Amendment -10, dated 14.08.2019 IFB no. HSCC/LHMC/ Equipment/01 dt. 23.03.2019

Procurement of Medical Equipment on behalf of the Director, Lady Harding Medical College & Hospital (LHMC), New Delhi:

- 1. High Energy Linear Accelerator
- 2. Wide Bore CT Simulator
- 3. High Dose Rate Brachytherapy System

S. N.	Specifications as per the tender	Request for amendment	Clarification/Response	Decision
	Technical Specification			
1.1	CT Scanner system The system should be of latest slipring technology allowing acquisition of 16 slices per rotation with true isotropic volume acquisition and sub millimeter resolution of an at least 0.625mm or less. The quoted model must have AERB type approval/NOC at the time of bid submission.	CT Scanner system The system should be of latest slip-ring technology allowing acquisition of 16 slices per rotation with true isotropic volume acquisition and sub millimeter resolution of an at least 0.75mm or less. The quoted model must have AERB type approval/NOC at the time of bid submission.	We request you to make the sub mm slice to 0.75mm is helpful in processing less slices while doing a contouring and also 0.75mm is having similar resolution like 0.625mm. Thinner slice is not a parameter of image quality it just that you will get a little bit more slice. In actual , Image quality or resolution depend on other parameter like : Focal spot size of the tube, (we have a special protocol of High resolution which we can use up to 60cm FOV,), Detector(we use world leading detector and our premium detector Elite with this equipment) and also we have other kernel available to increase the overall Quality of the CT scanner.	No change
2.1	X-RAY GENERATOR: 2.1 High frequency x-ray generator with an output of at least 80 KW or more to support continuous and sustained operation. Please give details.	2.1 High frequency x-ray generator with an output of at <u>least 60 KW</u> or more to support continuous and sustained operation. Please give details	Every company is having different parameter for Generator, X-ray tube and Detector. We have max mA range of 500mA and Generator capacity of 60kW that is more than enough for any CT Simulator for perform any clinical case. We have More than 550+ CT simulator installed globally of our big bore CT & nearly 10 million CT simulation has been done globally on our CT Sim, but we have not came across any single case where customer has face challenge on our CT simulator due to generator capacity and mA range. Philips Offers Unique 4th Generation iDOSE 4 Iterative technique and O-MAR(Metal artifact reduction technique) with our BBCT. Philips' iDose4 iterative reconstruction technique includes a dynamic frequency noise removal technique that lowers overall noise while closely preserving	No change

			the desired frequency spectrum characteristic of a corresponding routine-dose while providing dynamic Dose reduction. Philips BBCT 500mA with iDOSE 4th Generation iterative technique helps in maintaining natural appearance of image, Robust artifact reduction & improve image quality.	
3.1	X-Ray Tube 3.1 Tube current: 30-600 mA or more. The mA rating at peak generator power must be mention.	X-Ray Tube 3.1 Tube current: 30-600 mA or more. The mA rating at peak generator power must be mention.	Every company is having different parameter for Generator, X-ray tube and Detector . We have max mA range of 500mA and Generator capacity of 60kW that is more than enough for any CT Simulator for perform any clinical case. We have More than 550+ CT simulator installed globally of our big bore CT & nearly 10 million CT simulation has been done globally on our CT Sim, but we have not came across any single case where customer has face challenge on our CT simulator due to generator capacity and mA range. Philips Offers Unique 4th Generation iDOSE 4 Iterative technique and O-MAR (Metal artifact reduction technique) with our BBCT . Philips' iDose4 iterative reconstruction technique includes a dynamic frequency noise removal technique that lowers overall noise while closely preserving the desired frequency spectrum characteristic of a	No change
			corresponding routine-dose while providing dynamic Dose reduction. Philips BBCT 500mA with iDOSE 4th Generation iterative technique helps in maintaining natural appearance of image, Robust artifact reduction & improve image quality.	
	X-ray tube :	3.4 The x-ray tube should have anode	We request you to make it 7 MHU or more for better heat	No change
3.4	The x-ray tube should have anode heat storage capacity of 5 MHU or more	heat storage capacity of 7 MHU or more	dissipation which will ensure better tube life and less wear n tear in tube sue to anode melting or damage in tube cabinet due to excessive heat produced during a procedure.	
6.1	CT Scanning Parameters 6.1 The slice thickness should be users selectable which range from 0.625 mm to 10 mm.	CT Scanning Parameters 6.1 The slice thickness should be users selectable which range from 0.75 mm to 10 mm.	We request you to make the sub mm slice to 0.75mm is helpful in processing less slices while doing a contouring and also 0.75mm is having similar resolution like 0.625mm. Thinner slice is not a parameter of image quality it just that you will get a little bit more slice. In actual , Image quality or resolution depend on other parameter like : Focal spot size of the tube, (we have a special protocol of High resolution which we can use up to 60cm FOV,), Detector(we use world leading	No change

			detector and our premium detector Elite with this equipment) and also we have other kernel available to increase the overall Quality of the CT scanner.	
22.2	UPS: On line UPS with MF batteries for the backup of the entire system for at least 45 minutes	On line UPS with MF batteries for the backup of the entire system for at least 30 minutes.	30 min UPS is enough to keep running your system without interruption and easily available with all the supply vendors.	No change
22.5	Pressure Injector: CT Compatible pressure injector with remote console 100 disposable syringes.		Please specify whether you required single head or dual head injector.	No change

All other terms and conditions of the tender enquiry document shall remain unchanged. Prospective bidders are advised to regularly visit HSCC website/ CPP as corrigendum /amendments etc. if any, will be notified on this portal only, no separate advertisement will published in the news papers.

Sr. CGM-I, HSCC (I) Ltd For & on behalf of LHMC, New Delhi