS TO PERSON:**

- 35.1 The Tenderer shall indemnify and save harm to the TANGEDCO against all actions, suits, claims, demands, costs or expenses arising in connection with injuries suffered prior to the date when the works or plant shall have been taken over by the date when the works or plant shall have been taken over by the persons employed by the Tenderer or his sub-Tenderer, the works whether under the Central Law or under the workmen's compensation Act 1923 or any other statutory law in force at the date of the tender dealing with the question of the liability of employees for injuries suffered by employees and to have taken steps properly to insure against any claims there under.
- 35.2 On the occurrences of an accident which results in the death of the workmen employed by the Tenderer or which is due to the tender work and or so serious as to be likely to result in the death of any such workmen, the Tenderer shall 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 tenderer shall indemnify TANGEDCO against all loss or damage sustained by TANGEDCO resulting directly or indirectly from his failure to give intimation in the manner aforesaid, including the penalties or fines, if any payable by TANGEDCO as a consequence of TANGEDCO's failure to give notice under the Workmen's Compensation Act or otherwise to confirm to the provisions of the said Act in regard to such accident.
- 35.3 In the event of any claim being made, or action brought against the TANGEDCO involving the Tenderer and arising out of the matters referred to and in respect of which the Tenderer is liable under the clause, the Tenderer shall be immediately notified thereof and he shall with the assistance, if he so requires, of the TANGEDCO but at the sole expense of the Tenderer, conduct all negotiations for the settlement of the same or of any litigation that may arise there from. In such cases, the TANGEDCO shall at the expenses of the Tenderer, afford all available assistance for any such purpose.
- 35.4 In the event of an accident in respect of which compensation may become payable under workmen's Compensation Act VIII of 1923 and any subsequent amendment thereof whether by the tenderer or by the Government as principle, it shall be lawful for the Engineer to retain out money due and payable to the tenderer such sum or sums of money as may in the opinion of the said engineer be insufficient to meet such liability. The opinion of the engineer shall be final in this regard to all matters arising under this clause and will not be subjected to any arbitration.

35.5 Liability for damages or loss to third party including inspecting officers due to acts of the tenderer or his plant, or such tenderer connected with the execution of this tender shall be fully borne by the tenderer. The tenderer shall maintain such detailed records to furnish information regarding entitlement and discharge of all workmen employed under this tender as to be adequate for the timely and full settlement of claims under the Workmen Compensation Act. All cases of accident or injuries shall be reported to the engineer with all the details required for the settlement under the Workmen Compensation Act.

35.6 The tenderer should report about all accidents within 24 hours to the Assistant Executive Engineer of the TANGEDCO in the preliminary accidents form. He should furnish other particulars such as Medical Certificates, Wages particulars, fitness certificate, proof for having paid the compensation fixed by the TANGEDCO, etc. in due course without delay.

### **36.0 LIABILITY FOR DAMAGE TO WORK OR PLANTS:**

- 36.1 The tenderer shall during the progress of the work properly cover up and protect the work and plant from injury by exposure to the weather and shall take every reasonable proper, timely and usual precaution against accident or injury to the persons from any cause and shall be and remain answerable and liable for all accidents or injuries there to which until the same, be or deemed to be, taken over may arise or be occasioned by the Acts or omissions of the tenderer or his workmen or his sub-tenderers and all losses and damages to the works or plant arising from such injuries as aforesaid shall be made good in the most complete and substantial manner by and at the sole cost of the tenderer and to the reasonable satisfaction of the TANGEDCO Engineer, should such loss or damage happen to units of works, plant or materials falling outside the scope of this tender and the tenderer due to these shall be placed or compensated for by the tenderer to the satisfaction of the engineer.
- 36.2 In the case of losses 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 tenderer in like manner but at the cost of the TANGEDCO, at a price to be agreed between the tenderer and the TANGEDCO or in default of agreement settled by Arbitration and the TANGEDCO shall pay to the tenderer the tender value of the portion of the work so lost or damages or any balance of such tender value remaining unpaid as the case may be.
- 36.3 Until the work shall be or deemed to be taken over as aforesaid the tenderer 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 the act of tenderer, his workmen or his sub-tenderers or by the defective design, or materials and not due to cause beyond his control. If due to tenderer's carelessness, negligence or non-observance of safety precautions, damage to generating machineries of TANGEDCO should occur, the full cost will be recovered from the tenderer.



### **37.0 PROTECTION OF EQUIPMENT AND SAFETY:**

The tenderer shall take all reasonable care to protect the materials handed over to him. Wherever necessary, suitable temporary fencing and listing shall have to be provided by the tenderer as a safety measure against accident and damage of property of TANGEDCO. Suitable caution notices shall be displayed where access to any part may be deemed to be unsafe and hazardous.

### **38.0 SECURITY ARRANGEMENTS:**

The tenderer shall provide sufficient number of Security Personnel/ Watchmen to ensure that the equipments, tools and consumables under his charge are not lost due to theft.

In adequate provision in this regard will result in TANGEDCO's Engineer making similar arrangements at tenderer's cost.

### **39.0 TENDERER'S REPRESENTATIVE AND WORKMEN:**

- 39.1 The tenderer shall employ at least one competent representative whose name or names shall be communicated in writing to the TANGEDCO's Engineer and is to be given full responsibility as representative of the tenderer to enter into negotiations at site in regard to execution of tender. The said representative or if more than one shall be always present at site during working hours and any written orders or instruction which the TANGEDCO's Engineer may give to the said representative of the tenderer shall be deemed to have been given to the tenderer. The name, address, qualification of Engineer and other technical staff shall be given.
- 39.2 The tenderer shall provide skilled, semi-skilled and unskilled workers for the execution of work. The TANGEDCO's Engineer shall be at liberty to object to any representative or person employed by the tenderer in the execution or otherwise about the works who in the Engineer's opinion shall misconduct himself or by incompetent objected to forthwith, upon receipt of notice from the Engineer requiring him to do so.

### **40.0 DEATH, BANKRUPTCY ETC.:**

In case of death or committing any act of Bankruptcy or being a corporation commence to be wound up except for reconstruction purposes or carry on its Business under a receiver, the executors, successors or other representative in law of the estate of the tenderer or any such receiver, liquidator or any person in whom the tender may become vested, shall forthwith given notice thereof in writing to the TANGEDCO and shall given for one month, during which, he shall take all reasonable steps to prevent stoppage of the works, have the option of carrying out this tender subject to his/or their providing such guarantees as may be required by the TANGEDCO but not exceeding the value of the work for the time being remaining unexecuted. In the event of stoppage of the works the period of option under the clause be fourteen days only. Provided that, should the above option be not exercised, the tender may

be terminated by the TANGEDCO by notice in writing to the tenderer. And the same power and provisions reserved to the TANGEDCO on the taking of the work out of the tenderer's hands shall immediately become operative.

**41.0 REPAIRS/REPLACEMENT:**

Any loss or damage during erection and testing of the equipments shall be replaced/repared free of cost by the contractor.

**42.0 SUBLETTING:**

No part of the contract shall be sublet without prior written permission of the Chief Engineer nor shall transfer to make by power of attorney authorizing others, to receive payment on contractor's behalf.

In case of the contractor engaging contract laborers 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 laborer (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 employees at the time of awarding the contract.
- c) The contract laborer engaged by the contractor have no right to claim employment or any other benefit from TANGEDCO.

**43.0 The compliance of EPF & ESI Act:**

- a) The Contractor is required to comply with all the relevant provisions stipulated in the EPF & MP Act. Since certain TANGEDCO are covered under ESI Act 1948, the contractor to take up works contract for and inside the TANGEDCO which comes under the purview of ESI Act 1948 is required to comply with all the provisions stipulated to ESI Act 1948.
- b) The Contractor should have taken separate EPF and ESI main code number. The EPF main code number can be obtained from the Assistant Provident Fund Commissioner and the ESI main code number can be obtained from the ESI Authorities concerned.
- c) The Contractor shall be responsible for the payment of necessary EPF & ESI contributions - both Employer's and Employee's contributions- as per the provisions of the EPF & ESI Act in respect of the actual workers engaged for the specified works.
- d) The Contractor shall submit necessary returns to the EPF & ESI Organizations within the stipulated time as required under the said EPF & MP Act & ESI Act.

- e) The contractor shall produce the proof of payment of contributions - both Employer's and Employee's contributions made to the EPF & ESI Organisation in order to claim the bills for the respective works.
- f) The Contractor shall submit an Undertaking as per Annexure - VII in order to ensure the remittance of EPF & ESI, Employee and Employer contribution for the subject works while claiming bills.
- g) Only workers (engaged by contractors) who have EPF-UAN number (Universal Account Number) and ESI number with ESI temporary / permanent ID card will be permitted for any works in TANGEDCO & TANTRANSCO.
- h) The contractor shall be fully liable to meet and fulfill all the relevant provisions of the EPF & ESI Act in respect of the execution of the Tendered work.
- i) In case the contractor fails to fulfill any of the statutory provisions of the EPF & MP Act and ESI Act and consequently it happens that TANGEDCO Ltd., has to meet such requirements of the said Act or Statutory Provisions in the capacity of Principle Employer, TANGEDCO Ltd., shall make good such requirements out of money due & 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 Ltd.
- j) The contractor who claims exemption under the ESI Act shall produce the exemption order obtained from the Government/ESI organization and for Replacement of damaged Penstock pipe line by Supply, Fabrication, Erection, Testing and commissioning of 220 meter Penstock pipe line including civil works, reconditioning of Butterfly valve at valve house, Overhauling of expansion joints and rectification of defective weldments identified through 100% Ultrasonic test & Ultrasonic thickness measurement & painting of Penstock pipe line & Tunnel steel liner 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 Act.
- k) In such cases, where the revenue village in which work is being carried out has not been covered under the implemented area of ESI Act, provisions in the Agreements shall be given instructing the Contractors "to ensure the medical benefits for the Contract Workers engaged by the Contractors for the works and to take relevant group insurance policies with the applicability for giving compensation to the workers".
- l) Methodology to be adopted for ensuring correctness of actual no. of labour deployed is as follows:  
The field Engineer at site shall have to maintain "Daily labour Register" at site to mark the actual no. of workers employed on all working days. It has to be initialed by the TANGEDCO Engineer as well as the Contractor's representative at site. The abstract from this register will form the basis for ensuring correctness of EPF & ESI contributions.

#### **44.0 GENERAL:**

Notwithstanding anything contained in any of the above terms and conditions, the TANGEDCO shall have the right to relax waive any of the conditions of the contract wherever deemed necessary in the interest of the TANGEDCO.

#### **45.0 SIGNATURE OF TENDERERS:**

The tender must contain the name, residence and place of business of the person or persons making the tender and must be signed and sealed by tenderer with his usual signature.

A tender by a partnership concern must furnish the full names of all partners. It should be signed by one of members of the partnership or by an authorized representative followed by the name and designation of the person or persons signing.

Tenders by corporations/companies must be signed with the legal names of the corporations/companies by the President, Secretary or any other person or persons authorized to bind the corporation/company in the matter.

#### **46.0 SPECIFICATION AND CLARIFICATIONS:**

The tenderer shall study carefully the specification and conditions that are contained in this specification before tendering.

