SUPPLEMENTAL / BID BULLETIN

UNIVERSITY OF THE PHILIPPINES MANILA
The Health Sciences Center
Bids and Awards Committee 1
Taft Avenue, Manila
Trunk Line No. 8554-8400 Local 3014/3015

BID BULLETIN NO. 2021-110

for the Supply, Delivery, Installation, Testing and Commissioning of Brand-New Linear Accelerator System with Related Specialty Works for Philippine General Hospital Cancer Institute

29 October 2021

Pursuant to Section 22.5.1 of the 2016 Revised Implementing Rules and Regulations of Republic Act No. 9184, the Bids and Awards Committee 1 is issuing this bid bulletin to modify or amend the following items in the Bid Documents in response to / to address the request / clarification of the prospective bidder/s who attended the pre-bid conference held on 15 October 2021:

1. *The following should be modified in the Bid Data Sheet, Schedule of Requirements, Technical Specifications as:*

Item No.	From	To
SCOPE OF WORK		
II.C	Fully integrated MV CBCT Imaging System	Fully integrated MV ~~CB~~CT Imaging System
II.D	Fully integrated kV CBCT Imaging System	Fully integrated kV ~~CB~~CT Imaging System
II.L	Provision for Future Remote Access to OIS and TPS	Provision for ~~Future~~ Remote Access to OIS and TPS
DESIGN PHASE		
A.1	The winning bidder shall prepare and submit signed and sealed complete Engineering Design Plans in 20" x 30" size of 3 copies, Scope of Works and Specifications of the Construction of Bunker and Facilities based on the PGH issued Schematic Architectural Plans and Engineering Brief Description of Works to be approved by to be approved by the OETS, the Chair of the Department of Radiology, the Deputy Director for Administration, and the Director.	The winning bidder shall prepare and submit signed and sealed complete Engineering Design Plans in 20" x 30" size of 3 copies, Scope of Works and Specifications of the Construction of Bunker and Facilities based on the PGH issued Schematic Architectural Plans and Engineering Brief Description of Works ~~to be approved by~~ to be approved by the OETS, the Chair of the Department of Radiology, the Deputy Director for Administration, and the Director.
CONSTRUCTION PHASE		
B.3.c.i	Construction of the linear accelerator bunker with appropriate radiation shielding will follow IAEA or FDA-DOH specifications for a 6MV FFF stereotactic capability with a maximum	Construction of the linear accelerator bunker with appropriate radiation shielding will follow IAEA or FDA-DOH specifications for a 6MV FFF stereotactic capability with a ~~maximum~~

