

NAGPUR METRO RAIL CORPORATION LIMITED

Date : 28.10.2016

Tender No. N1S01/2016

(As uploaded in the E-tender Portal)

Name of work : DESIGN, MANUFACTURE, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF SIGNALLING AND TRAIN CONTROL SYSTEM FOR NAGPUR METRO RAIL PROJECT.

Tender No.: N1S-01/2016. (ICB), Dtd.16.07.2016

CORRIGENDUM -V

Part A	Addendum
--------	----------



General Manager
(Procurement)
NMRCL, Nagpur

Part A : Addendum:

Sl. No.	Part No.	Section	Clause Ref.	Corrigendum reference	Existing Description	Replaced With
1	I	Sect. IV: BIDDING FORMS	Annexure-IV-B (Pricing Document)	Corrigendum III	Schedule 11A- List of Spares for Train Control & Signalling System G: Track Side ATC Sr. No.15 :	Schedule 11A- List of Spares for Train Control & Signalling System G: Track Side ATC Sr. No.15 :
					Large Video Screen	%
2	I	Sect. IV: BIDDING FORMS	Annexure-IV-B (Pricing Document)	Corrigendum III	Schedule 11A- List of Spares for Train Control & Signalling System I Miscellaneous Sr. No.4	Deleted
3	II	Section VIIA GS	11.3.2.1	-	Within 14 days of the installation of any software into the Permanent Works by The Contractor, the Contractor shall submit to the Employer's Engineer for retention by the Employer two backup copies of the executable code. The contractor shall provide a list of deliverables and take approval of employer's engineer.	Within 14 days of the installation of any software into the Permanent Works by the Contractor, the Contractor shall submit to the Employer's Engineer for retention by the Employer two backup copies of software. The contractor shall provide a list of deliverables and take approval of employer's engineer.

Sl. No.	Part No.	Section	Clause Ref.	Corrigendum reference	Existing Description	Replaced With
4		Section VII-B 02 TS	5.3.7.2.2	Corrigendum III	<p>Secondary Train Detection The secondary train detection system will use Axle Counters. The axle counter shall be a proven model with processor level redundancy and reliable performance in metro field. The axle counter shall operate safely and reliably with proper interface with interlocking equipment. Train detection shall as a minimum determine train positions with the accuracy corresponding to the subdivision of the track system, in sections where the train has to be located according to operation requirements. The secondary train detection system shall cater to route setting as stipulated in TS 5.11.2. This minimum train detection shall be effective irrespective of whether a vehicle carries working on board equipment or not. All vehicles like trolleys, maintenance vehicle and any other rail vehicle should be positively detected.</p>	<p>Secondary Train Detection The secondary train detection system will use Axle Counters. The axle counter shall be a proven model with reliable performance in metro field. The axle counter shall operate safely and reliably with proper interface with interlocking equipment. Train detection shall as a minimum determine train positions with the accuracy corresponding to the subdivision of the track system, in sections where the train has to be located according to operation requirements. The secondary train detection system shall cater to route setting as stipulated in TS 5.11.2. This minimum train detection shall be effective irrespective of whether a vehicle carries working on board equipment or not. All vehicles like trolleys, maintenance vehicle and any other rail vehicle should be positively detected.</p>
5	II	Section VII-B 02 TS	5.3.12.11.3	Corrigendum III	Continuous Capacity : >125% of desired Capacity.	The static switch should also conform to the following minimum requirements Continuous Capacity : Equal to the 100% continuous rating of the inverter

Sl. No.	Part No.	Section	Clause Ref.	Corrigendum reference	Existing Description	Replaced With
6	II	Section VII-B 02 TS	5.3.12 (General),	-	5.30.8.1 : General The UPS system provided by the contractor shall be 60 KVA for depot, 60 KVA interlocking stations, 30 KVA secondary stations and 30 KVA OCC as well as BOCC of both the corridors with on-line redundant configuration. The UPS shall be of conventional 1+1 design.	5.3.12.1 : General The UPS system provided by the contractor shall be 60 KVA for depot, 60 KVA interlocking stations, 30 KVA secondary stations and 60 KVA OCC as well as BOCC of both the corridors with on-line redundant configuration. The UPS shall be of conventional 1+1 design.
7	II	Section VII-B 02 TS	5.3.12.12 (1)	-	Output capacity (KVA) of each UPS 60 KVA for depot 60 KVA for 10 interlocking stations. (5 in East west corridor & 5 in North South Corridor) 30 KVA for 27 Stations of both the corridors (secondary stations) and BOCC.	Output capacity (KVA) of each UPS 60 KVA for depot 60 KVA for interlocking Station, OCC & BOCC stations. 30 KVA for Non- Interlocking Stations of both the corridors (secondary stations)
8	II	Section VII-B 02 TS	5.3.12.12 (2)	Corrigendum III	(2) Input voltage (Three phase) of input feeder : 300 -477 at full load & 242-477 at 70% load	(2) Input voltage (Three phase) of input feeder: 415V AC +10%, - 20% #
9	II	Section VII-B 02 TS	5.3.12.12 (4)	Corrigendum III	Input Power factor : >0.99 at 100%load	Input Power factor : > 0.95
10	II	Section VII-B 02 TS	5.3.12.12 (8)	Corrigendum III	Overload capacity of each UPS better than > 150 % for 10 Minutes > 125 % Continuous	Overload capacity of each UPS better than > 150 % for 60 seconds > 125 % for 10 minutes > 110 % for 60 minutes

Sl. No.	Part No.	Section	Clause Ref.	Corrigendum reference	Existing Description	Replaced With
11	II	Section VII-B 02 TS	5.3.12.12 (14)	Corrigendum III	Efficiency (AC-AC) of complete system (including transformers) Better than 94% at full load excluding transformer. 90% at 25% Loading excluding transformer	Efficiency (AC-AC) of complete system (including transformers) Better than 80% (From 25% load to full load)
12	II	Section VII-B 02 TS	APPENDIX O – SPECIFICATIONS OF ATP/ ATO	-	4 FUNCTIONAL REQUIREMENT 4.1 The system shall conform to IEEE 1474.1 (2004), IEEE 1474.2 (2003), A200 FRS, Functional Requirements Specification for ETCS (European Train Control System) in general.	4 FUNCTIONAL REQUIREMENT 4.1 The system shall conform to IEEE 1474.1 (2004), IEEE 1474.2 (2003), IEEE 1474.3, A200 FRS, Functional Requirements Specification for Communication based Train Control (CBTC) / ETCS (European Train Control System).