



**MAHARASHTRA STATE ELECTRICITY TRANSMISSION CO. LTD**  
(CIN No. U40109MH2005SGC153646)

<b>From</b> The Chief Engineer (C&M), 5 <sup>th</sup> Floor, A-Wing, Prakashganga, C-19, "E" Block, Bandra – Kurla Complex, Bandra (East), Mumbai – 400 051. Tel: 022-2659 5125 (O)/022-2659 5124 (P) E-mail: cecm@mahatransco.in	<b>To</b> M/s Stelmec Ltd. Sea Queen, 43-A, H. K. Bhabha Road Bandstand, Bandra (W) Mumbai – 400 050 Tel: +91 22 2643 6127 /28 / 29 Fax: +91 22 2643 6139 E-mail: corporate@stelmec.com
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MSETCL/CO/C&M/Pre-T/SSPre-Tender/

**No 05458**

Date:

**24 JUL 2019**

**Sub:** Letter of Award for “Establishment of 400/220 kV substation at Karjat Dist. Ahmednagar along-with associated transmission lines under Nashik zone on turnkey basis against tender no. T-1921 (RFx No. 6000000715)”.

- Ref:**
- 1) SRM e -Tender No. T-1921/MSETCL/CO/C&M/Pre-T/Pre-Tender (RFx No. 6000000715)
  - 2) Your offer dtd. 25.02.2019 against subject tender.
  - 3) Scheme B.R. No. 118/08 dtd. 15.07.2017
  - 4) Tender acceptance B.R. No.135/30 dtd. 06.06.2019
  - 5) MERC approval – MERC/Capex/MSETCL/2017-18/5095 dtd. 04.01.2018

Dear Sir,

In connection with above subject, we are pleased to inform you that your above referred offer for the work of establishment of 400/220 kV substation at Karjat Dist. Ahmednagar along-with associated transmission lines under Nashik zone on turnkey basis has been accepted. The details are as follows.

**Part A- Supply of materials**

Description of works	Final Price quoted in Rs.
Supply of equipments and materials for the work of establishment of 400/220 kV substation at Karjat Dist. Ahmednagar along-with associated transmission lines under Nashik zone on turnkey basis for following scope of work:- 1) Establishment of 400/220 kV Karjat Substation 2) Work of construction of 400 kV LILO on both ckts. of 400 kV Lonikand-II (ckt.-1 & II) — Girawali line –6.0 km 3) Work of construction of 220 kV DC line from 220 kV Bhose (Belwandi) s/s to prop. 400 kV Karjat s/s –32.0 km	<b>Rs. 1,35,05,24,584.00</b> (Including all Taxes & Duties).

(Rs. One Hundred and Thirty-five Crore Five Lakh Twenty-four Thousand Five Hundred Eighty-four Only.)

The activity schedule for supply work is enclosed herewith.

It may please be noted that the scope shall also include supply of all equipments/materials which are not specifically listed in your offer but are necessary in order to meet the requirements of the substation as per tender specifications in all respect. Detailed terms and conditions will be as per the tender specifications, amendments thereof, your offer, clarifications thereon and contract agreement being executed shortly. The balance excess/extra material will not be accepted by MSETCL. Therefore the agency should take care for appropriate supply of material to complete the turnkey project. The work of above substation has to be completed within 24 months (including 12 months for 400 kV line and 18 months for 220 kV line) from the date of Handing over of the site (including monsoon).

#### **Part B – ETC of materials**

<b>Description of works</b>	<b>Final Price quoted in Rs.</b>
<p>Erection, Testing &amp; Commissioning of equipments and materials for the work of establishment of 400/220 kV substation at Karjat Dist. Ahmednagar along-with associated transmission lines under Nashik zone on turnkey basis for following scope of work:-</p> <ol style="list-style-type: none"> <li>1) Establishment of 400/220 kV Karjat Substation</li> <li>2) Work of construction of 400 kV LILO on both ckts. of 400 kV Lonikand-II (ckt.-1 &amp; II) — Girawali line –6.0 km</li> <li>3) Work of construction of 220 kV DC line from 220 kV Bhose (Belwandi) s/s to prop. 400 kV Karjat s/s –32.0 km</li> </ol>	<p><b>Rs. 15,14,51,188.00</b> (Including all Taxes &amp; Duties)</p>

(Rs. Fifteen Crore Fourteen Lakh Fifty-one Thousand One Hundred Eighty-eight only.)

The activity schedule for erection work is enclosed herewith.