Item No.	From	To
	dose rate of 800 MU/min as required by the IAEA standards.	dose rate of ***at least*** 800 MU/min as required by the IAEA standards.
B.3.c.iii	Bunker room dimensions shall be able to accommodate a machine with 6MV & 10 MV photon energy LINAC machine requirements.	Bunker room ~~dimensions~~ shall ~~be able to accommodate a machine with 6MV & 10 MV photon energy LINAC machine requirements~~ ***have a minimum inner dimension of 7(L) x 6.2(W) m2, excluding the maze.***
B.3.c.vi	The water chiller shall be connected to the existing water system of the hospital, with its accompanying water supply and plumbing.	The water chiller shall be connected to the existing water system of the hospital, with its accompanying water supply and plumbing***, if applicable***.
B.3.c.x.5	Electrical Room Provision for the main circuit breaker, electrical line and LINAC machine's air compressor.	Electrical Room Provision for the main circuit breaker, electrical line and LINAC machine's air compressor ***(if air compressor is required by the machine)***.
SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF BRAND-NEW LINEAR ACCELERATOR SYSTEM		
B.11	Multileaf Collimators (MLC): a. Number of leaves: At least 110 MLC leaves b. Leaf width resolution: not greater than 6.5 mm c. Maximum leaf extend position over the isocenter: at least 14 cm d. Maximum leaf retract position over the isocenter: at least 14 cm e. Leaf over travel: at least 14cm f. Maximum leaf travel speed: at least 5 cm/s g. Leaf beam transmission: ≤0.5% h. Leaf end position accuracy: ± 1mm i. Leaf end position repeatability: ± 1mm j. MLC control must be fully integrated with the digital control system; if not, an interface between MLC and existing network system shall be provided	Multileaf Collimators (MLC): a. ~~Number of leaves: At least 110 MLC leaves~~ ***Functionality specifications – equivalent to the users' bid specifications*** b. Leaf width resolution: not greater than 6.5 mm ~~c. Maximum leaf extend position over the isocenter: at least 14 cm~~ ~~d. Maximum leaf retract position over the isocenter: at least 14 cm~~ e. ~~Leaf over travel: at least 14cm~~ f. Maximum leaf travel speed: at least 5 cm/s g. Leaf beam transmission: ≤0.5% h. Leaf end position accuracy: ± 1mm i. Leaf end position repeatability: ± 1mm j. MLC control must be fully integrated with the digital control system; if not, an interface between MLC and existing network system shall be provided
B.12.c	Couch weight limit (supporting patient weight): at least 220 kilograms	Couch weight limit (supporting patient weight): at least ~~220~~ ***200*** kilograms
B.12.d.i	Lateral: ±20cm	Lateral: ~~±20cm~~ ***±30mm***
B.14.a	MV Cone Beam Computed Tomography (MV CBCT)	MV ~~Cone Beam~~ Computed Tomography (MV ~~CB~~CT)
B.14.b	kV Cone Beam Computed Tomography (kV CBCT)	kV ~~Cone Beam~~ Computed Tomography (kV ~~CB~~CT)
C	Fully integrated MV CBCT Imaging System	Fully integrated MV ~~CB~~CT Imaging System
C.4	MV CBCT reconstructed volume length: at least 25 cm	MV ~~CB~~CT reconstructed volume length: at least 25 cm
C.5	MV CBCT scan diameter: at least 25 cm	MV ~~CB~~CT scan diameter: at least 25 cm
C.6	MV CBCT spatial linearity accuracy: ± 0.5mm	MV ~~CB~~CT spatial linearity accuracy: ± 0.5mm

