

09-11-2023

Amendment No. 3**Sub: Amendment No. 3 to the referred tender enquiry****Ref.: Tender Enquiry No. HITES/PCD/MP/HELA/RT/23-24 dated 15-09-2023 (Tender ID: 2023_HITE_168131_1) for High Energy Linear Accelerator**

The following changes are being incorporated in the above referred Tender Enquiry Document

**SECTION I
NOTICE INVITING TENDER (NIT)****For:****(2) Tender Timeline:****Existing:**

Description	Schedule
Closing date & time for submission of online bids	09-11-2023, 01:00 PM
Closing date & time for submission of tender processing fee and EMD in physical form*	09-11-2023, 02:00 PM
Time and date of opening of online bids	10-11-2023, 02:30 PM

Read as:

Description	Schedule
Closing date & time for submission of online bids	23-11-2023, 01:00 PM
Closing date & time for submission of tender processing fee and EMD in physical form*	23-11-2023, 02:00 PM
Time and date of opening of online bids	24-11-2023, 02:30 PM

TECHNICAL AMENDMENT

Tender Page & Para	TENDER SPECIFICATION	Read As
Pg 45 Point 28 Symmetry	Symmetry -shall be within $\pm 2\%$. Please specify the same for both FF and FFF beams.	Symmetry -shall be within $\pm 3\%$. Please specify the same for both FF and FFF beams.
Pg 45 Point 38	Beam Symmetry: shall not exceed $+ 2\%$ at gantry angles of 0, 90, 180 and 270 degrees.	Beam Symmetry: shall not exceed $\pm 3\%$ at gantry angles of 0, 90, 180 and 270 degrees.
Pg 46 Point 60	Read out Digital and Mechanical Accuracy : $\pm 0.5^\circ$	Read out Digital Accuracy: $\pm 0.5^\circ$
Pg 47 Point 81	The couch top shall be indexed to allow reproducible placement of immobilization equipment and also to provide interface for mounting the quality assurance equipment at the head of the couch. Side rails, universal clamps and immobilization straps, as required, should be provided.	The couch top shall be indexed to allow reproducible placement of immobilization equipment and also to provide interface for mounting the quality assurance equipment at the head of the couch.
Pg 47 Point 82	The lateral range of the couch shall be at least ± 20 cm. The longitudinal range of the couch shall be greater than 70 cm. The vertical motion of the couch shall range from the isocentre to at least 60 cm below the isocentre.	The lateral range of the couch shall be at least ± 20 cm. The longitudinal range of the couch shall be greater than 70 cm. The vertical motion of the couch shall range from the isocentre to at least 55 cm or more below the isocentre.
Pg 48 Point 102	System shall be capable of acquiring images such as 3DCBCT, pretreatment interfraction 4D-CBCT, during treatment intrafraction 4D-CBCT and deep inspiration breath hold triggered 3D CBCT Imaging during the treatment, Gated CBCT, Extended Length CBCT etc.	System shall be capable of acquiring images such as 3DCBCT, pretreatment interfraction 4D-CBCT, during treatment intrafraction 4DCBCT and deep inspiration breath hold triggered 3D CBCT Imaging during the Treatment or intrafractional 3DCBCT, Gated CBCT (manual/automatic), etc.

