



TECHNICAL QUALIFICATION REQUIREMENT

QUALIFYING CONDITIONS FOR TELESCOPIC LADDER				
DESCRIPTION OF BHEL REQUIREMENT	TO BE SUPPLIED/ CONFIRMED/ SUBMITTED BY	OFFERED	DEVIATION	REMARKS
The bidder should have supplied atleast one number of Telescopic Ladder with Hydraulic Control of 35 feet or more anywhere in India within the last 5 years from the date of techno- commercial bid opening date of this tender. The following information should be submitted by the vendor about the companies where ladder have been supplied. This is required from all the vendors for qualification of their offer.	Vendor to accept & confirm.			
1. Name of the customer / company alongwith complete postal address where referred telescopic ladder is supplied.	Vendor to inform			
2. Month & Year of Supply.	Vendor to inform			
3. Copy of purchase order and supporting acceptance papers or material receipt certificate from the customers.	Vendor to submit			
4. BHEL reserves the right to verify the information provided by vendor. In case the information provided by vendor is found to be false/ incorrect, the offer shall be rejected.	Vendor to accept & confirm			

Prepared By: 
Ayushi Jindal
(Sr. Engineer-TBEM)

Checked By:
Asif Rizvi
(Dy. Manager-TBEM)

Approved By: 
SK Shukla
(Sr. DGM-TBEM)

	BHARAT HEAVY ELECTRICALS LIMITED TRANSMISSION BUSINESS ENGINEERING MANAGEMENT	Doc. No.	TB-399-316-163 Rev-00
	400/230-110 kV SUB STATION AT VELLALAVIDUTHI	Part No.	SECTION -1
	TELESCOPIC LADDER WITH HYDRAULIC CONTROL		SHEET 1 OF 2

SECTION-1

INTENT, SYSTEM REQUIREMENT AND SCOPE

1.1 INTENT OF SPECIFICATION

- a. This specification covers the manufacturing, inspection/testing and dispatch at site of **Telescopic Ladder with Hydraulic Control** as mentioned in different sections of this specification for **400/230-110 kV SUB STATION AT VELLALAVIDUTHI of TAMILNADU TRANSMISSION CORPORATION LTD (TANTRANSCO)**.
- b. The requirements specified under '**SECTION 2, SECTION 3, SECTION 4 & SECTION 5**' of the specification shall be considered as part of this section. In case of variance between various sections, the requirements of **SECTION 1** shall prevail. **Bidder shall follow Section-2 for equipment specification strictly.**
- c. The Bidder shall be deemed to have understood completely all the tender drawings and documents and quoted accordingly.
- d. **Contract shall be on lumpsum basis for the scope defined in the specification. Variations in quantities during contract stage without any change in input from BHEL side shall not have any commercial implications. The Bidder shall be responsible for providing all material, equipment and services, specified or otherwise which are required to fulfill the intent of ensuring operability, maintainability and the reliability of the complete work covered under this specification.**
- e. It is recommended that Bidders have no deviation on technical requirement & scope. Bidder shall submit signed and stamped copy of "Certificate of No deviation" (Schedule 1 of Section 5) for 'NIL DEVIATION'.
- f. The term 'Customer' appearing in this specification shall refer to **TANTRANSCO**, the term 'Purchaser' shall refer to **BHEL** and the term 'Contractor' shall refer to the successful **Bidder**.
- g. The system / equipment shall be capable of performing the required duties as per the specification requirements.

1.2. SCOPE

The scope of equipment to be furnished and services to be provided under the contract are outlined hereinafter and the same is to be read in conjunction with the provisions contained in other sections/ clauses. The scope of work under the contract shall be deemed to include all such items, which although are not

	BHARAT HEAVY ELECTRICALS LIMITED TRANSMISSION BUSINESS ENGINEERING MANAGEMENT	Doc. No.	TB-399-316-163 Rev-00
	400/230-110 kV SUB STATION AT VELLALAVIDUTHI	Part No.	SECTION -1
	TELESCOPIC LADDER WITH HYDRAULIC CONTROL		SHEET 2 OF 2

specifically mentioned in the bid documents and / or in Bidder's proposal, but are required to make the equipment/ system complete for its safe, efficient, reliable and trouble free operation. **NO EXTRA COST** implication to BHEL shall be considered during contract stage on account of supply & installation of these unaccounted items.