Item No.	From	To
C.8	Dose per MV CBCT acquisition: maximum of 5 MU	Dose per MV ~~CB~~CT acquisition: maximum of 5 MU
C.13		***Or equivalent MV CT that can produce the same result as with the end-users' bid specifications***
D	Fully integrated kV CBCT Imaging System	Fully integrated kV ~~CB~~CT Imaging System
D.9	Has kV CBCT mode for different anatomical programs (i.e. Head, Breast, Thorax, Pelvis)	Has kV ~~CB~~CT mode for different anatomical programs (i.e. Head, Breast, Thorax, Pelvis)
E.1.c.i	Head rests, with standard sizes of A-F with comprehensive range of neck angulations	***One (1) set of h***ead rests, with ***six (6) different sizes/*** ~~standard sizes of A-F with comprehensive range of~~ neck angulations ***(A-F)***
E.1.d.ii	Large bite blocks	~~Large~~ ***Small*** bite blocks
E.2.b.	Wing board: carbon fiber	Wing board: ~~carbon fiber~~ ***black ABS material***
E.4.e.	Calipers: stainless steel with parallel arms and calibrated in cm	Calipers: ~~stainless steel~~ with parallel arms and calibrated in cm
F.2.j.	Has Wi-Fi card for wireless connectivity	~~Has Wi-Fi card for wireless connectivity~~
G.3.c	Includes advanced dose calculation algorithms for Monte Carlo equivalent photon calculation (such as Monte Carlo, AcurosXB enhancement) and Monte Carlo algorithm for electron.	Includes advanced dose calculation algorithms for Monte Carlo equivalent photon calculation (such as Monte Carlo, AcurosXB enhancement) ~~and Monte Carlo algorithm for electron~~ ***if applicable***.
I.1	Leaded door (borated polyethylene) for the LINAC bunker	Leaded ***bunker*** door ~~(borated polyethylene) for the LINAC bunker~~ ***should comply with the shielding requirements of the machine offered.***
I.6	Water chillers; specifications as prescribed by the manufacturer	Water chillers; specifications as prescribed by the manufacturer***, if applicable to the machine***
J.1.a.i	3D mechanics with scanning volume of not smaller than 40 cm x 65 cm x 330°	~~3D mechanics with scanning volume of not smaller than 40 cm x 65 cm x 330°~~ ***Beam data requirements by the TPS to be delivered by the winning bidder.***
J.1.a.iii	Can fit inside the Linear Accelerator Bore	Can fit ~~inside~~ ***within*** the Linear Accelerator ~~Bore~~ ***patient clearance with the diameter of 85cm***
J.1.a.vii	Control unit with built in two channel electrometer and with TNC connector	Control unit with built in ~~two channel~~ electrometer ~~and with TNC connector~~
J.1.a.ix	Set of detector holders for use of Farmer, parallel plate and field/reference Ionization Chambers (IC)	Set of detector holders for ~~use of Farmer, parallel plate and field/reference Ionization Chambers (IC)~~ ***the dosimeter supplied by the winning bidder.***
J.2	Advanced acquisition and analysis software with laptop computer system	Advanced acquisition and analysis software with laptop computer system, ***or equivalent***
J.3	Farmer Type Ion Chamber	Farmer Type Ion Chamber ***or equivalent***
J.16	Chamber matrix for measurement of radiotherapy beam	Chamber matrix for measurement of radiotherapy beam ***or equivalent***
J.18	Water phantom for absolute dose measurement	Water phantom for absolute dose measurement ***or equivalent***

Item No.	From	To
L.	Provision for Future Remote Access to OIS and TPS Provision for future remote access to the Oncology Information System and Treatment Planning System with full functionality from any location on multiple devices for 25 users, as provided by a third-party supplier authorized by the distributor, in accordance with the Republic Act 10173/Data Privacy Act	Provision for ~~Future~~ Remote Access to OIS and TPS Provision for ~~future~~ remote access to the Oncology Information System and Treatment Planning System with full functionality from ~~any location on multiple devices for 25 users,~~ ***within the University of the Philippines Manila area,*** as provided by a third-party supplier authorized by the distributor, in accordance with the Republic Act 10173/Data Privacy Act
TERMS AND CONDITIONS		
D.1.b	Fully integrated MV CBCT Imaging System	Fully integrated MV ~~CB~~CT Imaging System
D.1.c	Fully integrated kV CBCT Imaging System	Fully integrated kV ~~CB~~CT Imaging System
D.8	Manufacturer's Office in the USA, Canada, Western Europe, and Japan	Manufacturer's Office in the USA, Canada, Western Europe, ~~and~~ ***or*** Japan
D.13	Certification issued by the equipment manufacturer that the medical LINAC in its present condition is compliant with the performance and safety requirements of the International Atomic Energy Agency and the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC)	Certification issued by the equipment manufacturer that the medical LINAC in its present condition is compliant with the performance and safety requirements of the International Atomic Energy Agency ~~and~~ ***or*** the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC)
E.2	Fully integrated MV CBCT Imaging System	Fully integrated MV ~~CB~~CT Imaging System
E.3	Fully integrated kV CBCT Imaging System	Fully integrated kV ~~CB~~CT Imaging System
I.		***All developments and concerns on civil works shall be coordinated the PGH-assigned Project Engineer***