Tender Page & Para	TENDER SPECIFICATION	Read As
Pg 48 Point 106	The offered 3DCBCT image quality should be sufficient to delineate target and critical structure volumes for adaptive planning dose calculations. Possible to generate synthetic CT from CBCT (using deep learning) for adaptive radiotherapy.	The offered 3DCBCT image quality should be sufficient to delineate target and critical structure volumes for adaptive planning dose calculations. Possible to generate synthetic CT from CBCT for adaptive radiotherapy.
Pg 48 Point 116	Side Rails on both sides of Couch for Mounting Accessories.	Deleted
Pg 51 Point 154	The vendor should provide advanced and latest model of optical surface tracking and gating solutions for entire four-dimensional (4D) treatment chain from imaging (4DCT) to (4D) treatment delivery. The system should consist of Advanced optical imaging system (stereovision / structured light / Laser) with atleast 3 cameras (resolution \geq 2MP) installed in the treatment room to reconstruct 3D surfaces, 4DCT acquisition and Gating Systems with following features.	Deleted
Pg 51 Point 156	The system should support for patient positioning/surface mapping, intrafraction motion tracking/monitoring and respiratory gating of complete workflow. System should be capable of tracking in coplanar and non-coplanar positions and imaging bolus accessories. At non-coplanar angles and at gantry angle, tracking accuracy ≤ 0.5 mm / $\leq 0.5^\circ$ suitable for frameless SRS in agreement with AAPM TG302 and ESTRO ACROP.	Deleted
Pg 51 Point 158	The system should have advanced algorithms for rigid/non-rigid and deformable models to enable realtime assessment of patient positioning errors before and during treatment delivery.	Deleted
Pg 51 Point 161	The optical scanning system should support DIBH and 4D CT imaging acquisition and should be installed both in the CT room and treatment room	Deleted
Pg 50	Surface Guided Radiation Therapy System (consider this system as optional item and price must be quoted separately.	Deleted
	154. The vendor should provide advanced and latest model of optical surface tracking and gating solutions for entire four-dimensional (4D) treatment chain from imaging (4DCT) to (4D) treatment delivery. The system should consist of Advanced optical imaging system (stereovision / structured light / Laser) with atleast 3 cameras (resolution \geq 2MP) installed in the treatment room to reconstruct 3D surfaces, 4DCT acquisition and	Deleted

Tender Page & Para	TENDER SPECIFICATION	Read As
	Gating Systems with following features	
	155.The system should be of non-invasive, marker-free i.e no markers or devices will need to be placed on the patient or on the couch..	Deleted
	156.The system should support for patient positioning/surface mapping, intrafraction motion tracking/monitoring and respiratory gating of complete workflow. System should be capable of tracking in coplanar and non-coplanar positions and imaging bolus accessories. At non-coplanar angles and at gantry angle, tracking accuracy ≤ 0.5 mm / $\leq 0.5^\circ$ suitable for frameless SRS in agreement with AAPM TG302 and ESTRO ACROP.	Deleted
	157.The system should facilitate the 4D treatment of thoracic and abdominal tumours	Deleted
	158.The system should have advanced algorithms for rigid/non-rigid and deformable models to enable realtime assessment of patient positioning errors before and during treatment delivery.	Deleted
	159.The system should have a frame rate of atleast 20 frames/second to track live patients position and should automatically hold the beam if patient move out of predefined threshold in all 6 DOF. Absolute-positioning accuracy ≤ 0.5 mm / $\leq 0.5^\circ$, Motion-monitoring accuracy ≤ 0.5 mm / $\leq 0.5^\circ$.	Deleted
	160.The system should have provision for audio/visual coaching apparatus to detect the deviation outside the set tolerance which also helps the patient to follow optimal breathing pattern. System shall provide guidance for correcting patient posture, such as chin / arm position for better improved positioning.	Deleted
	161.The optical scanning system should support DIBH and 4D CT imaging acquisition and should be installed both in the CT room and treatment room.	Deleted
	162.The gating system should be capable of prospectively gated and retrospectively gated imaging and treatment delivery.	Deleted
	163 .The system should comply with AAPM TG-302 and ESTRO ACROP guidelines for SGRT commissioning. All the necessary QA devices and phantoms required for commissioning, calibration, daily	Deleted

