

India Power Corporation Limited

Tender Notification for-GI Superstructures Lattice Type for 132kV Transmission Line –Dhasal Project

**NIT No- IPCL/GI-Superstructure-132kV Transmission.
Line/HO/21-22/13 Dated 05.06.2021
Due date for submission of tender: 10.06.2021
Date & Time of opening: 11.06.2021**

PROCUREMENT DEPTT
INDIA POWER CORPORATION LIMITED

General Instruction to Bidder

Manufacturing/ Procurement of MS angles, Fabrication/Manufacturing & Supply of GI Structures and GI Bolts & Nuts, HDG Washers, Electro-Galvanized Spring Washers, Step Bolts of 132 kV Double Circuit Transmission Line.

India Power Corporation Limited herein referred to as IPCL invites sealed bids through Domestic Competitive Bidding (DCB) from eligible bidders for – Manufacturing/Procurement of MS Angle, Fabrication/Manufacturing & Supply of GI Structures and GI Bolts & Nuts, HDG Washers, Electro- Galvanized Spring Washers, Step Bolts for the Project of 132kV Double Circuit Transmission Line 2.8CKM (Approx.) at Dhasal area of Bardhaman District of West Bengal.

1.0 SCOPE OF SUPPLY:

The brief scope of work is as under:

The scope covered under this package is as briefed below:

Manufacturing / Procurement of MS Angle, Fabrication/Manufacturing & Supply of GI Structures and GI Bolts & Nuts, HDG Washers, Electro-Galvanized Spring Washers, Step Bolts as per technical specifications for 132kV Double Circuit Line 185MT with a tolerance of 5% as detailed mentioned in subsequent clauses.

2.0 The bidder has to submit their offer as per SOR Format Below.

Item Name	Unit	Qty.	Basic Rate	CGST	SGST	Freight & Transit Insurance (inclusive)	Total Rate in INR	Amount
				@9%	@9%			
GI Superstructures	MT	183.20						

GI Stubs /template	MT	10.55						
nuts & bolts, spring washer	MT	5.904						

3.0 BOQ:

Note-1: Drawings & detail BOQ will be provided during manufacturing clearance.
Type of Towers & Quantity may vary.

4.0 The bidder has to submit manufacturing and delivery schedule as per format below along with the offer.

Manufacturing & Delivery Schedule:

GI Tower Materials Manufacturing, Approval & Delivery Schedule		
Step No.	Activity	Time required in days from the date of drawing
1	Material Procurement from (Billet from SAIL/TISCO/RINL) & testing. Or from state/ central utility	
2	Preparation of Floor layout drawings.	
4	Proto manufacturing	May be waved off if earlier
5	Assembly of Proto Tower	
6	Inspection by IPCL	
7	Mass Production	
8	Mass Inspection by IPCL	
9	Third party (IPCL Approved) inspection (If required)	
10	Dispatch Instruction from IPCL	
11	Bundling Tower Wise	
12	Dispatch and Delivery	

Total days	
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Delivery Date: - 31st August 2021

5.0 Minimum Qualification Criteria For Suppliers :

1. The BILLET shall be procured exclusively from the main steel producers
SAIL/TISCO/RINL.

However, sections not rolled by main producers, can be procured from state/central govt utility approved re-rollers, provided:-

- Re-rolling of structural steel sections is done from billets from SAIL/TISCO/RINL

and of tested quality.

- Re-rolled sections are duly tested as per relevant standard.
Necessary proof to be provided.

2. The supplier must have previous experience in supply of full shaped tower 132kV and above to WBSETCL or SEBs or Power grid from whom they have to submit the supply experience certificates along with the quotation.

3. The supplier should be a manufacturer of Transmission Line Structures and substation Structures having a minimum fabrication and galvanization Capacity of 500 MT per month.

4. The supplier must complete the delivery the materials within 55 Days from the date submission of drawings and manufacturing clearance incase order is placed on them.

6.0 Other Conditions:

i. The firm must agree to supply tower structures as per the tested tower design and drawings of IPCL after developing the shop floor drawings by them at their own cost.

ii. The tower structure will undergo proto testing in presence of IPCL Engineers.

iii. IPCL or their consultant or their client may visit the firms of Firms to assess the capability of the firm before considering their bids.

- iv. Firms who have been debarred for supply of Tower structures by any Govt. organizations /BCC&I shall not be able to participate in the bid.
- v. Bidder must agree to supply the tower structures as per the drawings, guaranteed weights, bill of quantities and type of steel used by state/central utility and as per the drawings approved by IPCL.
- vi. Bidder must be a manufacturer of the Tower Structures as per the technical specification and must have the requisite experience of five years in the manufacture of tower Structures having all the adequate manufacturing and testing facilities at their works.
- vii. Substitutions, if any, of steel sections of the tower parts by higher sizes, due to non-availability or otherwise shall be to the supplier's account. The buyer will not accept any liability on this account.
- viii. Step bolts & nuts, Fasteners to be provided as per IPCL approved Drawings.

7.0 SPECIFICATIONS:

- i. Billets/ Slabs etc. shall be in line with requirement of IS: 2830, IS: 808 1989, IS: 1852/1985(RA-1998) to produce MS angle sections.
- ii. The various tests confirming to requirement of mechanical strength, chemical Composition including those of bend test and hardness for re-rolled different angle sections are to be done as stipulated in IS Code Gr.A(2006).
- iii. Supply of Superstructures to be done in complete tower basis as per BOM and Bundling in tower-wise. Any quality defects and short supply in superstructures found during erection should be rectified by the bidder if order place on them without any additional cost.
- iv. All materials to be procured as per approved drawing, design & specification of DVC/WBSETCL/RVPN and from their approved vendor list. List of DVC/WBSETCL/RVPN approved vendors will be provided by IPCL within 7 days of issue of this order.
- v. Proto Manufacturing to be done after getting approval of Floor Layout and Shop Floor drawing by IPCL/their Consultant. Proto inspection for all types of towers will be done by IPCL/their Consultant. After issue of proto approval mass fabrication to be started.
- vi. All materials will be inspected at factory at different stages by IPCL/ their Consultant.