2. *Clarification/s:*

Supplier's Queries	End-User's Response
D. Fully Integrated KV CBCT Imaging System The supplier is requesting to remove this provision due to budget constraints.	Advantages of kV CBCT include higher image quality (which we can use for SBRT), no additional dose from MV energy (if using MV CT all the time), and longer LINAC target lifespan
F.4. At least five (5) year warranty on all parts and service of all equipment purchased (to start after the performance and acceptance testing)… The supplier is requesting to change the warranty to two (2) years.	The end user prefers a five (5)-year warranty period.
E.3.b. Abdomen and pelvis immobilization system with abdomen and pelvis baseplate: carbon fiber material	The end user prefers carbon fiber material for the baseplate

Supplier's Queries	End-User's Response
The supplier is requesting to amend to carbon fiber OR ABS material, as CIVCO baseplate is Black ABS material and considered MRI-safe.	
The supplier is requesting for the use of a small bunker, instead of a big bunker, that will comply with the requirements of the machine for this bidding.	The end user prefers a big bunker with minimum inner dimensions of 7 (L) x 6.2 (W) m2 excluding the maze, to fit a large LINAC machine in the future. This is also to allot space for other life-saving equipment inside the bunker.
II. D. Fully integrated kV CBCT Imaging System The supplier is requesting to make this optional, if possible	Advantages of kV CBCT include higher image quality (which we can use for SBRT), no additional dose from MV energy (if using MV CT all the time), and longer LINAC target lifespan.
I. B.3.c.viii. There will be installation of water sprinklers, smoke detectors, fire alarm system, proper signage and fire exits & clearances as required by the Bureau of Fire Protection. Room labels will be installed. The supplier is clarifying the need to install a fire protection system or just provide fire extinguishers.	As recommended by OETS, it may be any clear agent or any fire protection suitable for LINAC/Bunker room, such as fire extinguisher. Please refer to II.K.2.
I. B.3.c.ix. Establishment of connection to the Brachytherapy CT Scan & 16 Slice Somatom Emotion located in Cancer Institute Building. The supplier is clarifying the need to connect whether to the Brachytherapy system or to the CT-Scan used by the Brachytherapy system.	The "brachytherapy CT scan" pertains to the future CT simulation machine which will be placed near the brachytherapy suite. Establishment of connection is to the machine, not the brachytherapy system.
I. B.3.c.xii. Provision of appropriate fire protection system The supplier is clarifying the need to install a fire protection system or just provide fire extinguishers.	As recommended by OETS, it may be any clear agent or any fire protection suitable for LINAC/Bunker room, such as fire extinguisher. Please refer to II.K.2.
II.B.9.a. Gantry Rotation Range: minimum of 0 ± 185° The supplier is requesting to change to a rotating gantry, if possible.	There is no need for such modification as the supplier's technical specifications already comply with the specified provision.
II.B.14.b. kV Cone Beam Computed Tomography (kV CBCT) The supplier is requesting to make this optional due to budget constraints, if possible.	Advantages of kV CBCT include higher image quality (which we can use for SBRT), no additional dose from MV energy (if using MV CT all the time), and longer LINAC target lifespan.
II.D. Fully Integrated kV CBCT Imaging System 13. Able to do portal dosimetry to record intensity patterns of IMRT fields for pre-treatment quality assurance of IMRT planning and delivery c. Able to do continuous imaging in single, multiple or movie-loop mode d. Includes image analysis software for field fluence evaluation and analysis	Advantages of kV CBCT include higher image quality (which we can use for SBRT), no additional dose from MV energy (if using MV CT all the time), and longer LINAC target lifespan.