Tender Page & Para	TENDER SPECIFICATION	Read As
	QA and validation tests for clinical implementation of the above systems should be provided	
Pg 51 Point 174	It should have external beam and brachytherapy dose accumulation. (This specification is required but in case it is not available with the vendor then third party solution can be provided.)	Deleted
Pg 51 Added Para:	Vendor shall provide complete Offline Adaptive Radiotherapy solutions which includes -Dose Deformation & Dose Accumulation, Synthetic CT Creation without need of Re-CT simulation, Multi-Vendor Contouring Tool, BED and EQD2 tools.	Vendor shall provide complete Offline Adaptive Radiotherapy solutions which includes -Dose Deformation or dose recalculation, adaptive dose Accumulation , Synthetic CT Creation without need of Re- CT simulation, adaptive Contouring Tool BED and EQD2 or EUD tools.
Pg 53 Point 198	Optional Artificial Intelligence (AI) compatibility preferably with following features: (i) Model based contouring (ii) Scripting (iii) multi criterion optimization	Optional Artificial Intelligence (AI) compatibility preferably with following features: (i) Model based contouring (ii) Scripting (iii) multi criterion optimization with GPU & Real Time Trade-Offs Exploration based optimization.
Pg 53 Point 201	Treatment planning workstations, including dual 27-inch LED/QLED display monitors (resolution- 2560 x 1440 pixels or better), printer, keyboard, mouse with network capability	Treatment planning workstations, including dual 27-inch LED/QLED display monitors, printer, keyboard, mouse with network capability
Pg 53 Point 202	The system shall be integrated with physical connections and networking having optical fibre cabling with existing /upcoming CT Simulator, and Treatment Planning System, dosimetry equipment and hospital PACS . The bidders are strongly advised to visit the site prior to quoting.	The system shall be integrated with physical connections and networking having optical fibre cabling with upcoming CT Simulator, and Treatment Planning System, dosimetry equipment and hospital PACS . The bidders are strongly advised to visit the site prior to quoting.
Pg 53 Point 204	For the purpose of additional requirements in near future ,the vendor shall provide the each unit of both additional TPS and workstations offered which should be valid for upto three years. The same will not be considered for pricing ranking	Deleted

Tender Page & Para	TENDER SPECIFICATION	Read As
Pg 54 Point 218	ii) System shall also have the Radiobiological model-based treatment response evaluation tools such as BED/EQD or TCP and NTCP	ii) System shall also have the Radiobiological model-based treatment response evaluation tools
Pg 55 Point 221	The system shall have latest technology of hardware and software features having vendor recommended specification of the system commercially available at the time of delivery, not minimum specification. Latest version of graphics workstation, atleast 64 GB RAM, Internal HDD of atleast 2TB capacity or more and medical grade display monitor	The system shall have latest technology of hardware and software features having vendor recommended specification of the system commercially available at the time of delivery, not minimum specification. Latest version of graphics workstation, atleast 32 GB RAM or more, Internal HDD of atleast 1 TB capacity or more and medical grade display monitor
Pg 55 Point 226	Either single server or two server (one for data storage and one for image storage) having data storage capacity of atleast 10TB or higher and Three OIS workstations with concurrent licenses shall be provided.	Either single server or two server (one for data storage and one for image storage) having data storage capacity of atleast 8 TB or higher and Three OIS workstations with concurrent licenses shall be provided.
Page 55 ,Point 227	The OIS shall include a secure, remote servers and workstations at least 23-inch monitors, printer, keyboard, mouse with network capability	The OIS shall include a secure, remote access server and workstations atleast 23 inch monitor, printer, keyboard, mouse with network capability.
Pg 69 Point 3	Two no of TPS Server with 128 GB or more RAM . There shall be at 10TB on storage for plan storage in addition to OIS Storage	Two no of TPS Server with 64 GB or more RAM . There shall be atleast 8 TB or more storage for plan storage in addition to OIS Storage
Pg 67	<p>UPTIME GUARANTY (95 %) / PENALTY CLAUSE</p> <ul style="list-style-type: none"> • High Energy Linac: INR 30,000 per day • Penalty will be calculated 6 hours after telephonic/ SMS/ Email information to the vendor. 	<p>UPTIME GUARANTY (95 %) / PENALTY CLAUSE</p> <ul style="list-style-type: none"> • High Energy Linac: INR 30,000 per day • Penalty will be calculated 24 hours after telephonic/ SMS/ Email information to the vendor.