1.3. SCOPE OF SUPPLY & SERVICES

Sl. No.	Item Description	Unit	Quantity
1	Supply of Telescopic Ladder with Hydraulic Control 45 feet.	Set.	1
2	ETC of Telescopic Ladder with Hydraulic Control 45 feet. It covers the following: Erection (Assembly at site if it shall be dispatched in parts), performance test to the satisfaction of customer & finally handing over of Telescopic Ladder with Hydraulic Control.	Set	1

***Unloading and storage is excluded from contractor's scope.**

1.4. Approval of documents

1.4.1. Quality Plan

It shall be submitted during detailed engineering, if applicable

1.4.2. Drawings and Data Sheets

Drawings / Technical Datasheets have to be submitted to purchaser (BHEL). These shall be approved by purchaser/owner.

1.5. Delivery

Delivery dates as per schedule given in the tender.

1.6. Performance check at site and handing over

It shall be responsibility of vendor to demonstrate the functional check at site to the satisfaction of customer and also help BHEL to get TANTRANSCO acceptance on final handing over the material.

**BHARAT HEAVY ELECTRICALS LIMITED**

TRANSMISSION BUSINESS ENGINEERING MANAGEMENT

Doc.
No.**TB-399-316-163
Rev-00****400/230-110 kV SUB STATION AT
VELLALAVIDUTHI**Part
No.**SECTION -2****TELESCOPIC LADDER WITH HYDRAULIC CONTROL****SHEET 1 OF 1****SECTION-2
EQUIPMENT SPECIFICATION****2.0 Equipment Specification****2.1 Codes & Standards**

The design and construction of complete system shall comply with the latest applicable Indian/British/American Standards/Codes.

It is not the intent to specify herein all the details of design & construction. However, the equipment/system shall conform to high standards of design, engineering & workmanship in all respect and shall be capable of performing the required duties.

2.2 General Technical Specification:

The telescopic ladder shall be hydraulic controlled with extended height of 45 feet and wheels for easy movement. It shall be Folding type with automatic locking system while opening and closing. Platform/Railings shall be Retractable / Folding type. Emergency off switches shall be available in case of electric failure, while coming down. Spirit Level to be provided for proper levelling of platform.

	BHARAT HEAVY ELECTRICALS LIMITED TRANSMISSION BUSINESS ENGINEERING MANAGEMENT		Doc. No.	TB-399-316-163 Rev-00
	400/230-110 kV SUB STATION AT VELLALAVIDUTHI		Part No.	SECTION -3
	TELESCOPIC LADDER WITH HYDRAULIC CONTROL			SHEET 1 OF 5

SECTION-3

GENERAL TECHNICAL REQUIREMENTS

The provisions under this section are intended to supplement general requirements for the materials, equipment's and services covered under other sections.

PROJECT INFORMATION AND SYSTEM PARAMETERS

- a) Customer : M/s Tamil Nadu Transmission Corporation Limited
- b) Project Title : 400/230-110 kV Substation at Vellalaviduthi
- c) Transport facilities : Road/Rail

Physical and other parameters:

- Location of the substation : Vellala viduthi, Pudukottai district
- Nearest Railway station : Pudukottai Railway Southern Railway

3.1.3 Meteorological data

- (i) Maximum ambient temperature : 50°C
- (ii) Minimum ambient temperature : 20°C
- (iii) Maximum daily average ambient air temperature : 45° C
- (iv) Maximum yearly average ambient air temperature : 32° C
- (v) Maximum Humidity (%) : 100%
- (vi) Average thunder storm days per annum : 50
- (vii) Average rainy days per annum : 90
- (viii) Average annual rainfall (mm) : 1000 mm
- (ix) No. of months during which tropical monsoon condition prevail : 5
- (x) Maximum wind pressure : 150 Kgf/Sqmm
- (xi) Altitude above MSL : 1000M

However for design purpose, ambient temperature should be considered as 50° C and relative humidity as 100%.

MAIN ELECTRICAL PARAMETRS:		
a)	Fault Levels	400kV: 63kA for 1 sec. 230kV: 40kA for 3 sec. 110kV: 40kA for 3 sec.