- vii. All tower materials including Erection bolts & nuts, Pack Washers, Electro-galvanised, Spring Washers & Step bolts to be supplied as per IPCL/their Consultant issued Drawings and from the vendors list of state/central utility approved only or decided by IPCL.
- viii. Guarantee /warranty period of the supply is 18 months from date of supply or 12 Months from date of commissioning whichever is later.

8.0 Galvanizing Procedure

The zinc used for galvanizing fabricated material shall be of High Grade Electrolytic zinc.

Tests in accordance with IS :2026-Method for testing uniformity of coating on Zinc Coated Articles and IS :4759-Specification for Hot –Dip Zinc coatings on Structural Steel and other allied products.

Structural steelwork for switchyard or other structures as may be specified in the Contract shall be hot dip galvanized in accordance with the American Society for Testing and Materials Specification ASTM-A 123 or IS : 2629 -Recommended practice for Hot-Dip Galvanising of Iron and steel. Where the steel structures are required to be galvanized the field connection materials like bolts, nuts and washers shall also be galvanized.

Surface Preparation: All members to be galvanized shall be cleaned, by the process of pickling of rust, loose scale, dirt, oil, grease, slag and spatter of welded areas and other foreign substances prior to galvanizing. Pickling shall be carried out by immersing the steel in an acid bath containing either sulphuric or hydrochloric acid at a suitable concentration and temperature. The concentration of the acid and the temperature of the bath can be varied, provided that the pickling time is adjusted accordingly. The pickling process shall be completed by thoroughly rinsing with water, which should preferably be warm, so as to remove the residual acid.

Galvanizing shall be carried out by hot dip process in a proper and uniformly heated bath. It shall meet all the requirements when tested in accordance with IS:2633 - Method for testing uniformity of coating on Zinc Coated Articles and IS:4759 - Specification for Hot-dip zinc coatings on Structural Steel & other allied products. After finishing the threads of bolts, galvanizing shall be applied over the entire surface uniformly. The threads of bolts shall not be machined after galvanizing and shall not be clogged with zinc. The surface preparation for galvanizing and the process of galvanizing itself, shall not

adversely affect the mechanical properties of the materials to be galvanized.

Where members are of such lengths as to prevent complete dipping in one operation, great care shall be taken to prevent warping.

Materials on which galvanizing has been damaged shall be acid stripped and re-galvanized unless otherwise directed, but if any member becomes damaged after having been dipped twice, it shall be rejected. Special care shall be taken not to injure the skin on galvanized surfaces during transport and handling.

Damages, if occur, shall be made good in accordance with the provisions of this Specification or as directed by the Engineers of IPCL/their Consultant.

9.0 Inspection:-

IPCL will inspect time to time during procurement of MS Angles, fabrication, galvanizing and dispatch of materials. The various tests confirming to requirement of mechanical strength, chemical composition including those of bend test and hardness for re-rolled different angle sections are to be done as stipulated in IS Code Gr.A(2006) and will be witness by IPCL Engineers. The test certificate to be acceptable by IPCL/their Consultant Engineers.

IPCL may ask for 3rd party inspection materials NABL accredited laboratory if required and the supplier has to do the same without any additional cost to IPCL.

10.0 DELIVERY POINT

Material has to be delivered in as per the delivery schedule agree during ordering at IPCL's Store at Seebpore, Jamuria. Exact address will be intimated during inspection and dispatch in writing .

11.0 TERMS OF PAYMENT PROPOSED

- a. 10% advance against PI and ABG valid till complete delivery of equivalent amount.
- b. 80% against Performa invoice after inspection and dispatch clearance but after dispatch of material. Payment cheque will be prepared before dispatch but will be handed over immediately after receiving of materials and receipt certificate from IPCL Engineers.
- c. 10% against submission of PBG of equivalent amount valid of guarantee/warranty period of 12 Months from date of issuance of certificate of receipt

of materials .

12.0 Interested eligible Bidders may obtain further information on the bidding documents from the Office of the Head-Procurement, IPCL at the address given below:-

The Purchase Head,
India Power Corporation Limited
Head Office, Plot No. X – 1, 2 & 3,
Block – EP Sector – V, Salt Lake,
Kolkata – 700091

13.0 IPCL reserves the right to accept or reject any bid partly or fully or cancel the bidding without assigning any reasons thereof and in such case no Bidder/intending Bidder shall have any claim arising out of such action.

14.0 DeliveryAddress:

132kV Project Store-
Seebpore, P.O. : Jamuria
Bazar,
Dist.: Paschim Bardhaman,
West Bengal – 713336
Attention: Mr. Tridib Mandal

15.0 Address for submission of offer:

The Head - Procurement
India Power Corporation Limited
Plot No X – 1, 2 & 3, Block – EP,
Sector – V Salt Lake, Kolkata 700 091
FAX – 033 6609 4305
Telephone– 033 6609
4300/08/09/10/11/12, E-mail:
amit.prakash@indiapower.com

16.0 Address for any Technical Clarifications:

1. Jyotirmay Harh. -AGM E&PM
E-mail ID: jyotirmay.harh@indiapower.com