Tender Page & Para	TENDER SPECIFICATION	Read As
Pg 69 Point 2	If any Item/Items of the entire LINAC System which is/are required for the full functioning of the equipment mentioned in specification, but inadvertently missed in specifying in the many terms. The same shall be supplied without additional cost by the L1 Vendor	If any Item/Items of the entire LINAC System which is/are essential for the full functioning of the equipment mentioned in specification, but inadvertently missed in specifying in the many terms. The same shall be supplied without additional cost by the L1 Vendor
Pg 69	Software and Hardware Five Years warranty of all software and hardware and networking and software service agreement till ten years. All software updates should be free of cost.	Software and Hardware Five Years warranty of all software and hardware and networking and software service agreement till ten years. All software updates and upgrades should be free of cost.
	Suggestion By Bidder Turnkey Points:	Added Para : Turnkey Points Bidders are requested to visit the site before furnishing the bids.
	Suggestion By Bidder Turnkey Points:	Added Para : Turnkey Points Bidders are requested to visit the site before furnishing the bids and collect the site layout from consignee/HLL.
Pg 65, Site modification work	The bidder should inspect the proposed site and submit all the detailed structural and architectural drawings and BOQ for the proposed Low--Energy LINAC Centre along with technical bid of the tender.	The bidder should inspect the proposed site and submit all the detailed structural and architectural drawings and BOQ for the proposed High--Energy LINAC Centre along with technical bid of the tender.
	General query	Bidders are requested to visit the site before furnishing the bids and collect the site layout from consignee/HLL.

Tender Page & Para	TENDER SPECIFICATION	Read As
		<p>Added Para Quoted model Should have import/manufacturing license from Central licensing Authority or State licensing authority of CDSCO for the quoted model and copy of valid license should be submitted in line with the prevailing rules/guidelines/circular from CDSCO.</p>
		<p>Added Para 1.quoted model shall be brand new machine and supporting documents in his regards is to furnished. 2. The quoted model and technology should be latest and the same must have been launched on or the after 2013 . If any other model is launched with these technical feature after the model quoted,then latest model has to be given at the same cost . 3. Equipment with better specification than there mentioned will be preferred</p>
		<p>Added Para The Electron Gun , wave guide , beam bending magnet system , X Ray tube and RF system shall have guarantee for 10 Years . Pro rata warranty is not acceptable .</p>