It may please be noted that the scope shall also include erection, testing and commissioning of all equipments/materials which are not specifically listed in your offer but are necessary in order to meet the requirements of the substation as per tender specifications in all respect. Detailed terms and conditions will be as per the tender specifications, amendments thereof, your offer, clarifications thereon and contract agreement being executed shortly. The work of above substation has to be completed within 24 months (including 12 months for 400 kV line and 18 months for 220 kV line) from the date of Handing over of the site (including monsoon).

#### **Part C- Civil works**

<b>Description of works</b>	<b>Final Price quoted in Rs.</b>
<p>Civil works for establishment of 400/220 kV substation at Karjat Dist. Ahmednagar along-with associated transmission lines under Nashik zone on turnkey basis for following scope of work:-</p> <ol style="list-style-type: none"> <li>1) Establishment of 400/220 kV Karjat Substation</li> <li>2) Work of construction of 400 kV LILO on both ckts. of 400 kV Lonikand-II (ckt.-1 &amp; II) — Girawali line –6.0 km</li> <li>3) Work of construction of 220 kV DC line from 220 kV Bhose (Belwandi) s/s to prop. 400 kV Karjat s/s –32.0 km</li> </ol>	<p><b>Rs. 30,38,22,149.00</b> (Including all Taxes &amp; Duties)</p>

(Rs. Thirty Crore Thirty-eight Lakh Twenty-two Thousand One Hundred Forty-nine only.)

Sub: Letter of Award for "Establishment of 400/220 kV substation at Karjat Dist. Ahmednagar along-with associated transmission lines under Nashik zone on turnkey basis against tender no. T-1921 (RFx No. 6000000715)".



The activity schedule for civil works is enclosed herewith.


It may please be noted that the scope of civil work shall also include design of civil works and required materials which are not specifically listed in your offer but are necessary in order to meet the requirements of the substation as per tender specifications in all respect. Detailed terms and conditions will be as per the tender specifications, amendments thereof, your offer, clarifications thereon and contract agreement being executed shortly. The balance excess/extra material will not be accepted by MSETCL. Therefore the agency should take care for appropriate supply of material to complete the turnkey project. The work of above substation has to be completed within 24 months (including 12 months for 400 kV line and 18 months for 220 kV line) from the date of Handing over of the site (including monsoon).

You are requested:-

1. To intimate the acceptance of this LoA within 10 days from receipt of LoA.
2. To submit the bar chart indicating all activities for completion of the work within 10 days.
3. To submit price schedule with detailed break up of unit rate into ex-works price, tax, freight & insurance etc. within 10 days from receipt of LoA.
4. To complete the formalities like furnishing of Performance Bank guarantee as per the Clause No. 6.0 of Section-II of Book-I in prescribed format so that the contract agreement can be finalized.

Thanking you.

Encl: Activity schedules.

Yours faithfully,  
  
Chief Engineer (C&M)

Copy s.w.rs. to:

- 1) The Director (Projects), MSETCL, Mumbai.

Copy f.w.cs. to:

- 1) The C.E., EHV PC O&M Zone, MSETCL, Nashik.
- 2) The C.E., Project Scheme/Civil/D&P, MSETCL, Mumbai.
- 3) The C.G.M. (F&A), MSETCL, Mumbai.

Copy to:

- 1) The G.M. (F&A, Projects), MSETCL, Mumbai.
- 2) The S.E., EHV Projects Circle, MSETCL, Nashik.
- 3) The S.E., EHV Civil CCM Circle, MSETCL, Nashik.
- 4) The S.E. (Post Tender), C.O. MSETCL, Mumbai.
- 5) The E.E., EHV Projects Division, Nashik.
- 6) The E.E., EHV Civil CCM Division, Nashik
- 7) The E.E. (D&E-S1)/(D&E-S-2), C.O. MSETCL, Mumbai.
- 8) The E.E., PMT, MSETCL, Mumbai. ....For further needful
- 9) The E.E., FTU, MSETCL, Mumbai. ....For further needful

*Sub: Letter of Award for "Establishment of 400/220 kV substation at Karjat Dist. Ahmednagar along-with associated transmission lines under Nashik zone on turnkey basis against tender no. T-1921 (RFx No. 6000000715)".*

### Activity Schedule for Supply of Material

Tender No.: T-1921/MSETCL/CO/C&M/Pre-T/SSPre-Tender (RFx No. 6000000715)  
 Name of Work: Establishment of 400/220 kV substation at Karjat Dist. Ahmednagar along-with associated transmission lines under Nashik zone MSETCL, Maharashtra  
 Name of Contractor: M/s Stelmec Ltd., Mumbai  
 Completion Period: 24 months from the date of handing over of site.