If the tenderer has any doubt as to the meaning of any portion of this specification, he could refer to the Superintending Engineer/Hydro (Electrical)/ 5<sup>th</sup> Floor, Eastern Wing, N.P.K.R.R.MAALIGAI/ TANGEDCO, 144, Anna Salai, Chennai-2 (Ph: 044 - 28521416), in writing and obtain the clarification well in advance.

#### **47.0 DEPARTURE FROM THIS SPECIFICATION CLAUSE:**

If the tenderer wishes to depart from the specification clauses in any respect he shall draw the attention to support points of departure explaining fully the reasons thereof. Unless, this is done the requirement of this specification clause will be deemed to have been accepted in every respect.

#### **48.0 TENDERER'S UNDERSTANDING OF TENDER/DOCUMENT:**

The tenderer shall carefully examine the tender documents and fully inform himself as to all the condition and matters which may be in any way affect the work or the cost thereof. Should a tenderer find discrepancies in, or omissions from the specification or documents, or should be in doubt as to their meaning, he should at once notify the Superintending Engineer/ Hydro (Electrical)/ 5<sup>th</sup> Floor, Eastern Wing, N.P.K.R.R.MAALIGAI / TANGEDCO, 144, Anna Salai, Chennai-2 (Ph: 044 - 28521416) and obtain clarification in writing prior to submitting the tender.

## **SECTION-VI**

### **GENERAL CONDITIONS (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 either directly or 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 thereunder 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 moneys 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.

8) It is the responsibility of the contractor so as to obtain all other required clearances/approvals at site from all those concerned Departments/Organizations

### **1.0 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.

## **2.0 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 codenumber.

(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.

1.1 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 upto Rs.15,000/- only.

### **3.0 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 codenumber.

(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 exemption order obtained from the Government/ESI rganization.

(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.

#### **4.0 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.

#### **5.0 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.

#### **6.0 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 Tamilnadu 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.

(i) Muster Roll in Form – XVI.

(ii) Register of Wages in Form – XVII.

(iii) Register of overtime in Form – XVIII.

(iv) The contractor shall issue a photo identity card to his employees.

## **7.0 Wages:-**

(a) 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.

(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.

## **8.0 EPF Documents to be Produced for Claiming Bills:-**

(a) 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.

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

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

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

## **9.0 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 duly signed with seal by the contractor.

#### **10.0 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)

### **11.0 Agreement and Undertaking to be furnished by the contractors in respect of the Statutory Provisions:-**

(a) An undertaking as specified in Annexure 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 [Annexure-VII] with respective Superintending Engineer's of the circle.

### **12.0 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 lingoes, 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 the contractor is sole 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 of 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 ready made 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.



## **SECTION - VII** **TECHNICAL**

### **1.0    General :**

The Suruliyar Power House is a Hydro Power plant of capacity 35MW generation. The total length of penstock pipe carrying water from the reservoir to the generation point is approximately 2900 meters. There are 22 Anchors and 22 expansion joints. The steel used to fabricate penstock pipes is ASTM A 285 Grade C between anchor 22 to anchor 9 and Aldur – 58 between anchor 8 to 1 (as per design).

### **2.0    Scope**

The scope of works is intended to cover the work for replacement of damaged penstock pipe line by supply, fabrication, erection, painting, testing and commissioning of 220meter penstock pipe line including civil works reconditioning of Butterfly valve at valve house, overhauling of expansion joints and rectification of defective weld joints identified through 100% Ultrasonic test and Ultrasonic thickness measurement in each longitudinal and circumferential weldments in the Penstock pipeline & painting of Penstock pipe line & Tunnel steel liner at Suruliyar Power House. The activities to be carried out simultaneously are listed below

Activity I : Replacement of damaged Penstock pipe line (Activities of fabrication works and erection at site including Civil works)

The dismantling and replacement of penstock pipe line between anchor points 22 – 21 and anchor points 21 – 20 of length 220 m is to be replaced by newly fabricated pipe line which includes expansion joints 22 and 21 and one number bend segment of length 15metres and 2 numbers man hole. Drawings are enclosed as annexure A, B & C

- a) 100% UT tested new ASTM A285 Gr. C plates to be used for fabrication works by making plate cutting, edge preparation, surface cleaning, rolling & re-rolling of Pipe shells –ID.  $\phi$ 1.3 meter & minimum wall thickness of 10 mm – 200 meter. (length of each pipe shell is 2.5 meter & total nos of pipe shell is 80 Nos.) Bend as per site condition of length 15 meter long (various sections) –1 no with provision for fabrication and erection allowance of 5 meter for cutting, edge preparation during fabrication at shop and erection works at site including transport.
- b) Procurement of New Expansion joints No. 21 & 22 as per attached drawing New Manhole (No. 21 & 22) with dummies as per site conditions (including surface preparation & inner and outer painting)
- c) Making longitudinal weld joint in the rolled pipe shells & bend segments using Electric Fusion welding by engaging IBR certified welders. (80 Nos. of longitudinal weld joint for 80 Nos. of pipe shell of length 2.5 meter and 6 Nos. of longitudinal weld joint approx. as per site condition for 1No of bend segments of length 2.5 meter)

- d) Making circumferential weld joint by joining 2 nos. of fabricated pipe shells of length 2.5 meter having indicative standard length of 5 meter each and 3 nos bend segments having length of 5 meter each as per site conditions respectively by using Electric Fusion Welding by engaging IBR certified welders (40 Nos. of circumferential weld joint for 40 Nos. of pipe shells of length 5 meter and 3 Nos. of circumferential weld joint for 3 Nos Bend segments of 5 meter length as per site conditions)
- e) Conducting 100% Non-Destructive tests like DPT, UT and Radiography up to satisfactory limit in each longitudinal and circumferential weldments at fabrication workshop. ( Total no of longitudinal weldments – 86 Nos & Total No of Circumferential weldments – 43 Nos.)
- f) Hydro pressure testing of the fabricated pipe of 5 Metres long by putting dummy plates on both sides. (40 Nos of pipe shells of 5m length and 1 no. Bend as per required site conditions)
- g) Surface preparation using copper slag before painting at inner and outer surfaces of steel pipe of 5 meter length and 1 No. Bend to remove the mill dust and other particles to white metal surface finish of 220 meters.
- h) Painting 1 coat of weather resistant Zinc Rich Primer inner and outer surface of the steel pipe shells of 5m length and 1 no. Bend at fabrication shop including material .
- i) Transportation of newly fabricated pipe shells, bend segments, expansion joints, man holes from fabrication shop to erection site & local transportation including lead and lift, loading, stacking and unloading as per site conditions and necessary tool & plants like crane arrangements, cable winch, support structures, machineries, testing equipments, lead & lift equipments, pipe alignment supports etc.
- j) Dismantling of damaged old penstock pipes for a slopping length of 220 meters approximately including bends, expansion joints and man holes using suitable cutting gas including lead and lift of dismantled scrap materials from erection site & stacking at Suruliyar valve house.
- k) Fixing of new saddle steel plates and graphite pads in 14 piers starting from Anchor 22 after dismantling of old saddle plates and graphite pads including lead, lift, maneuvering of Newly fabricated pipe shells, bend segments, Expansion joints, Manholes & mobilizing all newly fabricated materials from suruliyar valve house to erection site and making arrangement for scaffolding, lifting equipments and aligning of pipe shells one by one for carrying out the erection works at erection site.
- l) Circumferential welding of the newly fabricated & aligned penstock pipe segments using suitable special welding Electrode after preparing the welding Edges by 'V' Butt chamfering. The welding will be performed using special Arc Welding machine by engaging IBR qualified welders. (5m length – 40Nos & bend as per requirement of site condition).
- m) Positioning, aligning & erecting 2 Nos. Expansion Joint and 2 Nos of man hole.
- n) Conducting welding test after welding and aligning the penstock pipe segments deploying DPT, UT and Radiographic tests.
- o) Painting 1 coat of weather resistant Zinc Rich Primer inner and outer surface of the pipe at erection site including material.

- p) Painting 3 coats of Hi-Grade weather resistant coal tar epoxy paint at inner and outer surface of the pipe at erection site including material.
- q) Cutting and clearing the Heavy jungle disposing off from the site as directed by the Engineer at site including cost of all T&P, labour, lead, lift, etc, complete.
- r) Dismantling the existing RCC Anchor 21 and 14 Nos of Piers (between Anchor 22 and busted portion) with reinforcement and clearing away the debris from site as directed by the Engineer in charge and scrap rods to be stacked with main scrap materials including all cost of labour, lead, lift, T&P, etc., complete.
- s) Providing R.C.C 1:1.5:3 using 12mm to 20mm HBG machine crushed metal for Anchor 21 and 14 Nos of Piers (between Anchor 22 and bursted portion), embedding the penstock pipes and supporting saddle Piers up to the required level, based on the NDT test, including cost of conducting NDT test charges, cost of all materials, scaffolding, shuttering, strutting charges, cost of MS/RTS steel, Fabrication reinforcement, admixtures of Epoxy coating, Grip rod vibrating charges, Curing, lead, lift, T&P etc complete as directed by the Engineer at Site

### **Activity II : Butterfly valve - Reconditioning works**

- a. Dismantling of the butterfly valve, lead, lifting and scaffolding arrangements from valve house to work shop.
- b. Reconditioning of worn out seating area in valve body through stainless steel welding having a diameter 1500mm.
- c. Reconditioning of worn out seating area in butterfly valve disc through aluminium bronze welding,
- d. Post weld heat treatment for normalizing/stress relieving, DPT, ultrasonic test in welded area before and after machining.
- e. Precision machining in welded areas and fine grinding, maintaining surface roughness average 0.2 to 0.8  $\mu\text{m}$  of reconditioned seating ring in valve body.
- f. Trail assembling and blue matching to ensure the perfect closing.
- g. Installation of new rubber seal (15 mm thickness) suitable for high pressure application along with protective stainless steel seal ring and to conduct hydro test and its necessary dummy, valves and pressure gauge etc.
- h. Replacement of Hydraulic pressure device and its motor (1.5 KW) including its accessories like inlet / outlet pipe line (1/2 inch –carbon steel seamless pipe) necessary pressure control valves, pressure gauges, limit switches, NRV, Solenoid valve and its panel etc.
- i. Servicing / Overhauling the Hydraulic Piston engaged in the counter weight mechanism and automatic air inlet / air release valve device.
- j. painting 2 coats of weather resistant Zinc Rich Primer on inner and outer surface followed by 3 coats of Hi-Grade weather resistant coal tar epoxy paint on inner and 1 coat of Hi-Grade weather resistant coal tar epoxy paint on outer surface at workshop and painting remaining 2 coats of Hi-Grade weather resistant coal tar epoxy paint on outer surface at erection site.
- k. Reassembling, Commissioning and Testing of Reconditioned Butterfly valve.
- l. Transportation of necessary tools & plant like crane arrangements, support

structures, machineries, testing equipments, lead & lift equipments, material for scaffolding arrangement for dismantling of butterfly valve from Suruliyar valve house and To & fro transportation of the butterfly valve from Suruliyar valve house for carrying out the reconditioning works.