COMMERCIAL AMENDMENT

Tender Para	TENDER SPECIFICATION	Read As
Pg no.32	<p>(15.2)-The warranty shall remain valid for 60 months commencing from first patient treated as per AERB norms with a regular update of newer technology as and when evolved followed by a CMC for a period of 5 (Five) Years for all the equipment after the goods or any portion thereof as the case may be, have been delivered to the final destination and installed and commissioned at the final destination and accepted by the purchaser/ consignee in terms of the....</p> <ul style="list-style-type: none"> - Plastic & Glass Parts against any manufacturing defects. - Printers and images including laser and thermal printers with all parts - All Kinds od painting,Civil 	<p>(15.2)-The warranty shall remain valid for 60 months commencing from first patient treated as per AERB norms with a regular update of newer technology as and when evolved followed by a CMC for a period of 10 (Ten) Years for all the equipment after the goods or any portion thereof as the case may be, have been delivered to the final destination and installed and commissioned at the final destination and accepted by the purchaser/ consignee in terms of the contract unless specified otherwise in the SCC</p>
Page 67	<p>UPTIME GUARANTY (95 %) / PENALTY CLAUSE</p> <ul style="list-style-type: none"> • High Energy Linac: INR 30,000 per day • Penalty will be calculated 6 hours after telephonic/ SMS/ Email information to the vendor. 	<p>UPTIME GUARANTY (95 %) / PENALTY CLAUSE</p> <ul style="list-style-type: none"> • High Energy Linac: INR 30,000 per day • Penalty will be calculated 24 hours after telephonic/ SMS/ Email information to the vendor.
Page 14	<p>13.5.3 Customs Duty:</p> <p>The Purchaser will pay/reimburse the Customs duty wherever applicable upon submission of documentary evidence.</p>	<p>13.5.3 Customs Duty:</p> <p>The Purchaser will reimburse the Customs duty wherever applicable upon submission of documentary evidence.</p>
Page 99	<p>Clause.6. Fall Clause</p> <p>The BIDDER undertakes that it has not supplied/is not supplying similar product/systems or subsystems OR providing similar services at a price / charge lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or PSU and if it is found any stage that similar product/systems or sub systems was supplied by the BIDDER to any to the Ministry/Department of the</p>	<p>Clause.6. Fall Clause</p> <p>The BIDDER undertakes that it has not supplied/is not supplying identical product/systems or subsystems at a price / charge lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or PSU and if it is found any stage that identical product/systems or</p>

Tender Para	TENDER SPECIFICATION	Read As
	<p>Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to HITES, if the contract has already been concluded.</p>	<p>sub systems was supplied by the BIDDER to any to the Ministry/Department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to HITES, if the contract has already been concluded.</p>
<p>Clause 30.2 Resolution of disputes Pg 39.</p>	<p>If the parties fail to resolve their dispute or difference by such mutual consultation within twenty-one days of its occurrence, then, unless otherwise provided in the SCC, either the Purchaser/Consignee or the supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided the applicable arbitration procedure will be as per the Arbitration and Conciliation Act, 1996 of India or amendments thereof. In the case of a dispute or difference arising between the Purchaser/Consignee and a domestic Supplier relating to any matter arising out of or connected with the contract, such dispute or difference shall be referred to the sole arbitrator appointed by CEO (HITES). The award of the arbitrator shall be final and binding on the parties to the contract subject to the provision that the Arbitrator shall give reasoned award in case the value of claim in reference exceeds Rupees One lakhs (Rs. 1,00,000/-)</p>	<p>If the parties fail to resolve their dispute or difference by such mutual consultation within twenty-one days of its occurrence, then, unless otherwise provided in the SCC, either the Purchaser/buyer or the supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided the applicable arbitration procedure will be as per the Arbitration and Conciliation Act, 1996 of India.</p> <p>In the case of a dispute or difference arising between the Purchaser/buyer and a domestic Supplier relating to any matter arising out of or connected with the contract, such dispute or difference shall be referred to the sole arbitration to be appointed by the Purchaser in consultation with supplier. The award of the arbitrator shall be final and binding on the parties to the contract subject to the provision that the Arbitrator shall give reasoned award in case the value of claim in</p>

Tender Para	TENDER SPECIFICATION	Read As
		reference exceeds Rupees One lakh (Rs. 1,00,000/-).

All other contents of the tender enquiry including terms & conditions remain unaltered.

Note:

1. TC compliance sheet is being uploaded on CPP Portal for necessary actions of interested Bidders.
2. Price Bid Format is being uploaded on CPP Portal for necessary actions of interested Bidders.
3. EMD should be valid for 775 days from Techno – Commercial Bid opening date. In reference to the extension of bid opening date, participating bidders, who had submitted or are submitting their Bid security/EMD in the form of Bank Guarantee (BG) or FDR are instructed to extend the validity of their BG/FDR accordingly, i.e. required validity of EMD is to be kept in line with the extended bid opening date.
4. Prospective Bidders are also advised to check the website regularly prior to the closing date and time of online submission of bids.