**BHARAT HEAVY ELECTRICALS LIMITED**

TRANSMISSION BUSINESS ENGINEERING MANAGEMENT

Doc.
No.**TB-399-316-163
Rev-00****400/230-110 kV SUB STATION AT
VELLALAVIDUTHI**Part
No.**SECTION -3****TELESCOPIC LADDER WITH HYDRAULIC CONTROL****SHEET 2 OF 5**

a)	Creepage Distance	25mm/kV
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AUXILIARY POWER SUPPLY:

Auxiliary electrical equipment's, maintenance equipment's etc., shall be suitable for operation on the following supply system.

3 phase AC Supply	415V, 3 phase 4 wire, 50 Hz, neutral grounded AC supply -10% to +10%, Frequency +/- 5%
1 phase AC supply	240V, single phase, 50 Hz, neutral grounded AC supply -10% to +10%, Frequency +/- 5%,
DC supply	220V, 2 wire DC supply + 10% to -15%, Ungrounded 48V, 2 wire DC supply , Positively earthed

GENERAL REQUIREMENT

ALL THE EQUIPMENTS / MATERIALS TO BE SUPPLIED SHOULD BE IN ACCORDANCE WITH RELEVANT LATEST / AMENDED IS/IEC, WHETHER IT HAS BEEN SPECIFICALLY MENTIONED IN THE SPECIFICATION OR NOT.

The bidder shall also furnish drawings for the following:

All EQUIPMENTS and type of clamps, fittings hardwares, insulators, bus bar. These designs/ drawing shall be got approved by the purchaser before commencing the manufacture/ construction/ erection and are to be as per latest IS/ IEC.

GENERAL:

The bidder shall be fully responsible for providing all equipment, materials system and services specified or otherwise which are required to complete the construction and successful commissioning of the substation in all respects.

Any other items not specifically mentioned in the specification but which are required for erection of materials/equipment under the scope of work, testing and commissioning are deemed to be included in the scope of the specification unless specifically excluded.

All items shall be supplied as per schedule and as specified in the relevant Indian standard of latest revision. The Technical specification of the main materials/equipment is furnished. The Technical specification contained herein for the materials are for the guidance of the tenderer.

	BHARAT HEAVY ELECTRICALS LIMITED TRANSMISSION BUSINESS ENGINEERING MANAGEMENT	Doc. No.	TB-399-316-163 Rev-00
	400/230-110 kV SUB STATION AT VELLALAVIDUTHI	Part No.	SECTION -3
	TELESCOPIC LADDER WITH HYDRAULIC CONTROL		SHEET 3 OF 5

The bidders are requested to procure the equipment's/materials/component only from reputed /qualified manufacturer as per Technical requirement stipulated in Section-1 of Technical specifications. Approval of make of item shall be taken up by vendor from TANTRANSCO himself.

SPECIFIC REQUIREMENT

The bidder shall furnish make/manufacturer, catalogues, engineering data, technical information, design documents, drawings etc., fully in conformity with the technical specification and get approval from competent authority before commencement of any work.

All steel materials, other than materials for earthing should be of galvanized if not specified.

STANDARD:

The works covered by the specification shall be designed, engineered, manufactured, built, tested and commissioned in accordance with the Acts, Rules, Laws and Regulations of India.

The equipment to be furnished under this specification shall conform to latest issue with all amendments (as on the date of bid opening) of standards specified in the specification.

The Bidder shall note that standards mentioned in the specification are not mutually exclusive or complete in themselves, but intended to complement each other.

The Bidder shall also note that list of standards presented in this specification is not complete. Whenever necessary the list of standards shall be considered in conjunction with specific IS/IEC.

When the specific requirements stipulated in the specifications exceed or differ than those required by the applicable standards, the stipulation of the specification shall take precedence.

TEST CERTIFICATE:

Copies of all test certificates relating to material to be procured by the contractor for the works shall be forwarded to the OWNER.

INSPECTION :

The inspection may be carried out by the TANTRANSCO/BHEL at any stage of manufacture. The supplier shall grant free access to TANTRANSCO's/BHEL representative at a reasonable time when the work is in progress. The TANTRANSCO/BHEL shall have access at all times to the works and all other places of manufacture/fabrication, where the equipments are being manufactured/fabricated and the bidder shall provide

	BHARAT HEAVY ELECTRICALS LIMITED TRANSMISSION BUSINESS ENGINEERING MANAGEMENT		Doc. No.	TB-399-316-163 Rev-00
	400/230-110 kV SUB STATION AT VELLALAVIDUTHI		Part No.	SECTION -3
	TELESCOPIC LADDER WITH HYDRAULIC CONTROL			SHEET 4 OF 5

TANTRANSCO's/ BHEL representative all facilities for unrestricted inspection of the works, raw materials, manufacture of all the accessories and for conducting necessary tests.