Supplier's Queries	End-User's Response
The supplier is requesting to remove this item if possible or put it as optional for future upgrade.	
II.G.3.f. Capable of multi-criteria optimization The supplier is requesting to remove this item if possible or put as optional for future upgrade due to budget constraints.	This specification is needed for faster and more efficient treatment planning.
II.G.3.h. Capable of adaptive treatment planning The supplier is requesting to remove this item if possible or put as optional for future upgrade due to budget constraints.	This specification is needed to ensure optimal delivery of radiotherapy to patients, as it compensates for anatomical differences that may occur during the course of treatment.
II.G.5. Quality Assurance a. Able to do portal dosimetry calculation for VMAT/RapidArc/Helical and IMRT fields on electronic portal imaging device/MV system b. Supports In-Vivo Estimation Dosimetry for IMRT/VMAT/RapidArc/Helical treatment plans iii. Can provide DVH comparison of actual delivered dose to planned delivered dose The supplier is requesting to remove this item if possible or put as optional for future upgrade due to budget constraints.	This specification is needed for quality assurance of patients' treatment plans.
II.G.12. Import filters include image transfer via LAN, CD- ROM, film scanner, digitizer for non-CT based patients (brachytherapy films and irregular images) and dosimetric beam data from all brand name water phantoms (e.g. Sun Nuclear, IBA, PTW, etc.) The supplier is requesting to remove this item if possible or put as optional for future upgrade due to budget constraints.	This specification is part of the function of the treatment planning system in filtering import images and data transfer.
II.J.11. Radiotherapy Area Monitor The supplier is clarifying if required or optional, not typically supplied for linacs according to the supplier.	This is a required specification.
II.J.12. Ready Pack radiotherapy verification films The supplier is requesting to remove this requirement if possible. Not required by the system being offered by the supplier.	The end user prefers to have the option of doing mechanical QA, that's not reliant on digital QA tools.
II.J.15. 4D Patient Plan Verification Dosimetry System The supplier is requesting to remove this item or put as optional for future upgrade due to budget constraints	The end user would like a third-party patient-specific QA for dose verification of treatment plans generated by the winning bidder's machine.
II.J.19. Independent Monitor Units (MU) Check Software for accurate and independent	MU Check Software can be a third-party item.

Supplier's Queries	End-User's Response
verification of monitor units, dose, and overall validity of standard, IMRT, VMAT/RapidArc/Helical The supplier is requesting to ask the supplier to specify the included dosimetry system.	
B. 3. Dosimetry System All chambers and electrometer must be of the same connector design with the existing dosimetry The supplier is requesting to ask the supplier to specify the included dosimetry system.	The connector design should be the same, if applicable.
F.7.c. Notarized undertaking from the supplier that they will provide training for five (5) radiation oncologists and two (2) medical physicists in USA, Canada, or Western Europe for at least 3 days; training/s shall be provided no later than the duration of the warranty period. Permit to travel and to conduct training must be approved by public health officials of both countries. The supplier is requesting to conduct an online training, depending on the pandemic situation, if possible or to clarify if a training center in Asia is possible.	The training for the radiation oncologists and medical physicists may be provided within the warranty period.
F. 11. One manufacturer application specialist/physicist assistance for one month during the commissioning The supplier is requesting to change to certified application specialist since system is pre-commissioned.	This can also be done through virtual/online manufacturer application specialist/physicist assistance for the duration of the commissioning.
F.12. Free upgrades of all software (i.e. console version, TPS version) shall be included in the preventive maintenance of the machine by the supplier. The supplier is requesting to change to "updates" instead of upgrade.	The end user prefers 'upgrades.'
The supplier would like to clarify if they need to show exact wordings, as reflected in the PGH technical specifications, on their submitted references. They are further clarifying if they need to indicate the page number, highlight the statement in the page and put a tab on their reference document.	Based on previous LINAC projects, it is the Technical Working Group who decides.
I.B.3.c.x.6 Patient Waiting Area Will be able to accommodate a seating capacity of at least 30 at a given time with space for storage and transport of hospital beds and wheelchairs Provision for four (4) four-seater gang chairs The supplier is requesting to have the location/position of the 4-seater gang chairs	According to OETS, gang chairs are movable items.

