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Attorneys for Oka Pacific, Inc.

BEFORE THE PUBLIC AUDITOR
PROCUREMENT APPEALS
TERRITORY OF GUAM

IN THE APPEAL OF	**DOCKET NO. OPA PA-18-001**
JMI-EDISON,	**INTERESTED PARTY OKA PACIFIC, INC."S EXHIBITS**
Appellant.	
AND	
GUAM MEMORIAL HOSPITAL AUTHORITY,	
Purchasing Agency.	

A. IFB Technical Specifications (A001-A007)
B. JMI Bid Submittal Re. GE Revolution EVO
C. JMI Bid Submittal Re. Revolution EVO ES Technical Data Coversheet
D. JMI Bid Submittal Re. System Hardware
E. JMI Response #1 to GMHA Inquiry
F. JMI Response #2 to GMHA Inquiry
G. 64 Acquired Slices vs. 32 Acquired Slices (Illustration)
H. CT Scan (Illustration)

Dated this 14th day of March, 2018.

BROOKS CONCEPCION LAW, P.C.
Attorneys for OKA PACIFIC, INC.

By: _____
Georgette Bello Concepcion, Esq.

2-3. TECHNICAL SPECIFICATIONS: The systems should be new, FDA-compliant, state-of-the-art console CT Systems with full digital technology to include all upgradable software, hardware, reporting system, connection peripherals. Vendor must consult with MIS/IT to assure compatibility with GMHA networking/connectivity configuration and unit is preferred to be upgradable as new updates, software and new services becomes available. The scanners should be able to fit within limited space and electrical renovation. Bidders should assess room layouts from diagram provided or onsite visit.

One CT scanner should be cardiac, vascular (CTA, dissections etc.) capable. The other CT scanner should be capable of routine arterial and venous studies for pediatric, adult, and geriatric patients such as brain, body, orthopedic and vascular. Unless otherwise stated, the following are the technical specifications for both scanners:

- The systems should have
  - Scan Time
    - a minimum time for one complete 360-degree rotation of .5 sec or less for routine scanner.
    - Rotation time of cardiac exam should be at .40 sec or less on at cardiac scanner
  - Scanning ability
    - Ability to choose different scan modes: helical, axial, dynamic, live fluoro.
    - The maximum time of one continuous scan on both scanners should be no more than 60 seconds.
    - Low radiation dose protocol availability for pediatrics.
    - Contrast monitoring acquisition ability in real time and auto scan initiation.
    - Scout image acquisition should be able to be interrupted manually.
    - Simultaneously scanning, archiving, post processing, and networking.
    - The speed of Image reconstruction should be at least 20 images or more per second.
    - Industry's highest spatial contrast resolution, or at least 15lp/cm
    - The maximum scan field in the longitudinal direction not less than 1750mm
    - Prerecorded instruction system or option to customize recording

- Gantry
  - Gantry aperture of at least 70cm.
  - Auto positioning laser lights with at least 1mm positioning accuracy
  - A scan field of view of at least 50cm
  - Table movement should be motorized and ability to control movement from the operator console.
  - The width of the table not less than 400mm
  - Gantry should have low voltage slip rings
  - Minimum tilt of 30 degrees on either side, with remote tilt available.
  - Control panels for the user on either side of the gantry for patient positioning.
  - Vendor should identify the number of slices/rotation for cardiac applications and for normal applications.
  - Vendor should identify the detector configuration.
- Detectors
  - Solid state detector array, the material should be specified, detectors should not require frequent calibration
  - 64 slice acquisition should be possible with one 360-degree rotation
  - The effective channels should be at least 600 per row
- Slice Thickness
  - Minimum slice thickness should be .625mm
  - Slice acquisition of 64 slices
  - Volume pitch should be user selectable or automated
  - Minimum pitch for cardiac scanning should be .2 or less
- X-ray Generator
  - High frequency type
  - The power output at least 100KW for the cardiac capable specific and 80KV on

the 2nd scanner

- Regulation of tube voltage in the range of 70-140KV
- mA range at least between 20-600mA on the cardiac specific and 20-400mA on the 2nd scanner,
- automatic mA exposure control
- ability for ECG-gated mA modulation for cardiac application on cardiac specific scanner
- built into the gantry

- X-ray Tube
  - Anode Heath Storage Capacity should have the latest technology and have a minimum of 5.0 MHU for heat dissipation
  - Unit for cooling the x-ray tube should be held within the gantry
  - Vendor should specify the focal spots of the X-ray Tube
- Patient Table
  - Weight capacity of at least 200kg on the and the capacity to increase to 250kg at least on the cardiac scanner.
  - Table length of at least 1700mm
  - Positioning accuracy of 1mm
  - Horizontal movement range of at least 150mm
  - Table height should not be more than 40cm from floor level
  - Table top width should be at least 40cm
  - Remote access to move table up and down, forward and backward
- Computer
  - Two latest grade medical monitors with at least a 19 inches' flat screen per scanner
  - Display matrix of at least 1024x1280