Inspection and acceptance of any equipment under this specification by the TANTRANSCO / BHEL shall not relieve the supplier of his obligation of furnishing equipment in accordance with the specification and shall not prevent subsequent rejection if the equipment is found to be defective. The supplier shall keep the TANTRANSCO/BHEL informed in advance, about the manufacturing programme so that arrangement can be made for inspection.

The TANTRANSCO/BHEL, reserves the right to insist for witnessing the acceptance/routine testing of the bought out items. No material shall be dispatched from its point of manufacture unless the material has been satisfactorily inspected and tested.

The correct grade and quality of steel shall be used by the supplier. To ascertain quality of steel, the TANTRANSCO/BHEL may at his discretion get the material tested at an approved laboratory.

The BHEL/TANTRANSCO or his representative shall have the right to inspect and/or test the goods /works to confirm their conformity to the supplier. BHEL/TANTRANSCO shall notify the supplier in writing of the identity of any representatives authorized for these purposes.

The inspections and tests may be conducted on the premises of the supplier or his Sub vendor at the point of delivery and /or at the goods' final destination. Where tests are conducted in the premises of Supplier, all reasonable facility and assistance including access to drawings and production data shall be furnished at no charge to the BHEL.

Should any inspected or tested goods fail to conform to specifications, the BHEL/TANTRANSCO may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet specification requirements free of cost to the BHEL/TANTRANSCO within one week of intimation.

The BHEL/TANTRANSCO's right to inspect, test and where necessary reject the goods after the goods; arrival at the site, shall in no way be limited or waived by reason of the goods having been previously inspected. Tested and passed by the BHEL/TANTRANSCO or his representative prior to the goods dispatch.

Not less than 15 (Fifteen) days advance intimation shall be given about the quantity of materials that will be ready for inspection by the officers of TANTRANSCO/ BHEL/Third agency authorized by the Corporation. The materials should not be dispatched without instruction from the Corporation.

	BHARAT HEAVY ELECTRICALS LIMITED TRANSMISSION BUSINESS ENGINEERING MANAGEMENT	Doc. No.	TB-399-316-163 Rev-00
	400/230-110 kV SUB STATION AT VELLALAVIDUTHI	Part No.	SECTION -3
	TELESCOPIC LADDER WITH HYDRAULIC CONTROL		SHEET 5 OF 5

GUARANTEE:

The supplier shall guarantee that the goods under the Contract are new, unused of the most recent or current models and incorporated all recent improvements in design and materials unless provided otherwise in the Contract. The supplier shall further guarantee that the goods supplied under this Contract shall have no defects arising from design, materials or workmanship, installation and erection, if that may develop under normal use of the supplied goods. The supplier shall also guarantee the performance of the works executed by him including the performance of all the materials/goods supplied by him.

BHEL shall promptly notify supplier in writing of any claims arising under guarantee in respect of goods. Upon receipt of such notice, the supplier shall, with all reasonable speed, repair or replace the defective works or parts thereof, free of cost at site. All the expenses towards transportation of defective parts to supplier's works and of repaired/replaced parts to site shall be borne by the Supplier.

If the Supplier, having been notified, fails to remedy the defects within 14 days, the BHEL will proceed to take such remedial action as may be necessary, at the supplier's risk and expenses. All expenses in this regard will be recovered from Supplier.

PACKING AND FORWARDING:

The equipment shall be packed in crates suitable for vertical/horizontal Transport, as the case may be and suitable to withstand handling transport and outdoor storage during transit. The supplier shall be responsible for any damage to the equipment during transit due to improper and inadequate packing and handling. The easily damageable material shall be carefully packed and marked with the appropriate caution symbols. Wherever necessary, proper arrangement for lifting, such as lifting hooks etc., shall be provided. Any material found short inside the packing cases shall be supplied by supplier without any extra cost.

The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit to their final destination as indicated in the Contract and exposure to extreme temperatures, salt and precipitation etc., during transport and open storage. Packing case size and weights shall be taken into consideration wherever appropriate, the remoteness of the 'goods' final destination and absence of heavy mechanized handling facilities, at all points in transit.