The Butterfly valve drawing is enclosed as Annexure D

**Activity III: Expansion joints - Inspection and Overhauling works**

- a) Forming scaffolding arrangements for inspection of existing gland rope & Rubber chord of 20 Nos Expansion joints including materials and transportation
- b) Cleaning, removing of gland ropes and rubber chords from expansion joint No .1 to expansion joint no.20, reinsertion of new 26mm square Graphite Gland rope & 25 mm rubber cord and greasing of 20 Nos. expansion Joints including material.
- c) Cleaning and replacing the worn out stud and bolts of 20 Nos. Expansion Joint design as per site requirement.
- d) Reassembling, Commissioning and Testing of 20 Nos. Expansion Joint.
- e) Cleaning and Lubricating the piers saddle plates including materials and forming scaffolding arrangements.

**Activity IV : Rectification of defective weld joints identified through 100% Ultrasonic test and Ultrasonic thickness measurement in each longitudinal and circumferential weldments in the Penstock pipeline & Painting of Penstock pipe and Steel pipe liner**

- a)** surface preparation for removal of metal dust in inner and outer surface of penstock pipe line for the length of 77.5 metres from Anchor - 20 towards valve house, pipeline between Anchor 20 to Spherical valve and inner surface of steel pipe liner between surge tank to butterfly valve including materials transport and forming scaffolding arrangements in blasting and painting works.
- b)** Rectification of defective weld joints identified through 100% Ultrasonic Test and Ultrasonic thickness measurement through surface preparation, EFW welding using suitable welding electrode and grinding as per site requirements, to the extent of satisfactory Ultrasonic test result in each weld joint. (longitudinal weld/2.5M of Penstock pipeline & circuferential weld/4.1M of penstock pipe line)
- c)** Conducting 100% Ultrasonic Test with defect identification and Ultrasonic thickness measurement in each longitudinal (each longitudinal weld/ 2.5 M of Penstock Pipe line) and circumferential weldments (each circumferential weld / 4.1M of Penstock pipeline approx.) for a length of 77.5 meters from Anchor – 20 towards valve house & 2587.66 meters between Anchor – 20 Anchor –TA for the rectification works.
- d)** Painting 2 coat of weather resistant Zinc Rich Primer inner surface of the penstock pipe line for the length of 77.5 metres from Anchor - 20 towards valve house, pipeline between Anchor 20 to Spherical valve

and inner surface of steel pipe liner between surge tank to butterfly valve followed by 3 coats of Hi-Grade weather resistant coal tar epoxy paint at inner surface of penstock pipe line 77.5 meters from Anchor – 20 towards valve house, pipeline between Anchor 20 to spherical valve and inner surface of steel pipe liner between surge tank to butterfly valve including material and transportation

1. 1.0m dia of penstock length – 1120 m
2. 1.15 m dia of penstock length – 877.9 m
3. 1.3 m dia of penstock length – 683 m
4. 1.5 m dia of steel liner length – 30 m

**Painting specification**

1. Weather resistant Zinc Rich Primer – 25 to 50 micron per coat.
2. Hi-Grade weather resistant coal tar epoxy paint – 100 to 125 microns per coat. Total thickness of the paint coating per surface 400 to 475 micron to be maintained

- e) Painting 2 coat of weather resistant Zinc Rich Primer outer surface of the penstock pipe line for the length of 77.5 metres from Anchor - 20 towards valve house, pipeline between Anchor 20 to Spherical valve followed by 3 coats of Hi-Grade weather resistant coal tar epoxy paint at outer surface for the length of 77.5 meters from Anchor – 20 to spherical valve including material & transportation.

**Painting specification**

1. Weather resistant Zinc Rich Primer – 25 to 50 micron per coat.
2. Hi-Grade weather resistant coal tar epoxy paint – 100 to 125 microns per coat. Total thickness of the paint coating per surface 400 to 475 micron to be maintained

- f) Dismantling and reassembling of manhole dummies during blasting, painting and charges for replacement of rubber cord in manhole dummies including material. Cleaning and replacing the worn out bolts with nuts of 20 Nos Man hole dummies as per site condition including material . Measurement of coating thickness before blasting, painting and after each coat of painting in every 50 meters.

Any other work not mentioned herein but relates to the scope of works will be under the scope of contractor.

**3.0 Special Conditions:**

1. The Tenderer before quoting the rate for each item should visit the site is mandatory.
2. The Tenderer should visit the site during working hours and if any technical clarification may contact The SUPERINTENDING ENGINEER / Thirunelveli Generation Circle
3. Material handling and local transportation at Erection site shall be covered under the contractor scope.
4. Manufacturer Test certificate for Material & Mechanical properties shall be submitted to SUPERINTENDING ENGINEER / Thirunelveli Generation Circle

- /TANGEDCO for approval by SUPERINTENDING ENGINEER / Thirunelveli Generation Circle
5. On Receipt of Raw material at factory 100% UT shall be carried out to identify Laminar type defects and Transverse type defects and test certificate shall be submitted to SUPERINTENDING ENGINEER / Thirunelveli Generation Circle /TANGEDCO for approval by SUPERINTENDING ENGINEER / Thirunelveli Generation Circle
  6. Only one longitudinal weld joints shall be used for fabricating 2.5m length of pipe.
  7. Welding works in Penstock pipeline during shop fabrication and at erection site shall be carried out by Indian Boiler Regulation ( IBR ) certified welders only.
  8. The contractor shall arrange inspections at various stages and final inspection during the execution of following work
    - i. Inspection of Raw material at shop before start of fabrication works.
    - ii. DPT, UT,RT and hydrostatic pressure test after completion of each pipe, bends, Manholes and expansion joint at fabrication site.
    - iii. DPT, UT,RT after the completion of erection at site.
  9. All the tests and inspection shall be carried out in presence of TANGEDCO Engineers.
  10. Calibrated welding machines and suitable oven baked welding electrodes shall be used for welding joints and the same may be ensured.
  11. The expansion joint and the anchor points shall comply the existing Design and Dimensions.
  12. The storage arrangement for materials at erection site comes under the contractor scope and adequate space for storage arrangement will be provided by the TANGEDCO.
  13. Contractor is solely responsible for safety of all the men and material at erection site, all tools, tackles and consumables.
  14. Contractor shall comply all the statutory compliances stipulated by TANGEDCO.
  15. Necessary permission from forest department etc. shall be obtained by the contractor during the execution of the above works.
  16. TANGEDCO will provide power supply based on the request of contractor and the CC charge at appropriate tariff with all necessary/ liable extension costs has to be paid by the contractor.
  17. All the works such as shop fabrication, Erection, Commissioning, Testing, Painting etc., shall be carried out as per the site condition and as directed by the TANGEDCO Engineers. The work shall be carried out as per relevant IS standard (IS 111639.1 part-1-1986) and accordance with the serial No. 10 to 14 of CWC Penstock manual.
  18. The CONTRACTOR shall be responsible for the design of all specials like bends, expansion joints, manholes as per available drawings & site conditions and all temporary supports and holding down anchors, etc, (for erection and embedment of penstock within anchors respectively). The supports and anchors shall be designed to prevent floatation of the penstock and maintain

the alignment when the concrete is poured in lifts and until the concrete is completed. For the pipe to be encased in anchor blocks, the CONTRACTOR will be required to indicate the field joint within the anchor and position of holding down straps.

19. The CONTRACTOR should use his own erection tools and plants and all necessary accessories complete required for the satisfactory erection of penstock for the specified length and accessories.
20. The setting out for the above work shall be done by the CONTRACTOR at his own cost from the general survey and bench marks given by the TANGEDCO. He shall give all help including instruments, materials and men to the TANGEDCO for checking the detailed alignment and levels during the site erection. The CONTRACTOR shall be solely responsible for the correctness of the alignment and levels. The checking done by the TANGEDCO will not absolve the CONTRACTOR from his responsibility of erection of penstock pipes at correct locations and levels. Marking bench mark pillars and reference line pillars etc. and maintaining them up till the completion of the work shall be the responsibility of the CONTRACTOR.
21. The CONTRACTOR shall complete all preliminary works at site well before arrival of penstock pipes, such as keeping in readiness electrical winches, mobile cranes, jig poles, all tools and tackles, welding sets etc. as part of this work and any other work or equipment or facility that may be necessary to start erection immediately after the receipt of fabricated shells at site. The CONTRACTOR shall arrange for such number of erection equipments, supervision personnel, labours and other materials as to carry out the work efficiently and complete the work in targeted time.
22. Any defects in the alignment of penstock shall be rectified by the CONTRACTOR. Sufficient finger bars shall be used on circumferential joints to maintain the alignment during the welding operation. No tack welding shall be allowed in case of pressure vessel quality, high strength quenched and tempered steel. Field welding inside the steel liner shall be done with back up strip on the outer surface at the joint. The tolerance in the alignment and shape of the erected steel liner shall be as specified in the Indian standards or acceptable International standards.
23. The steel penstock to be designed for internal water pressure for both static and dynamic condition. The completed penstock will have a uniform inside diameter as per the approved design and drawings.
24. Roundness tolerances for the penstock shall conform to para UG 80 of section VIII of ASME code of unfired pressure vessels or equivalent IS: 2825 – 1969 and IS: 5878 (Part VI) -1975.
25. Efficiency of welded joint (longitudinal) should be 100% and All the longitudinal and circumferential joints of pipe shells including bends, reducers, expansion joints etc. shall be subjected to 100% radiographic examination, 100% Dye penetrate test, 100% Ultrasonic test. Hydrostatic testing of pipe shells shall be done at a pressure equal to 1.75 times of the design pressure subject to the condition that the stress produced in the pipe shell shall not exceed 80% of the yield point strength of the material.
26. Stress relieving shall be carried out on all the complicated fabricated structures such as manhole etc.
27. The CONTRACTOR shall take note of the above design details, guarantee period for

60 (sixty ) months from the date of commissioning given by the manufacture, workmanship and satisfactory performance of the steel Penstock pipes.

28. The materials and equipments used in the fabrication and erection of penstocks and its accessories shall comply with the following appropriate specifications along with all their up-to-date modifications.

<b>Sl. No.</b>	<b>Description of materials</b>	<b>Name of specifications</b>
1	Steel plates for penstocks	<b>ASTM A285 Gr.C</b>
2	Bolts, Nuts and studs bolts	IS 1363 or ISO/R-225
	Studs	IS 1862 IS 1364 or ISO/R-225
	Nuts	IS 1862, IS1363 IS 1364 or US Federal Specification
3	Coal Tar Epoxy	British Epilux 5 paints or Equivalent
4	Zinc rich Epoxy primer	Epilux 4 Paints or Equivalent
5	Welding	
a)	Code of practice for use of metal arc welding for general construction in mild steel	IS 816
b)	Code of practice for training and testing of metal arc welders	IS 817
c)	Code of practice for manual metal arc welding of structural steel	IS 823
d)	Code of practice for inspection of welds	IS 822
e)	Classification and coding of covered electrodes for metal arc welding of mild steel and low alloy high tensile steel	IS 815/E-7018 or Equivalent
f)	Electrodes (covered) for metal arc welding in mild steel and low alloy H.T steel	IS 814(to –suit imported steel)
g)	Electrodes (covered) for metal arc welding in mild steel and low alloy H.T steel	IS 1442
h)	Specification for structural steel (fusion welding quality)	IS 2062/IS 226
i)	Code of practice for unfired pressure vessels	IS 2825
j)	Criteria for structural Design of Penstock – Surface Penstock	IS 11639 (Part – 1)
k)	Criteria for Design of anchor blocks for Penstocks with expansion joints.	IS 5330

29. Where materials are indicated or required by the above work but are not defined herein, the CONTRACTOR shall furnish high class commercial grades of materials satisfactory to the TANGEDCO. The completed work should be in such a



way that there shall not be any defects and the test results shall comply with IS codes.