Supplier's Queries	End-User's Response
that will accommodate at least 30 patients at a given time on the layout.	
I.B.3.c.xii. Provision of appropriate fire protection system The supplier would like to clarify if they are to supply a fire extinguisher or a sprinkler system?	As recommended by OETS, it should be a suitable fire protection for LINAC/bunker room approved by NFPA.
I.B.3.d. Relocation Works and Provision of Temporary Utilities As there are no existing as-built plans for the site, in the event that there are pipes and electrical lines in the preferred relocation areas, the supplier is inquiring about the recommended action for the winning bidder as the cost for these possible hidden works are not accounted for by the bid.	OETS recommends to have a joint inspection with the suppliers/bidders.
I.B.3.f.ii. Centralized air conditioning system within the facility, as well as separate back-up individual air- conditioners as cited in II.K.1., will be provided. The supplier would like to clarify if room 104 will be included in the centralized air conditioning system? We noticed that room 104 is far from the main area.	OETS recommends that for room 104, it is recommended to have a separate aircon with back-up unit.
II.B.8. Dose Rate and Beam Stability 6 MV Photon: Maximum dose rate of at least 800 MU/min at Dmax The supplier is requesting to amend the provision to '8. Dose Rate and Beam Stability 6 MV Photon: Maximum dose rate of 600 MU/min at Dmax for flattened beams and 6 MV FFF with dose rate of at least 800 MU/min at Dmax for unflattened beams.'	The request of the supplier is already covered in the end user's specification. Thus, there is no need for such modification.
II.B.9.d. Gantry Maximum Rotational Speed: at least 4.0 RPM The supplier would like to clarify if they are allowed to offer a C-arm LINAC? They are also requesting to amend the provision to to 'd. Gantry Maximum Rotational Speed: at least 4.0 RPM for ring type linac, and at least 1.0 RPM for c-arm linac.' If not allowed to offer a C-arm LINAC, the supplier is inquiring about the targeted clinical benefit to be achieved with the said requirement.	The end user prefers a ring-type/O-arm LINAC. As part of a training institution, our Division wants to acquire different types of LINAC machines. We already have a two C-arm LINACS: one medium-range, workhorse LINAC and ongoing installation of another SRS- and SBRT-capable, high-end LINAC machine. The end user also wants to optimize the treatment advantage of ring-type machines.
II.B.10. Bore size: at least 85 cm in diameter The supplier is requesting to amend the provision to '10. Bore size: at least 85 cm in diameter for ring type linac, and at least 90 cm patient clearance for c-arm linac.'	As previously mentioned, the end user prefers a ring-type/O-arm LINAC.
II.B.11.a. Number of leaves: At least 110 MLC leaves	This does not qualify as a downgrade if we're considering specifications of a ring-type/O-

Supplier's Queries	End-User's Response
The supplier would like to clarify if this provision is a downgrading from the previous LINAC of PGH which required a 120 leaf MLC.	arm LINAC which has a different technology from a C-arm LINAC.
II.B.12.d.iii. Longitudinal: at least +160cm The supplier would like to clarify the clinical benefit intended for the said requirement. They are further requesting to amend the provision to 'iii. Longitudinal: at least +100cm'. Their proposed unit has a longitudinal movement of at least +100cm.	The specification is specific for a ring-type/O-arm LINAC, which is the preferred equipment of the end user.
II.C. Fully Integrated MV CBCT Imaging System The supplier is requesting to amend the provision to 'C. Fully integrated MV CBCT Imaging System OR MV Imaging Panel.' According to the supplier, their system does not have an MV CBCT, but they have an EPID as an MV imaging panel. The supplier would also like to clarify the clinical benefit intended to be achieved by the said requirement (MV CBCT).	The end user requires an MV CT imaging system since we prefer a ring-type/O-arm LINAC.
II.D.1. Maximum reconstruction scan range: at least 38 cm The supplier would like to have more details on this requirement and is inquiring about the definition of maximum reconstruction scan range. They are also inquiring about the clinical benefit intended to be achieved by said requirement.	The specification is specific for a ring-type/O-arm LINAC, which is the preferred equipment of the end user.
II.D.2. Maximum scan diameter: at least 48 cm The supplier would like to have more details on this requirement and is inquiring about the definition of maximum scan diameter. They are also inquiring about the clinical benefit intended to be achieved by said requirement.	The specification is specific for a ring-type/O-arm LINAC, which is the preferred equipment of the end user.
II.D.3. Spatial linearity accuracy: ± 0.5mm The supplier would like to have more details on this requirement.	The specification is specific for a ring-type/O-arm LINAC, which is the preferred equipment of the end user.
II.D.5. Hounsfield Uniformity: ±50 HU The supplier would like to have more details on this requirement.	The specification is specific for a ring-type/O-arm LINAC, which is the preferred equipment of the end user.
II.D.7. Acquisition exposure time range: 10 - 25 ms The supplier is requesting to amend the provision to 'Acquisition exposure time range: 10-25 ms OR Max mas at 500mas.' They are also inquiring about the clinical benefit intended to be achieved by said requirement.	The specification is specific for a ring-type/O-arm LINAC, which is the preferred equipment of the end user.
II.D.10.b. TPS configuration and connectivity (2D, 3D, and 4D systems)	The specification is specific for a ring-type/O-arm LINAC, which is the preferred equipment of the end user.