The packing, marking and documentation within and outside the package shall comply strictly with such special requirements as shall be expressly provided for in the Contract or in any subsequent instructions issued by BHEL.

**BHARAT HEAVY ELECTRICALS LIMITED**

TRANSMISSION BUSINESS ENGINEERING MANAGEMENT

**400/230-110 kV SUB STATION AT
VELLALAVIDUTHI****TELESCOPIC LADDER WITH HYDRAULIC CONTROL**Doc.
No.**TB-399-316-163
Rev-00**Part
No.**SECTION -4****SHEET 1 OF 1****SECTION-4****GUARANTEED TECHNICAL PARTICULARS**

Following to be submitted by the bidders at the time of the bid which are minimum information, however bidder may also furnish the other important technical details.

1.	Closed height	
2.	Extended height	
3.	Make and material for	
	Side Section for Ladder	
	Steps for Ladder	
4.	Platform Size and Material	
5.	Folds	
6.	Trolley	
7.	Wheels	
8.	Net Weight	

Signature of the authorized representative of Bidder

Name _____
Designation _____
Place _____
Date _____

	BHARAT HEAVY ELECTRICALS LIMITED TRANSMISSION BUSINESS ENGINEERING MANAGEMENT	Doc. No.	TB-399-316-163 Rev-00
	400/230-110 kV SUB STATION AT VELLALAVIDUTHI	Part No.	SECTION -5
	TELESCOPIC LADDER WITH HYDRAULIC CONTROL		SHEET 1 OF 4

SECTION-5

SCHEDULES TO BE FILLED BY THE BIDDER

Schedule 1 Certificate of No Technical deviation

Schedule 2 Schedule of unpriced BOQ

Schedule 3 Details of contact person both technical and commercial

**BHARAT HEAVY ELECTRICALS LIMITED**

TRANSMISSION BUSINESS ENGINEERING MANAGEMENT

**400/230-110 kV SUB STATION AT
VELLALAVIDUTHI****TELESCOPIC LADDER WITH HYDRAULIC CONTROL**Doc.
No.**TB-399-316-163
Rev-00**Part
No.**SECTION -5****SHEET 2 OF 4****SCHEDULE-1****CERTIFICATE OF NO TECHNICAL DEVIATION**

We confirm that there are no deviations whatsoever and our offer is in full compliance with the specification. We also confirm that there are no technical deviations in any other form such as comments, variations/ GTP and/ or exceptions.

Signature of the authorized representative of Bidder

Name : _____

Designation : _____

Place : _____

Date : _____

Company Seal

	BHARAT HEAVY ELECTRICALS LIMITED	Doc. No.	TB-399-316-163
	TRANSMISSION BUSINESS ENGINEERING MANAGEMENT		Rev-00
	400/230-110 kV SUB STATION AT VELLALAVIDUTHI	Part No.	SECTION -5
	TELESCOPIC LADDER WITH HYDRAULIC CONTROL		SHEET 3 OF 4

SCHEDULE-2

Bidders shall attach signed and stamped **unpriced** copy of this BOQ with their technical offer:

Sl. No.	Item Description	Unit	Qty	Whether Unit Rates have been furnished in priced bid?
1	Supply of Telescopic Ladder with Hydraulic Control 45 feet	Set	1	YES
2	Erection, Testing & Commissioning (ETC) for above mentioned telescopic ladder	Set	1	YES

Signature of the authorized representative of Bidder

Name : _____

Designation : _____

Place : _____

Date : _____

Company Seal

**BHARAT HEAVY ELECTRICALS LIMITED**

TRANSMISSION BUSINESS ENGINEERING MANAGEMENT

**400/230-110 kV SUB STATION AT
VELLALAVIDUTHI****TELESCOPIC LADDER WITH HYDRAULIC CONTROL**Doc.
No.**TB-399-316-163
Rev-00**Part
No.**SECTION -5****SHEET 4 OF 4****SCHEDULE-3****DETAILS OF CONTACT PERSON BOTH TECHNICAL AND COMMERCIAL**

Name

Address for correspondence

Phone No.

Fax No.

Email

Place

Date

Signature of the authorized representative of Bidder

Name-----

Designation-----

Company seal -----