30. The CONTRACTOR shall also procure at his own cost all raw materials required for fabrication and erection such as steel plates, electrodes, fixtures, gases, Surface Preparation for painting in Penstock pipes, paints grinding stones, temperature crayons, x-ray films, screens, pre-heating and stress relieving equipment, welding gate, erection winches and trolleys and other types of tools and plants required for erection of steel pipes and accessories.
31. The CONTRACTOR shall prepare and furnish all necessary design and shop drawings as given below, covering the details of the fabrication of materials and shall be responsible for the correct fitting of all the parts.
  - a) Assembly drawings giving exact size of sections to be used and identification marks of various sections (up to the specified length of replacement of Penstock pipe line).
  - b) Dimensional drawings of the straight liners, bends, etc.
  - c) Complete bill of materials and detailed drawings of all sections and also their billing weight. Any other drawings or calculation that may be required for the clarification of work.
32. Before erection is undertaken, the CONTRACTOR shall submit to the TANGEDCO for approval of all the prints of checked shop drawings covering all details of construction. TANGEDCO shall have the right to ask the CONTRACTOR to make any change in the CONTRACTOR's design which may be necessary in his opinion. Approval by TANGEDCO shall not be held to relieve the CONTRACTOR of any obligation to meet all the requirements of these specifications or of the responsibility of the correctness of the CONTRACTOR's drawings. The drawings shall show all changes and provisions made up to the time the Construction work is completed.
33. **Preparation of Weld Edges:** Members to be joined in welding shall be measured out accurately to size and when required shall be rolled or pressed to the proper curvature in accordance with the dimension. The edges of the members shall be sheared, flamecut or machined to suit the required type of welding and to allow 100% penetration of all welding. The out surface shall expose sound metal free from lamination, surface defects caused by shearing, flame cutting, operations or other injurious defects. The surface of plates shall be free from rust, grease and other foreign matters for a distance of at least 50mm from the edge of the weld. Plates shall be pressed or rolled to true circular sections with the circumference continuous from the edge of the plates. Correction of curvature shall be by pressure and not by blows. In assembling and during welding the component parts of built up members shall be held in place with sufficient proper clamps or other adequate means to keep all parts in proper position. A welding procedure shall be prepared by CONTRACTOR and submitted to TANGEDCO for approval before start of welding both for shop as well as in field. No production work shall be undertaken until both the welding procedure and welders or welding operations have been approved. Approval of welding procedure by TANGEDCO shall not relieve the CONTRACTOR from his responsibility for correct and sound welding without undue distortion in the finished structure. CONTRACTOR shall be responsible for the quality of welding. No

welding shall be done when the surface of the member is either wet or during the period of high wind unless the welding operator and works are properly protected.

34. **Welding:** Welding shall be done in an approved manner using the automatic welding processes, the welding procedure adopted shall conform IS 823 – 1964. IS : 4353 – 1967 and IS 2825 – 1969 for all shop welding, where the weld metal is deposited in successive layers, each layer shall be thoroughly cleaned before the subsequent layer is deposited. Welded joints shall be reasonably free from craters, depressions and other irregularities. After welding is completed, all weld spatters shall be removed. Welded beads on the interior surfaces of the liner shall be corrected by grinding so as not to project more than 1.5mm. Outer surface of the liner shall be corrected by smooth finishing and should not be by grinding. All welds shall have complete penetration and shall be free from imperfections and all defective welds shall be repaired. Defects in the welds shall be chipped or flame gouged until sound metal is reached on all sides and the resulting cavity shall be filled by the same procedure as and when the original grooves were filled. The welded joint shall not be brittle or sensitive to blows. No allowance will be made for trimming of weld and the weld should in no point be less than the nominal thickness of the plate.
35. The shop and field joints shall be welded and all welding shall conform to the requirements of section VIII of the ASME Boiler and pressure vessel code and/or to the relevant I.S.S.
36. The selection of quality of welds shall depend upon the basic material and stresses on the same. The mechanical properties of electrodes and filler metal shall conform to those of parent metal. The weld metal shall satisfy the tests as per IS:2825 -1969 –Code for unfired pressure vessel. Stress relieving is adopted if required by suitable method. The CONTRACTOR should provide their own electrodes and equipments, ovens to keep the electrodes at the desired temperature and dry.
37. Longitudinal joints in adjacent pipes shall be staggered as per existing site conditions.
38. All sections of the penstocks, bends, etc. shall be carefully marked before dispatch from the shop for easy identification and erection in the field and the supplier must furnish clear and complete erection diagrams.
39. **Radiography at Fabrication Site:** Radiographic Examination shall be carried out by the latest and most efficient techniques either with x-ray or Gamma ray equipment. The weld ripple or surface irregularities on both inside and outside shall be removed by any suitable mechanical process to a degree such that resulting in radiographic contact due to any remaining irregularities cannot be confused with that of any objectionable defect. The photographs are to be marked in such a way that the corresponding portion of the welded seem can be readily identified. All radiograph films will be reviewed by the Contractor to identify the defect and determining those which must be removed. Defects that are not acceptable shall be removed by chipping, machining or flame cutting to sound metal and the resulting cavities shall be re-welded. After rectification, the joint is to be radio graphed to prove the quality of the repair. The radiographs will be judged as acceptable or unacceptable by the inspector based on the latest standards prescribed by British Standard specification or ASME or other equivalent continental and Indian Standards

specifications. X-ray Films shall be developed within 24 hrs of exposure and be readily accessible at all times for inspection by the TANGEDCO. The CONTRACTOR shall provide for the use of the TANGEDCO suitable x-ray viewing equipment. X-ray films shall be properly maintained by the CONTRACTOR and shall be handed over to the TANGEDCO on completion of the contract. All films shall be identified by the number and chart prepared, indicating location of the joint, each x-ray photo represents. In the event that additional radiographic inspection is required of any work associated with this penstock erection, such inspection shall be performed by the radiographs at the discretion of the TANGEDCO.

40. After erection, all temporary fixtures/appurtenances, debris etc. inside the Penstock shall be carefully removed. At least 200mm wide strip of pipe along the field welded joints shall be thoroughly cleaned before painting. The same treatment shall be required at the spots where bars or other temporary steel pieces were installed to facilitate erection of steel Penstock.
41. The entire section of the steel penstock shall be blasted both inside and outside keeping the air pressure and proportion of air to blasting material as per the standard practice for surface preparation for painting in Penstock pipes. The above mentioned operation should be made according to the latest standard practice using modern technique. Initial painting need not be done up to a margin of 75 mm from the ends which will have to be welded at site.
42. After completion of erection, the penstock shall be charged with water through power Tunnel from the Eravangalar Dam and the stability and tightness of steel liners and penstock at accessible locations, if any, shall be thoroughly checked to the entire satisfaction of the TANGEDCO. The acceptance, however, shall not in any way absolve the CONTRACTOR from his responsibility for any damage that may occur to the steel liner/penstock or its accessories within the guarantee period.

**SCRAP:** The scrap materials retrieved from the damaged existing penstock pipeline at Suruliyar valve house and from other erection activities to be devoluted to Sub store/Periyar, TANGEDCO by the Contractor in his own arrangement during the execution of work.

#### **4.0 GENERAL SPECIFICATIONS:**

- 4.1 The tenderer can inspect the Suruliyar Power House in Tirunelveli Generation Circle before quoting the rates, in order to have an overall idea of the constructional features of the machines and its related arrangements.
- 4.2 Where the contract specifications does not indicate all the standard specifications applicable, or where it has been left partly or wholly to the discretion of the inspector, the standard specifications to be applied on the job shall be decided in consultation with the TANGEDCO.
- 4.3 Any other consumables and materials required for the completion of the work which are not specifically mentioned in the tender has to be borne by the tenderer.
- 4.4 Cost of transport of materials, lead & lift, scaffolding tools, machineries required for carrying out the work in complete shape is in the scope of the contractor.

- 4.5 The contractor should employ skilled labourers.
- 4.6 All T & P's and consumables required for the work should be provided by the contractor at his scope.
- 4.7 The work should be carried out as per the specification and instruction of the Engineer in charge by engaging adequate skilled & suitable labourers to complete the entire work in time.
- 4.8 During the course of execution of work if other persons meet with an accident, the contractor alone is responsible to compensate the individual for loss.
- 4.9 No damage should be caused to TANGEDCO's property and equipment. In the event of any damage caused, the same should be set right by the contractor at his cost.
- 4.10 The contract is liable for termination at any time during the period of contract without assigning any reasons thereof.
- 4.11 All the workers and supervisory staffs should be insured as per Workman Compensation Act. The TANGEDCO will not be responsible for any compensation in the event of any loss due to accident. The same has to be borne by the contractor. Any direct or indirect loss due to accident has to be made good by the contractor.
- 4.12 If the contract does not carry out the work to the entire satisfaction of the Engineer in charge, the contract will be liable for termination without any reasons therefor.
- 4.13 The contractor should take care and ensure that law and rules are not violated in doing the work either by himself or by his personnel's.
- 4.14 The cleaned surface to be painted should be shown to the field Engineer for his approval before commencement of the painting works.
- 4.15 The works should be done carefully and without hindrance to other works carried out by Board in that area.
- 4.16 The workers shall confine themselves, within the areas for which the works contract has been awarded as specified by the Engineer.
- 4.17 The contractor should provide adequate safety appliance to his employee for which no claim from TANGEDCO can be made.
- 4.18 All the workers should be insured against accident. The TANGEDCO will not be responsible for any compensation in the event of accidents etc.,
- 4.19 Risk and Insurance Policy before commencement of work, the contractor is to take accident risk Insurance policy for the workman covering the entire period of work and produce the same to the site Engineer for verification.
- 4.20 During flood conditions or such kind of any other unavoidable circumstances, the work may have to be stopped as per the instructions of Engineer in charge.

- 4.21 The work should be carried out as per the specification and instruction of the Engineer in charge by engaging adequate skilled & suitable labourers to complete the entire work in time.
- 4.22 The contactor should commence the work immediately on the receipt of Works contract Order

## **5.0 ELECTRICITY RULES :**

All works shall be carried out in accordance with the latest provisions of the Indian Electricity Act and the rules there under unless modified by this specification.