Supplier's Queries	End-User's Response
The supplier would like to have more details on this requirement. Their TPS does not require 2D technique. They are also inquiring about the end result to be achieved by said requirement.	
II.G.3.e. Can utilize graphics processing unit for plan optimization The supplier is inquiring about the end result to be achieved by said requirement. For their system, the GPU utilization is available only for proton therapy.	Utilizing the graphics processing unit allows for faster plan optimization.
II.G.9.a. Winning bidder shall provide connectivity to the offered treatment planning system (TPS). It shall be connected to the existing OIS, and be able to store contoured DICOM images and convert or translate it to an acceptable file for treatment planning on the existing and new TPS storage capacity. The supplier would like to clarify if their interpretation is correct: 1. The new TPS must be able connect with existing OIS. 2. The new TPS must be able to store contoured DICOM images. 3. The new TPS must be able to push the DICOM file of contoured images to the existing TPS for re-planning. The supplier would also like to have more details on what is expected with the new TPS storage capacity.	Yes, the interpretations of the supplier are correct.
II.G.9.b. Computer storage capacity shall be able to store at least 4000 patient treatment data. The supplier would like to clarify if their interpretation is correct: 1. The new TPS must be able to store at least 4000 patient treatment data.	Yes, the interpretation of the supplier is correct.
II.G.9.c. Performance of beam data gathering and commissioning of the existing LINAC machine shall comply with the beam data requirements of the new TPS to be done by the in-house medical physicist. The supplier would like to clarify if their interpretation is correct: 1. The new TPS must have a beam model of the existing Linac. 2. The new TPS must be able to plan for the existing linac.	Yes, the interpretation of the supplier is correct.
II.G.9.d. Beam data gathering of the new LINAC machine shall comply with the beam data requirements of the existing TPS to be done by the in-house medical physicist.	Yes, the interpretation of the supplier is correct.

