# **Amendment No. 1**

Date: 13.10.2015

Subject: Amendment no. 01 to the Tender Enquiry Document

Ref: (i) Tender Enquiry No.: HLL/PCD/PMSSY-II/NAGPUR/10/15-16 dated 07.10.2015

The following item is added to the list of requirements,

# Section I

# **Notice Inviting Tenders(NIT)**

Sl. No	e- Tender Ref. No (Event No.)	Item Name	Department	Quantity	EMD (Rs.)
14	3000000351	Intra Operative neuro monitoring system	Orthopaedics	1	68,000.00

#### **SECTION - VI**

#### **LIST OF REQUIREMENTS**

#### PART - I

Sl. No	Item Name	Department	Quantity	Warranty	CMC
				(years)	
14	Intra Operative neuro monitoring system	Orthopaedics	1	5 (five)	YES

# Section - VII

### **TECHNICAL SPECIFICATIONS**

**Schedule No.14** 

# SPECIFICATIONS OF INTRA OPERATIVE NEURO MONITORING SYSTEM

 Equipment should have comprehensive intra-operative neuro-physiological monitoring facilities including but not limited to continuous monitoring of Evoked potentials (SSEP, MEP, VEP, BAEP), free run EMG and triggered responses and be capable of MIOM (multimodality intra-operative monitoring), i.e, simultaneous monitoring of EEG, EMG and Evoked Potentials etc

2.

- a. Equipment should have the capability of full surgeon access to controls and tests from the sterile field- Stimulator probe with menu navigation, intensity dial, trigger, Start /Stop buttons available. Visual & audio feedback available
- b. Equipment should have the capability to be solely operated by Surgeon.
- c. Easy for surgeon and his staff to learn, operate and interpret the signals
- d. Equipment should have the capability for user to create and save customized tests
- e. Equipment should have the a probe to provides full control of menu and functions to surgeon
- f. Equipment should have the capability for Automated pedicle screw testing, nerve proximity and nerve root testing through probe
- g. Equipment should have Evoked Potential recordings include Triggered EMG, Motor Evoked Potential and Sensory Evoked Potentials
- h. Equipment should have Sensory Potentials include Somatosensory Evoked Potential (SSEP), Visual Evoked Potential (VEP) and Brainstem Auditory Evoked Response (BAER)
- Equipment should have the ability for both slow charge and fast charge transcranial MEP (with and without double train)
- Equipment should be capable of producing both monophasic and biphasic MEP stimulation.
- k. Equipment should have the capability for pedicle screw testing, nerve proximity, train of four test and nerve root testing
- 1. Equipment should have capability for upto 2 sites for transcranial MEP testing
- m. Equipment should have capability for upto 1000 volts max for MEP testing

- n. Equipment should have capability for upto 8 stimulator ports for High electrical output and one stimulator port for low level electrical output.
- Equipment should have capability for upto 16 channel (upgradable to 32 channel)
  EEG monitoring
- p. Equipment should have EEG in CSA, DSA or CDSA formats
- 3. Equipment should have the capability of 2 channel pulse oximetry recording
- 4. Equipment should have free running EMG, triggered EMG and EEG monitoring
- 5. Equipment should have capability for Direct cortical stimulation
- 6. Equipment should have exclusive pedicle probes (straight, thoracic and lumbar) that tests for EMG response and identifies pedicle breach while pedicle hole preparation
- 7. Equipment should have pedicle access needles for DLIF approach
- 8. Equipment should have Motor Evoked Potential (both Single and double train)
- 9. Equipment should have both biphasic and monophasic MEP stimulation.
- 10. Equipment should have diagrammatic representations of electrode placement available on screen for different procedures available
- 11. Equipment should have the capability upto  $1000\ V\ MEP$  stimulation ( for constant voltage source; max  $1000\ mA$ )
- 12. Equipment should have the safety feature of Maximum current delivery upto 1000mA during MEP
- 13. Equipment should have a mute detector probe to mute electrocautery interference
- 14. Equipment should have the capability to import and display Vital signs from a wide range of monitors
- 15. Data can be saved manually or automatically as continuous EEG, free run EMG, triggeredEMG, EMG audio, updated averaged EP, Screen snapshots and, Video
- 16. Equipment should have the capability to review previously saved data while monitoring, automatic recovery of data after power or system failure and multi-site remote monitoring and data review capabilities
- 17. Equipment should provide the surgeon both audio and visual feedback
- 18. Equipment should have on screen display of patient current
- 19. Equipment should have automated report generation for every test

- 20. Equipment should provide standard test protocols which can be modified and saved by user
- 21. Equipment should have Windows 7 Operating system
- 22. Equipment should have Notch filter: 50 or 60 Hz
- 23. Equipment should be capable of 16 channelmonitoring (32 inputs) and should provide options for both 8 channel surgeon controlled and upgrade option to 32channelas well.

All other terms and conditions of the tender enquiry remain unaltered.