## **6.0 TECHNICAL CLARIFICATION:**

Any technical clarification and drawing regarding this tender may be obtained from Superintending Engineer / Tirunelveli Generation Circle

## SECTION – VIII – FORMATS

### SPECIFICATION NO.HE\_2419

#### SCHEDULE - `A'- PRICE SCHEDULE

**(To be filled ONLINE by the Tenderer)**

Name of the work: Replacement of damaged Penstock pipe line by Supply, Fabrication, Erection, Testing and commissioning of 220 meter Penstock pipe line including Civil works, reconditioning of Butterfly valve at valve house, Overhauling of expansion joints and rectification of defective weld joints identified through 100% Ultrasonic test and Ultrasonic thickness measurement in each longitudinal and circumferential weldments in the Penstock pipeline & painting of Penstock pipe line & Tunnel steel liner including at Suruliyar Power House in Tirunelveli Generation Circle

#### SCHEDULE OF RATES:

#### Prices in Rupees

Sl No	I.Replacement of damage, Penstock pipe line & Erection at site & civil work	Qty.	Unit	Rate/Qty (Rs.)		Total Amount (Rs.)	
				Material cost	Labour cost	Material cost (A)	Labour cost (B)
1	Cost of 100% UT tested new ASTM A285 Gr.C plates and Charges for plate cutting, edge preparation, surface cleaning, rolling & re-rolling. 1. Pipe shells - ID. $\phi$ 1.3 meter & minimum wall thickness of 10 mm – 200 meter (Length of each pipe shell is 2.5 meter & Total Nos. of pipe shell is 80 Nos.) 2. Bend as per site condition of length 15 meter long (various sections)–1 no with provision for fabrication and erection allowance of 5 meter for cutting, edge preparation during fabrication at shop and erection works at site. (including Transportation Charges)	220	mts				
2	Charges for procurement of 1. New Expansion joints (No. 21 & 22) as per attached drawing 2. New Manhole (No. 21 & 22) with dummies as per site conditions (including surface preparation & inner and outer painting)	2	nos				
3	Charges for longitudinal weld joint of	86	Joints				

	the rolled pipe shells & bend segments using Electric Fusion Welding by engaging IBR certified welders (80 Nos. of longitudinal weld joint for 80 Nos. of pipe shell of length 2.5 meter and 6 Nos. of longitudinal weld joint approx. as per site condition for 1 No. of Bend segments of length 2.5 meter)						
4	Charges for circumferential weld joint by joining 2 nos. of fabricated pipe shells of length 2.5 meter having indicative standard length of 5 meter each and 3 nos Bend segments having length of 5 meter each as per site conditions respectively by using Electric Fusion Welding by engaging IBR certified welders (40 Nos. of circumferential weld joint for 40 Nos. of pipe shells of length 5 meter and 3 Nos. of circumferential weld joint for 3 Nos. Bend segments of 5 meter length as per site conditions)	43	Joints				
5	Charges for conducting 100% Non-Destructive tests like DPT, UT and Radiography up to satisfactory limit in each longitudinal and circumferential weldments at fabrication workshop. (Total no of longitudinal weldments – 86 Nos. & Total no of circumferential weldments – 43 Nos.)	129	Joints				
6	Charges for Hydro pressure testing of the fabricated pipe of 5 meter long by putting dummy plates on both sides. (40 Nos. of pipe shells of 5 m length and 1 no. Bend as per required of site condition)	41	Nos.				
7	Charges for surface preparation using copper slag before painting at inner and outer surfaces of steel pipe of 5 meter length and 1 No. Bend to remove the mill dust and other particles to white metal surface finish of 220 meters.	1812	Sq.m				
8	Charges for Painting 1 coat of weather resistant Zinc Rich Primer inner and outer surface of the steel pipe shells of	1812	Sq.m				

	5m length and 1 no. Bend at fabrication shop including material cost.						
9	Transportation Charges for newly fabricated pipe shells, bend segments, expansion joints, man holes from fabrication shop to erection site and local transportation including lead and lift, loading, stacking, unloading and necessary tool and plants like crane arrangements, cable winch, support structures, machineries, testing equipments, lead & lift equipments, pipe alignment supports and etc.	LS	(a)				
	Activities at Erection site	Qty	Unit	Rate/Qty		Total amount	
				Material	Labour	Material (A)	Labour (B)
10	Charges for dismantling of damaged old penstock pipes for a slopping length of 220 meters approxi. including bends, expansion joints and man holes using suitable cutting gas including lead and lift of dismantled scrap materials from erection site & stacking at Suruliyar valve house.	1	LS				
11	Cost for new saddle steel plates and graphite pads in 14 piers starting from Anchor 22 after dismantling of old saddle plates and graphite pads.	14	Nos				
12	Charges for lead, lift, maneuvering of Newly fabricated pipe shells, bend segments, Expansion joints, Manholes & mobilizing all newly fabricated materials from suruliyar valve house to erection site including charges for making arrangement for scaffolding, lifting equipments and aligning of pipe shells one by one for carrying out the erection works at erection site.	1	LS				
13	Charges for circumferential welding the newly fabricated & aligned penstock pipe segments using suitable special welding Electrode after preparing the welding Edges by 'V' Butt chamfering. The welding will be performed using special Arc Welding machine by engaging IBR qualified welders. (5m length - 40 Nos and Bend as per requirement of site condition).	47	joints				
14	Charges for Positioning, aligning & erecting 2 Nos. Expansion Joint and 2 Nos of man hole.	1	LS				



15	Charges for conducting welding test after welding and aligning the penstock pipe segments deploying DPT, UT and Radiographic tests.	47	joints				
16	Charges for Painting 1 coat of weather resistant Zinc Rich Primer inner and outer surface of the pipe at erection site including material cost.	1812	Sq.M				
17	Charges for Painting 3 coats of Hi-Grade weather resistant coal tar epoxy paint at inner and outer surface of the pipe at erection site including material cost.	1812	Sq.M				
	<b>Civil Work</b>			Rate / qty		Total amount	
				material	labour	material	labour
18	Cutting and clearing the Heavy jungle disposing off from the site as directed by the Engineer at site including charges for T&P, labour, lead, lift, etc, complete.	13100	Sq.m				
19.	Dismantling the existing RCC Anchor 21 and 14 Nos of Piers (between Anchor 22 and busted portion) with reinforcement and clearing away the debris from site as directed by the Engineer in charge and scrap rods to be stacked with main scrap materials including all cost of labour, lead, lift, T&P, etc., complete.	143	cu.m				
20.	Providing R.C.C 1:1.5:3 using 12mm to 20mm HBG machine crushed metal for Anchor 21 and 14 Nos of Piers (between Anchor 22 and busted portion), embedding the penstock pipes and supporting saddle Piers up to the required level, based on the NDT test, including cost of conducting NDT test charges, cost of all materials, scaffolding, shuttering, strutting charges, cost of MS/RTS steel, Fabrication reinforcement, admixtures of Epoxy coating, Grip rod vibrating charges, Curing, lead, lift, T&P etc complete as directed by the Engineer at Site.	145	cu.m				
						(A)	(B)
	<b>Total cost for activity I C = ( A+B) + a</b>						
	<b>GST"D"</b>						

	Total cost for Activity - I= C + D						
II	Butterfly valve – Reconditioning works			Rate/qty		Total amount	
				Material	labour	material	labour
1	Charges for dismantling of the butterfly valve, lead, lifting and scaffolding arrangements from valve house to work shop.	1	LS				
2	Charges for reconditioning of worn out seating area in valve body through Stainless steel welding having a dia 1500 mm.	1	No.				
3	Charges for reconditioning of worn out seating area in butterfly valve disc through aluminum bronze welding.	1	No.				
4	Charges for post weld Heat Treatment for Normalizing / Stress Reliving, DPT, ultrasonic test in welded area before and after machining.	1	LS				
5	Charges for precision machining in welded areas and fine grinding, maintaining surface roughness average 0.2 to 0.8 µm of reconditioned seating ring in valve body.	1	LS				
6	Charges for trail assembling and blue matching to ensure the perfect closing.	1	LS				
7	Cost for new rubber seal (15 mm thickness) suitable for high pressure application along with protective stainless steel seal ring.	1	No				
8	Charges for hydro test and its necessary dummy, valves and pressure gauge etc.	1	LS				
9	Charges for Replacement of Hydraulic pressure device and its motor (1.5 KW) including its accessories like inlet / outlet pipe line (1/2 inch –carbon steel seamless pipe) necessary pressure control valves, pressure gauges, limit switches, NRV, Solenoid valve and its panel etc.	1	LS				
10	Charges for Servicing / Overhauling the Hydraulic Piston engaged in the counter weight mechanism and automatic air inlet / air release valve device.	1	LS				
11	<u>At.Workshop</u> Charges for painting 2 coats of weather resistant Zinc Rich Primer on inner and outer surface followed by 3 coats of Hi-Grade weather resistant coal tar epoxy paint on inner and 1 coat of Hi-Grade weather resistant coal tar epoxy paint on outer surface including material cost.	13	Sq.M				

	At Erection site ( valve house) Charges for painting remaining 2 coats of Hi-Grade weather resistant coal tar epoxy paint on outer surface including material cost.						
12	Charges for Reassembling, Commissioning and Testing of Reconditioned Butterfly valve.	1	LS				
13	Charges for transportation of necessary tools and plant like crane arrangements, support structures, machineries, testing equipments, lead & lift equipments, material for scaffolding arrangement for dismantling of butterfly valve from Suruliyar valve house and To & fro transportation of the butterfly valve from Suruliyar valve house for carrying out the reconditioning works.	LS	(b)				
	<b>Sub Total – E,F</b>					(E)	(F)
	<b>Sub total "G" = (E +F) + b</b>						
	<b>GST "H"</b>						
	<b>Total cost for Activity II= (G+H)</b>						
<b>III</b>	<b>Expansion joints – Inspection and Overhauling works</b>	Qty	unit	Rate/qty		Total amount	
				material	labour	material	labour
1	Charges for forming scaffolding arrangements for inspection of existing Gland rope & Rubber chord of 20 Nos. Expansion Joint including materials and transportation.	1	LS				
2	Charges for cleaning, removing of gland ropes and rubber cords from expansion joints from Expansion joint No. 01 to Expansion joint No. 20, reinsertion of New 26 mm square Graphite Gland rope & 25 mm rubber cord and greasing of 20 Nos. expansion Joints including material cost.	1	LS				
3	Charges for cleaning and replacing the worn out stud and bolts of 20 Nos. Expansion Joint design as per site requirement. (1set = 1 stud + 3 Nuts) including material cost. <u>Size</u> 1. Length of stud -280mm, Dia –11/2" =50sets 2. Length of stud -280mm, Dia – 11/4" = 50 sets	100	sets				
4	Charges for Reassembling, Commissioning and Testing of 20 Nos. Expansion Joint.	1	LS				
5	Charges for Cleaning and Lubricating the	154	Nos.				