Sr. No.	Name of the material	Scheduled period for supply of material from the date of handing over of site	Hold point for payment
1	Soil investigation, Drawing submission i.e. layout, Erection Key Diagram, Gantry Structure, Equipment Structure, Earth mat Design, Cable Trench, Control Room & Foundation Drawing etc.	Submission within 30 days	
2	Gantry Materials	Commencement after 30 days & completion within 210 days.	Gantry material should be as per approved layout & site requirement and equivalent to gantry foundations casted.
3	Equipment Structures	Commencement after 30 days & completion within 210 days.	Equipment structures should be as per requirement worked out from approved layout and equivalent to respective equipment foundations casted.
4	Conductor, Insulators Hardwares etc.	Commencement after 90 days & completion within 330 days.	Completion of 100% gantry foundations & 50% gantry erection.
5	CTs, PTs, LA, Isolator, BPI, CC, Clamp & Connectors, M.K.	Commencement after 120 days & completion within 360 days.	1. Completion of erection of 100% gantries with bus bar stringing. 2. Erection of respective equipment structure.
6	MS Flats, CI Pipes, Earthing Material, Yard Lighting, ACDB, Power & Control Cables, Cable Trays,	Commencement after 150 days & completion within 270 days.	Material should be as per finalization of BoQ by Engineer in charge as per actual requirement based on approved drawing and erection of 100% gantries with bus bar stringing.
7	Reactor, Circuit Breakers, Power Transformer, ICT& Station Transformer	Commencement after 240 days & completion within 480 days	1. Completion of all equipment foundations & erection of it, 100% gantries with bus bar stringing and transformer plinth, completion of 100% cable trench with laying of cable trays. 2. Completion of unfinished main control room * and 100% BCR.
8	FOTE Equipments and Panel, DCDB, etc.	Commencement after 300 days & completion within 420 days.	Completion of all bay equipments except circuit breaker, power transformer / ICT and complete finishing of PLCC room.
9	Control & Relay Panels, SCADA, Battery Sets, Battery Chargers& Fire Fighting Equipments.	Commencement after 360 days & completion within 540 days.	Completion of control room, bay control rooms & erection of respective bay equipments& laying of respective control cable.
<b>Note:</b> 1. The contractor may supply the material prior to schedule delivery period. However, the payment eligibility will be as per hold points indicated above. 2. *Unfinished control room: Completion of slab, brick work & plastering. 3. It is mandatory for agency to take possession of site within 30 days from the date of issuance of LOA.			

### Activity Schedule for Erection Work

Tender No.: T-1921/MSETCL/CO/C&M/Pre-T/SSPre-Tender (RFx No. 6000000715)

Name of Work: Establishment of 400/220 kV substation at Karjat Dist. Ahmednagar along-with associated transmission lines under Nashik zone MSETCL, Maharashtra

Name of Contractor: M/s Stelmec Ltd., Mumbai

Completion Period: 24 months from the date of handing over of site.

Sr. No.	Name of the material	No. of days/months from the date of handing over of site		Hold points/Remarks
		Commencement	Completion	
1	Mobilization of gang	Within 30 days		
2	Arrangement of work and power supply, tests etc.	Within 30 days		
3	Erection of gantry structures and stringing of bus bar	Within 75 days	Within 300 days.	
4	Equipment structures	Within 75 days	Within 300 days.	
5	CT, PT, LA, Isolator, & BPI	Within 180 days	Within 420 days.	
6	Earthing, layout of earth mat, cable laying, cable trenches & yard lighting	Within 210 days	Within 420 days.	
7	FOTE equipments & DCDB etc.	Within 360 days	Within 480 days.	
8	Erection of Reactor, power transformer and stations transformer	Within 300 days	Within 480 days	
9	Installation of C&R panels, battery & battery charger.	Within 360 days	Within 540 days.	
10	Electrical installation.	Within 420 days	Within 600 days.	
11	Pre commissioning trials/testing.	Within 630 days	Within 700 days.	

### **Activity Schedule for Civil Work**

Tender No.: T-1921/MSETCL/CO/C&M/Pre-T/SSPre-Tender (RFx No. 6000000715)  
 Name of Work: Establishment of 400/220 kV substation at Karjat Dist. Ahmednagar along-with associated transmission lines under Nashik zone MSETCL, Maharashtra  
 Name of Contractor: M/s Stelmec Ltd., Mumbai  
 Completion Period: 24 months from the date of handing over of site.