Supplier's Queries	End-User's Response
The supplier would like to clarify if their interpretation is correct: 1. The requirement is only for beam data gathering on the new LINAC. Beam modelling for the existing TPS is not part of the requirement, as beam modelling for the existing machine must be required only if the new LINAC is of the same brand as with existing TPS.	
II.J.3.a. Farmer type ionization chamber 0.6 cc with plastic walls, Co-60 build-up cap, waterproof and fully guarded, calibrated in a standards laboratory in terms of absorbed dose to water The supplier is inquiring if they are allowed to provide Farmer chamber with graphite wall material with a protective acrylic cover. They are also inquiring about the output required for the plastic wall requirement.	The Farmer chamber to be provided should have an acrylic wall and graphited with a PMMA protective cover/build-up cap.
II.K.1.b.i.2. Wall-mounted or ceiling-mounted The supplier is inquiring if they are allowed to provide floor mounted unit as this has less risk of leaks compared to wall mounted or ceiling mounted?	The end user prefers a wall-mounted or ceiling-mounted unit to save space as the area is limited.
II.K.12.b.iii.3. Inspiration/Expiration Ratio (Ti:Te) 4:1 to 1:8 The supplier is inquiring about the clinical output intended to be achieved by said requirement.	This is the anesthesia machine specification recommended by the Department of Anesthesiology.
II.K.12.c.ii. Monitor: At least 19-inch high-resolution TFT LCD Color Display; 10-12 channels The supplier is requesting to amend the provision to 'ii. Monitor: 15 inch to 19 inch high resolution TFT LCD Color Display; 10-12 channels.'	This is the anesthesia machine specification recommended by the Department of Anesthesiology.
II.K.12.c.v.7. Control via capacitative touch screen The supplier is requesting to amend the provision to '7) Control via capacitative or resistive touchscreen.'	This is the anesthesia machine specification recommended by the Department of Anesthesiology.
Terms and Conditions B.1. Couch Fully compatible with the existing immobilization devices and accessories The supplier would like to clarify if their interpretation is correct: 1. The immobilization devices depend on the treatment couch of the machine. 2. If the center already has immobilization devices, then it follows that they must be compatible with the existing linac couch, and	The new couch should come along with the lock bars that are fully compatible with the existing immobilization devices and new immobilization devices.

Supplier's Queries	End-User's Response
the existing CT overlay, which is also dependent on linac couch. 3. If the new linac is different from the existing linac it follows that the couch is not the same. 4. If the couch is not the same, then the existing immobilization devices will not be compatible with the new couch.	
B.3.Dosimetry System All chambers and electrometer must be of the same connector design with the existing dosimetry system The supplier is requesting for the list of the existing chambers and electrometer of PGH LINAC 1 so they could provide the correct connecting system?	Existing chambers and electometer Triax BNC (Jack & Plug) [as per sample]
C.1.e. Should be connected with the existing OIS of the LINAC at CI The supplier would like to clarify if their interpretation is correct: The new OIS must be connected to the existing OIS. The supplier is also inquiring what is expected to be achieved with this connectivity.	Yes, the interpretation of the supplier is correct. This is to allow sharing of patient files (e.g. images & contours) for replanning between the machines, in the event that one machine is down.
E.1 to 6. Product presentation in an institution with the same brand and model of the following: 1. Technical Specifications of the Linear Accelerator Machine 2. Fully integrated MV CBCT Imaging System 3. Fully integrated kV CBCT Imaging System 4. Treatment Planning System 5. Immobilization Devices 6. Oncology Information System with Networking, Record and Verify System The supplier would like to clarify if they are to submit a recorded presentation (items 1 to 6) by a personnel of an institution with the same brand and model and if this presentation can be done by different persons from different institution.	Yes, the supplier can submit a recorded presentation of the same brand and same product by different persons and from different institution.
F.7.c. Notarized undertaking from the supplier that they will provide training for five (5) radiation oncologists and two (2) medical physicists in USA, Canada, or Western Europe for at least 3 days; training/s shall be provided no later than the duration of the warranty period. Permit to travel and to conduct training must be approved by public health officials of both countries. The supplier would like to clarify if the requirement means that they are to send 5 ROs and 2 MPs for training in 3 facilities? (one in USA, one in Canada, one in Europe)	The training for the radiation oncologists and medical physicists may be provided within the warranty period.

This shall form an integral part of the Bid Documents.

For the information and guidance of all concerned.

~Sgd.~
Dean LEONARDO R. ESTACIO, Jr., PhD
Chairperson, Bids and Awards Committee 1

Received by the Bidder:

_____
Signature over Printed Name

_____
Name of Company

_____
Date