	piers saddle plates including materials and forming scaffolding arrangements.						
	<b>Sub Total – I,J</b>					(I)	(J)
	<b>Sub total "K" = (I + J)</b>						
	<b>GST "L"</b>						
	<b>Total cost for Activity III= (K+L)</b>						
IV	Painting of Penstock pipe steel pipe liner and UT	Qty	Unit	Rate/qty		Total amount	
				material	labour	material	labour
1	Charges for surface preparation for removal of metal dust in inner and outer surface of penstock pipe line for the length of 77.5 meters from Anchor - 20 towards valve house, pipeline between Anchor 20 to Spherical valve and inner surface of steel pipe liner between surge tank to butterfly valve including materials transport and forming scaffolding arrangements in blasting and painting works.	19512	sq.m				
2	Rectification of defective weld joints indentified through 100% Ultrasonic Test and Ultrasonic thickness measurement, through surface preparation, EFW welding using suitable welding electrode and grinding, as per site requirements, to the extent of satisfactory Ultrasonic test result in each weld joint						
2.a	Cost of rectification of longitudinal weld (each longitudinal weld / 2.5M of Penstock pipe line)	34	Joints				
2.b	Cost of rectification of circumferential weld (each circumferential weld / 4.1M of Penstock pipe line approx.)	22	Joints				
3	Charges for conducting 100% Ultrasonic Test with defect identification and Ultrasonic thickness measurement in each longitudinal and circumferential weldments for a length of 77.5 meters from Anchor-20 towards valve house & 2,587.66 meters between Anchor-20 and Anchor-TA for the above rectification works						
3.a	Cost of 100% Ultrasonic Test and Ultrasonic thickness measurement for each longitudinal weld (each longitudinal weld / 2.5M of Penstock pipe line) (1690 joints X 2.5 meters = 4225 meters)	4225	meter				
3.b	Cost of 100% Ultrasonic Test and	4507	meter				

	Ultrasonic thickness measurement for each circumferential weld (1086 joints X 4.15 = 4507 meters)						
4	<p>Charges for Painting 2 coat of weather resistant Zinc Rich Primer inner surface of the penstock pipe line for the length of 77.5 meters from Anchor - 20 towards valve house, pipeline between Anchor 20 to Spherical valve and inner surface of steel pipe liner between surge tank to butterfly valve followed by 3 coats of Hi-Grade weather resistant coal tar epoxy paint at inner surface of penstock pipe line 77.5 meters from Anchor - 20 towards valve house, pipeline between Anchor 20 to Spherical valve and inner surface of steel pipe liner between surge tank to butterfly valve including material &amp; transportation cost.</p> <p>1) 1.0 m dia of penstock length – 1120m  2) 1.15 m dia of penstock length – 877.9m  3) 1.3 m dia of penstock length – 683m  4) 1.5 m dia of steel liner length – 30m</p> <p><b><u>Painting.specification</u></b>  1. Weather resistant Zinc Rich Primer – 25 to 50 micron per coat.  2. Hi-Grade weather resistant coal tar epoxy paint – 100 to 125 microns per coat.(Total thickness of the paint coating per surface 400 to 475 micron to be maintained)</p>	9616	sqm				
5	<p>Charges for Painting 2 coat of weather resistant Zinc Rich Primer outer surface of the penstock pipe line for the length of 77.5 meters from Anchor - 20 towards valve house, pipeline between Anchor 20 to Spherical valve followed by 3 coats of Hi-Grade weather resistant coal tar epoxy paint at outer surface of penstock pipe line for the length of 77.5 meters from Anchor - 20 towards valve house, pipeline between Anchor 20 to Spherical valve including material &amp; transportation cost.</p> <p><b><u>Painting.specification</u></b>  1. Weather resistant Zinc Rich Primer –</p>	9896	sqm				

	25 to 50 micron per coat. 2. Hi-Grade weather resistant coal tar epoxy paint – 100 to 125 microns per Coat. (Total thickness of the paint coating per surface 400 to 475 micron to be maintained)						
6	Charges for dismantling and reassembling of manhole dummies during blasting, painting and charges for replacement of rubber cord in manhole dummies including material cost.	20	Nos.				
7	Charges for cleaning and replacing the worn out bolts with nuts of 20 Nos. Man hole dummies as per site condition including material cost.	100	sets				
8	Charges for measurement of coating thickness before blasting, painting and after each coat of painting in every 50 meters.	1	LS				
	<b>Sub Total –M,N</b>					(M)	(N)
	<b>Sub total "O" = (M + N)</b>						
	<b>GST "P"</b>						
	<b>Total cost for Activity IV = (O+P)</b>						
<b>Total cost for all the activities (TC)I+II+III+IV</b>				<b>GROSS TOTAL</b>			

Note: The quantity mentioned is approximate for the Activity - I (20), III (3), IV (2.a, 2.b & 7). However payment will be made as per actual.

**Schedule- B**

**SPECIFICATION NO.HE \_2419**

**DEVIATION FROM TECHNICAL SPECIFICATION**

All technical deviations from the specification shall be filled in by the Tenderer, clause by clause, in the Schedule.

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 respects.

COMPANY SEAL:

SIGNATURE :

DATE:

DESIGNATION :

COMPANY :

**SCHEDULE – C**  
**SPECIFICATION NO.HE \_2419**  
**DEVIATION FROM COMMERCIAL SPECIFICATION**

All Commercial deviations from the specification shall be filled in by the tenderer, clause by clause, in the Schedule.

<b>SECTION NO</b>	<b>CLAUSE NO</b>	<b>DEVIATION</b>

The tenderer hereby confirms that the above mentioned are the only deviations from the Commercial Specification and the tender conforms to the specification in all other respects.

COMPANY SEAL

DATE

SIGNATURE  
DESIGNATION  
COMPANY NAME



## SCHEDULE –D

### STATEMENT OF WORK ORDERS EXECUTED/ UNDER EXECUTION DURING THE PAST FIFTEEN YEARS AS ON DATE OF TENDER OPENING

Sl No	Name & Address of the Organization incl. other SEBs	Name of the material/works	P.O./ WCT No. & Date	Qty	Value of order in Rs. Lakhs FOR (D) Price **	Schedule date of completion of Order	Actual date of Completion of Order	Whether PO Copy is Enclosed (Yes/ No)	Whether End User Certificate Copy is Enclosed (Yes/ No)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
** Split up details such as Ex-works Price, F&I and GST FOR (D) per each may be enclosed separately.									

**NOTE:**

1) Copies of orders received shall be enclosed.

COMPANY SEAL

DATE

SIGNATURE  
DESIGNATION  
COMPANY NAME

**SCHEDULE – E**  
**TAMIL NADU GENERATION AND DISTRIBUTION CORPORATION LIMITED**  
**DECLARATION FORM**  
**SPECIFICATION NO.HE\_ 2419**

To  
The Chief Engineer/Hydro  
TANGEDCO,  
5<sup>th</sup> Floor, Eastern Wing,  
NPKRR Maaligai, Electricity Avenue,  
144, Anna Salai,  
Chennai – 600 002.

Dear Sir,

1. Having examined the above specification together with the accompanying schedules etc., we hereby offer to supply the equipment covered in this specification at the rates entered in the attached schedule of prices.

2. We hereby guarantee the particulars entered in the schedules attached to the specification.

3. In accordance with security deposit cum performance guarantee clause, Section-V, of the specification we agree to furnish security deposit cum performance guarantee to the extent of 5% of the total value of the contract/ retain 5% payment till the expiry of guarantee period.

4. Our company is not a potentially Sick Industrial Company or a Sick Industrial Company in terms of Section-23 or Section-15 of the Sick Industrial Companies (Special Provisions) Act, 1985.

Yours faithfully,

PLACE :  
DATE :  
COMPANY SEAL :

SIGNATURE :  
DESIGNATION :  
COMPANY :

## **SCHEDULE-F**

### **DECLARATION FORM**

**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,

-----

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No:-----Name of Tender/Work

Dear Sir,

1. 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. 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 – G**  
**QUESTIONNAIRE-A**  
**CHECK LIST FOR BID QUALIFICATION**  
**(TO BE KEPT IN THE ENVELOPE-A"COMMERCIAL AND TECHNICAL BID")**

S.No.	Particulars	Bidder's Response.
01	Name and Address of the Firm/Company.	
02	Address of the Registered office, Phone Nos. etc.,	
03	Address of the Factory/Works, Phone Nos. etc.,	
04	Fax No. for correspondence and E-Mail address.	
05(a)	Confirm whether the tenderer is previous experience in supply, fabrication, erection, and commissioning of penstock/water conducting system made up of steel pipe size not less than 600mm diameter rolled with thickness of 10mm and above or major mechanical works carried out in Hydro power stations of any State electricity board or PSU or Govt of India or state govt organization or Undertaking of Central Govt. or State Govt. during the preceding 15 years as on the date of tender opening.	Yes/No
(b)	If yes, whether attested documentary evidence is enclosed as per BQR condition.	
(c)	If so, list the documentary evidence.	
06	Whether the bidder is old supplier/contractor to TANGEDCO.	Yes/No
07	Whether the attested copies of orders executed to Power Utilities in State or Central Sector/Public Sector Undertakings/any Govt. Organizations/Govt. undertakings enclosed.	Yes/No
08	Whether attested copies of performance certificates from the end users enclosed.	Yes/No
09	Annual Turnover of the Bidder for the preceding three years. 2017 – 2018 2018 – 2019 2019 – 2020	
10(a)	Whether attested copies of the documentary evidence produced for the annual turnover.	Yes/No
(b)	If so, whether certificate from auditor furnished or copies of audited annual statement of accounts furnished, duly attested ones.	

**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 :

Place :

SIGNATURE OF THE TENDERER

NAME

STATUS IN THE COMPANY

(AFFIX SEAL OF THE COMPANY)

## QUESTIONNAIRE-B

### **CHECK LIST FOR COMMERCIAL TERMS**

**(TO BE KEPT IN THE ENVELOPE- A"COMMERCIAL AND TECHNICAL BID")**

S.No.	Particulars	Bidder's Response.
01	<b>EARNEST MONEY DEPOSIT:</b>	
(i)	Amount.	Rs.20,00,000/-
(ii)	Mode of payment.	NEFT/RTGS/ by way of Account transfer/ Permanent EMD
(iii)	If exempted state whether the bidder is.	SSI unit of Tamil Nadu/ SSI unit registered with NSIC/Unit of Government of Tamil Nadu.
(iv)	If SSI unit state whether copy of duly attested permanent Registration Certificate enclosed.	Yes/No
(v)	Whether the material tendered is included in the certificate.	Yes/No.
(vi)	Validity of the permanent registration certificate.	Yes/No
(vii)	Whether duly attested undertaking enclosed in lieu of EMD.	Yes/No
02	Whether the offer is valid for a period of 180 (One hundred and eighty) days from the date of opening of commercial/Technical bids.	Yes/No
03	<b>PRICE:</b>	
i)	Whether quoted firm price valid for the entire contract period.	Yes/No
ii)	Whether the quoted price contain the following breakup price.	Yes/No
a)	Unit ex-works price.	Yes/No
b)	Unit Freight and Insurance charges, P & F Charges	Yes/No
c)	Unit GST applicable (Percentage and amount).	Yes/No
iii)	Confirm that the price quoted is after taking into account of the ITC benefit.	Yes/No
iv)	Whether the tenderer is agreeable in case of delayed delivery, the GST prevailing on the date of actual delivery or the GST applicable on the date of contractual delivery date whichever less shall only be payable.	Yes/No
v)	Confirm that Freight and Insurance charges quoted are applicable for delivery to any of the TANGEDCO stores in Tamil Nadu including the unloading by the supplier.	Yes/No
04	Whether the tenderer is agreeable for the	

	following clauses specified under Section-V of the Specification.	
i)	Payment terms (Clause-6.0 )	Yes/No
ii)	Security Deposit cum PG (Clause-7.0 )	Yes/No
iii)	Completion Period (Clause-8.0 )	Yes/No
iv)	Liquidated Damages (Clause-10.0)	Yes/No
v)	Guarantee (Clause-12.0)	Yes/No
vi)	Jurisdiction for legal proceedings (Clause-18.0)	Yes/No
05	Whether tenderers furnished their permanent Account Number (PAN) and GSTIN in their offer.	PAN No. GSTIN No.
06(i)	Whether the tenderer has accepted all the commercial terms of specification of TANGEDCO.	Yes/No.
(ii)	If not, give details of commercial deviation in the deviation schedule C.	