Sr. No.	Activity	No. of days/months from the date of handing over of site		Hold point for payments	Remarks
		Commencement	Completion		
(A)	CIVIL WORKS				
1	Visit to site, collection of site details. Layout, organizing soil investigation and submission of reports to Corporate Office and field office.	Within 21 days		The in charge Addl.EE/EE/ S.E., to be contacted and joint visit to be undertaken with official nominated by him.	
2	Establishment of site store, <b>construction of store shed</b>	Within 10 days	Within 150 days	Location to be got approved from Engineer in charge.	
3	Yard leveling i.e <b>Land Development</b>	Within 15 days	Within 165 days	The scope of work and estimated cost to be got approved from C.E.(Civil) In charge of works	
4	<b>Compound Wall</b>	Within 21 days	Within 600 days		
5	<b>WBM Road</b>	Within 365 days	Within 575 days		
6	Collection/finalization of foundation drawings & control room drawing	Within 30 days		Soil details within soil investigation report to be furnished with report of site visit duly certified by Engineer in charge of works (Addl.EE/EE).	
7	<b>Civil foundation for:</b>				
	Gantries	Within 30 days	Within 330 days		
	Equipments	Within 120 days	Within 360 days		
	Transformers	Within 45 days	Within 240 days		

	Cable Trench	Within 210 days	Within 450 days		
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8	<b>Control Room</b>				
	i) Foundations & plinth work	Within 45 days	Within 120 days		
	ii) Brick work upto lintel	Within 90 days	Within 180 days		
	iii) Lintel to slab and casting of slab	Within 180 days	Within 280 days		
	iv) Flooring, Plastering, cable trenches, Doors and Windows	Within 310 days	Within 400 days		
	v) Painting & finishing	Within 400 days	Within 450 days		
9	<b>Watchmen Cabin &amp; Cycle Stand</b>	Within 330 days	Within 360 days		
10	<b>Chainlink Fencing</b>	Within 470 days	Within 620 days		
11	<b>Metal Spreading &amp; Earthing Pipe Line</b>	Within 570 days	Within 720 days		
12	<b>Asphalting Of Roads</b>	Within 630 days	Within 720 days		

STANDARD ACTIVITY SCHEDULE FOR PAYMENT ELIGIBILITY				
<b><u>T-1921 (RFx No. 6000000715) Work of construction of 400 kV MC line on MC towers by making LILO on both ckts. of 400 kV Lonikand-II (ckt.-1 &amp; II) — Girawali line — 6.0 km.</u></b>				
COMPLETION PERIOD = 12 MONTHS				
Sr. No.	ACTIVITY	Schedule for completion of activities from date of LOA		Remarks/ Hold points for payments
		Commencement	Scheduled period of completion	
1	Submission of performance B.G. in lieu of S.D.		Within 10 days	
2	Visit to site , verification of scope of work, Establishment of site office and mobilisation of gang	After 5 days	Within 20 days	
3	Signing of contract agreement	After 10 days	Within 30 days	
4	Trial pits and inspection of route	After 7 days	Within 21 days	
5	Preliminary & Detailed Survey	After 15 days	Within 68 days	At the rate minimum 20 km per month
6	Check survey	After 10 days	Within 136 days	At the rate minimum 10 km per month
7	Approval of detailed /check survey & trial pits	After 20 days	Within 145 days	
8	Requisition of drawings of towers, stubs templates	After 5 days	Within 20 days	
9	Issuance of all drawings for execution by MSETCL	After 10 days	Within 30 days	Copy of trial pits report duly approved by Engineer in Charge be furnished
10	Collection of drawings by Contractor	5 days	15 days	
11	Preparation of shop drawings	15 days	45 days	
12	Proto manufacturing, assembly of tower, submission of call for inspection (if applicable)	After 30 days	Within 45 days	
13	Proto inspection	After 37 days	Within 60 days	
14	Supply of stub & stub setting templates	After 20 days	Within 160 days	Supply to be effected within 15 days after approval of check survey
15	Tower foundation	After 20 days	Within 250 days	At the rate minimum 10 locations per month
16	Supply of tower material	After 40 days	Within 270 days	The foundation should have been casted for tower under supply. The towers to be supplied on per tower basis within 15 days of casting of foundation.
17	Erection of tower	After 60 days	Within 390 days	50% tower foundations should be completed, Erection @ 30 loc. per month.
18	Supply of conductor, earthwire, insulators for accessories towers & conductor /groundwire & insulator Hardware .	After 180 days	Within 275 days	Contractor's confirmation about complete erection of towers of equivalent route length is ready for stringing
19	Stringing of line	After 190 days	Within 300 days	Atleast 50% of towers should have been erected. Progress @ 10KM/Month



20	Miscellaneous works (fixing of tower accessories, tree cutting etc.)	After 220 days	Within 310 days	
21	Inspection, testing & commissioning of line	After 275 days	Within 360 days	
<b>Note:-</b>				
1	Contractor may execute the erection works ahead of schedule dates. In such an event the schedule date for supply of respective materials stands preponed accordingly and such supplies will become eligible for payments.			
2	The contractor shall supply the material as per actual requirement only, based on the bill of quantities after check survey & duly approved by Engineer incharge. No additional /surplus material shall be accepted except specifically requisitioned by Engineer-In-Charge.			
3	The contractor can supply the material prior to scheduled delivery period, however, the payment eligibility will be from the date as per approved schedule period subject to satisfying conditions of hold points.			

**STANDARD ACTIVITY SCHEDULE FOR PAYMENT ELIGIBILITY**

**T-1921 (RFx No. 6000000715) Work of construction of 220 kV DC line from 220 kV Bhose (Belwandi) s/s to prop. 400 kV Karijat s/s — 32.0 km**

**COMPLETION PERIOD = 18 MONTHS**

Sr. No.	ACTIVITY	Schedule for completion of activities from date of LOA		Remarks/ Hold points for payments
		Commencement	Scheduled period of completion	
1	Submission of performance B.G. in lieu of S.D.		Within 10 days	
2	Visit to site , verification of scope of work, Establishment of site office and mobilisation of gang	After 5 days	Within 20 days	
3	Signing of contract agreement	After 10 days	Within 30 days	
4	Trial pits and inspection of route	After 7 days	Within 21 days	
5	Preliminary & Detailed Survey	After 15 days	Within 105 days	At the rate minimum 20 km per month
6	Check survey	After 10 days	Within 220 days	At the rate minimum 10 km per month
7	Approval of detailed /check survey & trial pits	After 20 days	Within 145 days	
8	Requisition of drawings of towers, stubs templates	After 5 days	Within 20 days	
9	Issuance of all drawings for execution by MSETCL	After 10 days	Within 30 days	Copy of trial pits report duly approved by Engineer in Charge be furnished
10	Collection of drawings by Contractor	5 days	15 days	
11	Preparation of shop drawings	15 days	45 days	
12	Proto manufacturing, assembly of tower, submission of call for inspection (if applicable)	After 30 days	Within 60 days	
13	Proto inspection	After 37 days	Within 70 days	
14	Supply of stub & stub setting templates	After 20 days	Within 300 days	Supply to be effected within 15 days after approval of check survey
15	Tower foundation	After 20 days	Within 400 days	At the rate minimum 15 locations per month
16	Supply of tower material	After 60 days	Within 420 days	The foundation should have been casted for tower under supply. The towers to be supplied on per tower basis within 15 days of casting of foundation.
17	Erection of tower	After 80 days	Within 450 days	50% tower foundations should be completed, Erection @ 30 loc. per month.
18	Supply of conductor, earthwire, insulators for accessories towers & conductor /groundwire & insulator Hardware .	After 180 days	Within 480 days	Contractor's confirmation about complete erection of towers of equivalent route length is ready for stringing
19	Stringing of line	After 190 days	Within 500 days	Atleast 50% of towers should have been erected. Progress @ 6 KM/Month

Sr. No.	ACTIVITY	Schedule for completion of activities from date of LOA		Remarks/ Hold points for payments
		Commencement	Scheduled period of completion	
20	Miscellaneous works (fixing of tower accessories, tree cutting etc.)	After 220 days	Within 510 days	
21	Inspection, testing & commissioning of line	After 510 days	Within 540 days	

**Note:-**

1	Contractor may execute the erection works ahead of schedule dates. In such an event the schedule date for supply of respective materials stands preponed accordingly and such supplies will become eligible for payments.
2	The contractor shall supply the material as per actual requirement only, based on the bill of quantities after check survey & duly approved by Engineer incharge. No additional /surplus material shall be accepted except specifically requisitioned by Engineer-In-Charge.
3	The contractor can supply the material prior to scheduled delivery period, however, the payment eligibility will be from the date as per approved schedule period subject to satisfying conditions of hold points.