### **UNDERTAKING**

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

Date :

SIGNATURE OF THE TENDERER

Place :

NAME

STATUS IN THE COMPANY  
(AFFIX SEAL OF THE COMPANY)

## **QUESTIONNAIRE-C**

### **CHECK LIST FOR TECHNICAL TERMS**

**(TO BE KEPT IN THE ENVELOPE – A “COMMERCIAL AND TECHNICAL BID”)**

S.No.	Particulars	Bidder's Response.
01(i)	Whether the equipment / material offered is exactly as per technical specification of TANGEDCO.	Yes/No.
(ii)	If not, give details of technical deviation in the deviation schedule B.	

### **UNDERTAKING**

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

Date :

SIGNATURE OF THE TENDERER

Place :

NAME

STATUS IN THE COMPANY  
(AFFIX SEAL OF THE COMPANY)

**ANNEXURE - I**  
**SPECIFICATION NO.HE -2419**

GUARANTEE IN RESPECT OF SECURITY DEPOSIT CUM PERFORMANCE OF MATERIALS / EQUIPMENTS / WORKS PAYABLE BY THE TENDERER STAMP PAPER VALUE RS.100/-

**THIS DEED OF GUARANTEE MADE AT CHENNAI** this . . . . . day .....month of Two thousand and twenty one between the. . . . . (hereinafter called "The Bank") of the one part and the Tamil Nadu Generation and Distribution Corporation Limited, a body corporate incorporated under Companies Act, 1956, having its registered office at 144, Anna Salai, NPKRR Maaligai, Chennai – 600002 (hereinafter called the Purchaser) of the other part:

WHEREAS . . . . . (hereinafter called "the Contractor") have by virtue of the contract entered into with the Purchaser as per WCT No. . . . . agreed with the Purchaser to supply . . . . in accordance with the terms and conditions contained therein:

AND WHEREAS the Purchaser in his WCT No. . . . has directed the Contractor to pay a sum of Rs. . . . /- (Rupees . . . . . only) as Security Deposit cum performance Guarantee.

AND WHEREAS the contractor has requested the Purchaser to accept the Bank guarantee in lieu of Security Deposit cum performance Guarantee in cash:

AND WHEREAS the Purchaser has agreed to accept the Bank Guarantee from a Scheduled Bank towards Security Deposit cum performance Guarantee for a sum equivalent to 5% (Five percent) of the value of the contract for the satisfactory performance of the contract:

AND WHEREAS the Bank has, at the request of the Contractor, agreed to Guarantee the payment of the said sum in case the contract is not performed in accordance with the specifications indicated in the terms and conditions contained in WCT. No. . . . .

**NOW THE DEED WITNESSESS AS FOLLOWS:-**

- 1) IN consideration of the Purchaser having agreed to accept a Bank Guarantee from a scheduled Bank towards Security Deposit cum performance Guarantee for a sum equivalent to Rs. . . . . /- (Rupees . . . . . only), the Bank do hereby guarantees that if the Contractor fails to perform the contract in accordance with the specification and conditions of the contract as subsequently amended, the Bank shall pay forthwith to the purchaser such amount or amounts as per Bank may be called upon to pay by the Purchaser:

PROVIDED that the liability of the Bank under this Deed shall not at any time exceed the said Guaranteed amount of Rs.. . . . /- (Rupees . . . . . only).

PROVIDED further that the Guarantee hereunder furnished shall be released as soon as the contractor has performed his part of the contract in accordance with the terms of the contract and a certificate to that effect is issued by the purchaser;

- 2) The Bank further undertakes to indemnify the purchaser against any loss or damage that may be caused or suffered by the Purchaser by reason of any breach of the terms and conditions in the said PO. . . . .



3) The Guarantee herein contained shall remain in force till the terms and conditions of the WCT No. . . . have been fully and properly carried out by the said Contractor and in any case, the Guarantee shall not hold good after the . . . .

4) The Bank further agrees with the Purchaser that the purchaser shall have the fullest liberty (without the consent of the Bank and without affecting in any manner the obligations of the Bank hereunder) to vary any of the terms and conditions of the contract or to extend the time of performance of the contract by the said contractor from time to time or to postpone from time to time any of the powers exercisable by the purchaser against the said contractor and to forbear or to enforce any of the terms and condition relating to the said contract and the bank shall not be relieved of its liability by reason of any such variations or extensions being granted to the said contractor or by reason of any forbearance, act or omission on the part of the purchaser or any indulgence by the purchaser to the said contractor or by any such matter or thing whatsoever which under the law relating to sureties would but for these provisions have the effect of so relieving the Bank.

5) Any account settled between the Purchaser and the contractor shall be the conclusive evidence against the Bank for the amount due and shall not be questioned by the Bank.

6) The Expressions "Bank", "Purchaser" and "Contractor" herein before used shall include their respective successors and assigns:

Notwithstanding anything contained herein:

- i) Our liability under this Bank Guarantee shall not exceed Rs. . . . ./- (Rupees . . . . . only)
- ii) This Bank Guarantee shall be valid upto . . . . .
- iii) We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before . . . . .

IN WITNESS WHEREOF Thiru. . . . . and on behalf of the bank has signed this Deed on the day, month and year first above written.

IN THE PRESENCE OF WITNESSES.

- 1.
- 2.

**ANNEXURE - II**  
**SPECIFICATION NO.HE-2419**

**UNDERTAKING TOWARDS JURISDICTION OF LEGAL PROCEEDINGS**

*(To be furnished in non-judicial stamp paper of value not less than Rs.100/-)*

This Undertaking executed at ..... on this ..... (date) ..... Month Two Thousand .....by M/s ....., a company 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 assigns ) with the TANGEDCO, a statutory authority created under the powers vested with the Electricity Act 2003, having its registered office at 144, Anna Salai, NPKRR Maaligai, Chennai – 600002, hereinafter called the Purchaser (which expression shall where the context admits mean and include its successors in office and assigns ).

**WHEREAS** the contract is for the supply of.....in terms of the W.C.T. No. . . . date . . . . .

**AND WHEREAS** in accordance with Clause .....of the above said WCT Certain terms were stipulated for the above supply.

**AND WHEREAS** in accordance with clause ..... of the above mentioned Works Contract Order the contractor has to furnish an Undertaking 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 City Civil Court of Chennai or other Court of small causes, at Chennai.

In consideration of the TANGEDCO having agreed to accept the Undertaking from the contractor, undertakes that no suit or proceedings in regard to any matter arising in any respect under this contract shall be instituted in any court other than in the City Civil Court of Chennai or other Court of small causes, at Chennai.

It is also agreed that no other court shall have jurisdiction to any suit or proceedings even though part of the cause of action might arise within their jurisdiction. In case any part of the action arises within the jurisdiction of any of the courts in Chennai City, then it is agreed to between the parties that such suits or proceedings shall be instituted in court within Tamil Nadu and no other court outside Tamil Nadu shall have jurisdiction even though any part of the cause might arise within the jurisdiction of such courts.

**IN WITNESS WHEREOF THIRU**..... of the contractor hereby puts his hand and seal for due observance of the Undertaking in the presence of the following witnesses.

**SIGNATURE WITH SEAL**

**WITNESSES:**

(Signature with Name and Address)

- 1.
- 2.

### **ANNEXURE -III**

ITC Undertaking to be submitted by the L1 bidder in non-judicial stamp paper of value not less than Rs.100/-

To  
The Chief Engineer /Hydro,  
TANGEDCO.

We hereby declare and confirm that we are registered vendor under GST Act having GSTIN                      in State of                      . Our applicable GST% for the above reference job is                      under 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 (ie.ITC benefit), 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 Rs.                      /- of                      % as rebate in my quoted price against input tax credit benefit.

We hereby declare that we do not have any input tax credit benefit on account of GST applicable against this job. 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:

Bidder may strike out the para not applicable

**ANNEXURE - IV**  
**SPECIFICATION NO.HE -2419**

**UNDERTAKING FOR PAYMENT OF DUES TO TANGEDCO**

***(To be furnished in non-judicial stamp paper of value not less than Rs.100/-)***

THIS DEED OF UNDERTAKING executed at . . . . .on this the . . . . . day of  
Two thousand and -----

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 is a company registered under companies Act, 1956 having its office at NPKRR Maaligai, 144, Anna salai, Electricity Avenue, Chennai- 600 002, hereinafter called the "Corporation" (which expression shall where the context so admits mean and include the successors- in- office and assigns).

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

NOW THIS UNDERTAKING WITNESSETH the corporation 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 Corporation. Further, the Tenderer hereby authorises the Corporation to recovery, any dues against any other contract of the Tenderer with the Corporation with the available amount due to the Tenderer against this contract.

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

- COMPANY SEAL-

SIGNATURE OF THE TENDERER

NAME :

DESIGNATION:

**ANNEXURE - V**  
**SPECIFICATION NO.HE -2419**  
**GUARANTEE CERTIFICATE**

We the undersigned M/S ..... hereby guarantee the entire scope of works as per section VII Technical for satisfactory operation and good workmanship for a period of 60 months from the date of commissioning of the penstock after rectification works.

We shall correct, at our own expense, the defects, if any, during the guarantee period. Within two years, after acceptance of the equipment and completion of erection if any part of the completed work is found defective because of workmanship or material or otherwise, we shall at our own expense, furnish and install new part and materials approved by the purchaser.

We shall assume all responsibility for direct damages causing personnel injury or property damage caused by any manufacturing defects resulting in the failure of the equipment being supplied under these specifications.

Any defects noticed during this period shall be rectified free of cost to the Corporation within 2 (Two) months from the intimation of defect/failure. Irrespective of number of failures and repairs, we are responsible for free replacement of the defective materials till the completion of guarantee period. If they are not rectified or replaced within this period we shall pay Liquidated Damages as per Liquidated Damages clause in the contract for the delay from the date of receipt of intimation for the defects or failures. The incidental expenses, insurance and freight charges for the replacement of defective materials within the guarantee period shall also be borne by us till the completion of guarantee period.

The guarantee among other things are the following:

- a. Quality and strength of the materials used.
- b. Satisfactory operation of the equipment.
- c. Safe stresses in all parts under all conditions of operations.
- d. Protection of equipments against vibration and corrosion.
- e. Workmanship

Place:

Date :

SIGNATURE WITH SEAL

**ANNEXURE-VI**  
**DRAFT UNDERTAKING**

**(The undertaking should be submitted by the contractors in 100 rupees 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 shall not be responsible for the consequent Legal/Financial obligations.

Authorised Signatory  
(Contractor)  
With Seal

Date :

Place :

## **ANNEXURE- VII**

### **CONSORTIUM AGREEMENT PROFORMA**

(On Non Judicial Stamp Paper of value not less than RS.100/-  
To be purchased in the Name of the Consortium).

Proforma of Consortium Agreement between \_\_\_\_\_ For Bid  
SPECIFICATION NO. \_\_\_\_\_ of TAMIL NADU GENERATION AND DISTRIBUTION  
CORPORATION.

This Consortium agreement executed on this \_\_\_\_\_ day of \_\_\_\_\_ Two thousand  
and \_\_\_\_\_ between and M/s \_\_\_\_\_ a company incorporated under the  
laws of \_\_\_\_\_ and having its registered office  
at \_\_\_\_\_ (herein after called the "Lead company" which expression  
shall include its successors, executors and permitted assigns) and M/s \_\_\_\_\_  
a company incorporated under the laws of \_\_\_\_\_ and having its  
registered office at \_\_\_\_\_ (herein after called the 'Member' which  
shall include its successors, executors and permitted assigns) for the purpose of  
making a bid and entering into a contract for "Replacement of damaged  
penstock pipe line by supply, fabrication, erection, testing & commissioning  
of 220 meter Penstock pipeline, reconditioning of butterfly valve at valve  
house, overhauling of expansion joints rectification of defective joints &  
painting of Penstock pipeline and tunnel steel liner" at Suruliyar Power  
House \_\_\_\_\_ in  
Tirunelveli Generation" for the TamilNadu Generation and Distribution Corporation  
, having it's registered office at No 144, Anna Salai, NPKRR Maaligai, Chennai  
600002, Tamil Nadu, India (herein after called the "OWNER". The leader of the  
consortium shall abide by the general terms and conditions specified by TANGEDCO.  
Whereas TANGEDCO invited bids as per the above mentioned specification for the  
Replacement of damaged penstock pipe line by supply,  
fabrication, erection, testing & commissioning of 220 meter Penstock  
pipeline, reconditioning of butterfly valve at valve house, overhauling of  
expansion joints rectification of defective joints & painting of Penstock  
pipeline and tunnel steel liner" at Suruliyar Power House in Tirunelveli  
Generation TamilNadu, India under Specification No.: ..... And Whereas Section  
\_\_\_ (Bid Qualification Requirement), forming part of the bidding documents stipulates  
that a consortium of ....meeting the requirement of section \_\_\_, applicable may  
bid, provided the consortium fulfils all other requirements of specification and in such  
a case, the BID shall be signed by the members so as to legally bind the members  
and who will be jointly and severally liable to perform the contract and all obligations  
hereunder.

The above clause further states that the consortium agreement shall be attached to  
the bid and the contract performance guarantee will be as per the format enclosed  
with the bidding document without any restriction or liability for either party.

And Whereas the bid has been submitted to TANGEDCO vide proposal No \_\_\_\_\_ dated  
\_\_\_\_\_ by the Lead Company based on the constituent agreement between the

consortium under these presents and the bid in accordance with the requirement of specification(Bid Qualification Requirements)

NOW THIS INDENTURE WITNESSETH AS UNDER

In consideration of the above premises and agreement all the partners to this consortium members, do hereby now agree as follows:

- 1) In consideration of the award of the contract by TANGEDCO to the consortium members, we the members to the consortium agreement do hereby agree that M/s.\_\_\_\_\_ shall act as lead company and further declare and confirm that we shall jointly and severally be bound unto TANGEDCO for the successful performance of the contract and shall be fully responsible for the Replacement of damaged penstock pipe line by supply, fabrication,erection, testing & commissioning of 220 meter Penstock pipeline, reconditioning of butterfly valve at valve house, overhauling of expansion joints rectification of defective joints & painting of Penstock pipeline and tunnel steel liner” at Suruliyar Power House in Tirunelveli and successful performance of the offered System in accordance with the contract.
- 2) In case of any breach of the said contract by the lead company or other member of the Consortium Agreement, the Lead Company do hereby agree to be fully responsible for the successful performance of the contract and to carry out all obligations and responsibilities under the contract in accordance with the requirement of the contract.
- 3) Further if TANGEDCO suffers any loss or damage on account of any breach in the contract or any shortfall in the performance of the equipment in meeting the performance guaranteed as per the specification in terms of the contract, the lead company of these presents undertakes promptly make good such loss or damages caused to TANGEDCO, on its demand without any demur. It shall not be necessary or obligatory for TANGEDCO to proceed against the lead partner to these presents before proceeding against or dealing with the other partners.
- 4) The financial liability of the members of this consortium agreement to TANGEDCO, with respect to any of the claims arising out of the performance or non-performance of the obligation set forth in the said agreement, read in conjunction with the relevant conditions of the contract shall, however, not be limited in any way so as to restrict or limit the liabilities of any of the members of the agreement.
- 5) It is expressly understood and agreed between the members to this consortium agreement that the responsibilities and obligation of each of the partners shall be as delineated in Appendix-...  
(To be incorporated suitably by the member to this agreement). It is further agreed by the member that the above sharing of responsibilities and obligation shall not in any way be a limitation of joint and several responsibilities of the members under this contract.
- 6) This Consortium Agreement shall be construed and interpreted in accordance with the laws of India and the courts of Chennai shall have the exclusive jurisdiction in all matters arising there under.



- 7) In case of an award of a contract, we the consortium members do hereby agree that we shall be jointly and severally responsible for the works respectively executed and Lead Company shall furnishing a contract performance security from a bank in favour of TANGEDCO in the forms acceptable to TANGEDCO for value of 10% of the contract price in the currency/currencies of the Contract.
- 8) It is further agreed that the Consortium agreement shall be irrevocable and shall form an integral part of the contract, and shall continue to be enforceable till TANGEDCO discharges the same. It shall be effective from the date first mentioned above for all purposes and intents.

In Witness Whereof the Partners to the Consortium have through their authorized representatives executed these presents and affixed common seals of their companies, the day, month and year first mentioned above.

1. Common Seal of \_\_\_\_\_ For Lead Company

Has been affixed in my/our presence

Pursuant to the Board of Directors

Resolution dated.

(Signature of authorized Representative) :

Name :

Designation :

Common Seal of the Company :

For Other member

2. Common seal of \_\_\_\_\_

Has been affixed in my/our presence

Pursuant to the Board of Directors

(Signature of authorized Representative) :

Name :

Designation :

Common Seal of the Company :

WITNESSES

1. \_\_\_\_\_

(Signature)

Name \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Official address

2. \_\_\_\_\_

(Signature)

Name \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Official address

## **ANNEXURE VIII**

### **POWER OF ATTORNEY FOR CONSORTIUM PROFORMA**

**(On Non-Judicial Stamp Paper of Appropriate value to be purchased in the Name of Consortium company)**

KNOW ALL MEN BY THESE PRESENTS THAT WE, the consortium company Whose details are given hereunder (1).....(2).....have formed a Consortium under the laws of .....and having our Registered Office(s)/Head Office(s) at.....(hereinafter called the consortium which expression shall unless repugnant to the Context or meaning thereof, include its successors, administrators and assigns) Acting through M\s.....Being the company in charge do hereby constitute, nominate and appoint M\s..... a company incorporated Under the laws of.....and having its Registered / Head Office at ..... as our duly constituted lawful Attorney(hereinafter called "Attorney" or "Authorised Representative" or Partner In charge") to exercise all or any of the powers for and on behalf of the Consortium in regard to "Replacement of damaged penstock pipe line by supply, fabrication,erection, testing & commissioning of 220 meter Penstock pipeline, reconditioning of butterfly valve at valve house, overhauling of expansion joints rectification of defective joints & painting of Penstock pipeline and tunnel steel liner" at Suruliyar Power House in Tirunelveli Generation Tamil Nadu", for the TamilNadu Generation and Distribution Corporation, NPKRR Maaligai, 144, Anna Salai, Chennai – 600 002(hereinafter called the "OWNER") and the Bids for which have been invited by TANGEDCO, to undertake the following acts:

- i. To submit proposal and participate in the aforesaid Bid Specification of TANGEDCO on behalf of the Consortium.
  - ii. To negotiate with TANGEDCO in the terms and conditions for award of the Contract pursuant to the aforesaid Bid to sign the Contract with TANGEDCO for and on behalf of the Consortium.
  - iii. To do any other act or submit any document related to the above.
  - iv. To receive, accept and execute the Contract for and on behalf of the Consortium.
- It is clearly understood that the Lead Company shall ensure performance of the Contract(s) and if one or more Company fail to perform their respective portion of the Contract(s), the same shall be deemed to be a default by the Lead Company. It is expressly understood that this Power Of Attorney shall remain valid binding and irrevocable till completion of the Defect Liability Period in terms of the Contract. The Consortium hereby agrees and undertakes to ratify and confirm all the whatsoever the said Attorney/ Authorized representative of the Lead Company in charge quotes in the Bid, negotiates and signs the Contract with TANGEDCO and/or proposes to act on behalf of the Consortium by virtue of this Power Of Attorney and the same shall bind the Consortium as if done by itself.

IN WITNESS THEREOF the Company constituting the Consortium as aforesaid have executed these presents on this..... Day of .....under Common seal(s) of their Companies.

For and on behalf of the Company of Consortium

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

The common Seal of the above Companies of the Consortium: The Common Seal has been affixed there unto in the presence of:

WITNESS:

1. Signature :

Name :

Designation :

Occupation :

2. Signature :

Name :

Designation :

Occupation :

### CHECK LIST / QUESTIONNAIRE FOR B.Q.R.-SECTION-II

SL.NO.	SECTION-III: BID QUALIFICATION REQUIREMENT (BQR) CLAUSE AS PER SECTION II IN THE TENDER SPECIFICATION	DECLARATION, STRIKE OUT WHICHEVER IS NOT APPLICABLE	IF YES,  PAGE NO. & Remarks by bidder.
	<b>BID QUALIFICATION REQUIREMENT (BQR)</b>		
	<b>1</b>	YES/NO	
	<b>1.a</b>	YES/NO	
	<b>1.b.</b>	YES/NO	
	<b>2.</b>	YES/NO	
	<b>3.</b>	YES/NO	
	<b>3.a.</b>	YES/NO	
	<b>CONDITIONS FOR CONSORTIUM</b>		
	<b>Item.1</b>	YES/NO	
	<b>Item.2</b>	YES/NO	
	<b>Item.3</b>	YES/NO	
	<b>Item.4</b>	YES/NO	
	<b>Item.5</b>	YES/NO	
	<b>Item.6</b>	YES/NO	
	<b>Item.7</b>	YES/NO	
	<b>Item.8</b>	YES/NO	
	<b>Item.9</b>	YES/NO	
	<b>Item.10</b>	YES/NO	
	<b>Item.11</b>	YES/NO	
	<b>Item.12</b>	YES/NO	