- 8GB or more or RAM, with a reconstruction time of not more than 100ms.
- Hard disk capacity of at least 500MB
- Archiving ability to CD or DVD
- PACS interface ready
- DICOM compliant
- Automated Patient Instruction System with programmable languages
- CPU speed of 2.5 GHz or better.
- Keyboard, mouse

o Contrast Resolution

- Spatial resolution of at least 15lp/mm in both helical and axial mode
- Low contrast resolution not more than 4mm at .5%

o Image Processor

- The Operating System should have a high speed processor, at least 3GHz
- Standard software applications like
  - Basic and Advanced Angiography for CTA (both scanners)
  - ECG gating (prospectively) on cardiac capable scanner
  - On the operator consoles, the following should be available: MPR, MIP, CPR, SSD, MiniIP, ROI, Volume Calculation, CT Number Measurement, WW, WL, Volume Rendering, Cine Display for both scanners
  - Bone densitometry upgrade available for one scanner
  - Automatic MPR images creation after images are acquired
  - Perfusion CBF, CBV, MTT, TTP maps available on cardiac scanner or workstation.

- Auto Bone removal software, volume rendering
- Ability to add lung nodule detection software at a later date
- Shoulder and Pelvis streak artifact suppression software on cardiac specific scanner
- Noise suppression software on cardiac specific scanner
- mA modulation/iterative reconstruction technique for dose efficiency both scanners
- bolus tracking software for both scanners with manual override
- Patient's radiation dose to be displayed for both scanners
- Remote diagnostics software for both scanners
- The operator console should have scanning and analyzing common functions such as change of width and window level, cineview, zoom, measurement of angles, distances, text and graphics editor, image rotation, application of filters to image, scaling and overlay grid coordination, post scanning reconstruction of raw data.

o A complete cardiac package on one scanner that includes

- ECG gated segmental reconstruction for cardiac scans (prospective and retrospective), for both calcium scoring and cardiac angiography.
- quantitative vessel analysis for cardiac angiography.
- Calcium score, plaque analysis, coronary vessel fly through
- ECG-gated ma modulation minimum of 80% (max reduction from peak mA)
- Pitch range between .16-1.5
- ECG editing

o One separate workstation that the manufacturer offers to perform post

processing on CT angiography and brain perfusion

- a video card of at least 4GB, DVD/CD ROM,
- keyboard, mouse,
- processor of at least 3.5 Ghz.
- Clinical applications on the console of this workstation should be mainly for cardiac and perfusion analysis.
- Images should be able Ability to upgrade at a later date for options such as oncology, virtual colonoscopies, dental, CAD lung, etc.
- Images from scanner should be easily pushed to the workstation either triggered or automatic.
- Images from workstation easily pushed to PACS either triggered or automatic.

- Image Reconstruction
  - Minimum Reconstruction Field of View Range: 6cm or less
  - Maximum Reconstruction Field of View Range: 50cm
  - Reconstruction Matrix: 512*512
  - Reconstruction Rate: 20 images/sec or more
  - Image Area Matrix and Display: 1024*1024
  - Parallel Processing: simultaneous scanning, reconstruction, archiving, and transfer.
- Real Time CT Fluoroscopy
  - At least 8 frames per second with a 19inch monitor or bigger color LCD monitor near to gantry/patient table. Only one machine needs to be CT fluoro capable with associated fluoro hardware
- Operator Console
  - At least a 19 inch monitor or large with image area matrix of 1024*1024 or more

- Modern and state of the art interface and user friendly.

- Accessories
  - One Additional independent workstation
    - RAM of 8GB or higher
    - Capacity to do all 2D and 3D post processing
  - Two Color Laser Printers
  - Two UPS with appropriate KVA with at least 10 minutes back up capable of running the entire system. One system should be able to connect with the UPS we have on site.
  - Pulse oximeter with adult and pediatric probes
  - ECG cables
  - ECG monitor on the gantry for cardiac scanner
  - Positioning aids for both scanners
  - Table Velcro with adult and pediatric straps for both scanners
  - Patient communication system with multiple languages available for both scanners

- It is expected that
  - software is installed for remote application/maintenance support for both scanners
  - positioning aids, such as head sponges, lumbar support for both scanners are standard
  - table Velcro with adult and pediatric straps for both scanners are standard
  - the patient communication system will have multiple languages available for both scanners
  - both scanners should be interoperable with the RIS and PACS system
  - the additional workstation should be interoperable with the RIS and PACS system

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GE Revolution EVO

S7880ES Revolution EVO System - ES Configuration

Today's healthcare environment is about creating new solutions to pressing needs. It's about understanding how one CT exam can improve patient outcomes while lowering the cost of providing care. Revolution EVO is designed with the purpose of operating in this new reality, while anticipating the challenges of tomorrow. It's designed to support the widest variety of patients and applications, from complex trauma or cardiac cases, to large patient backlogs in busy emergency departments that strain workflows and resources. The design of Revolution EVO is made for institutions that are unable to sacrifice advanced capabilities such as high resolution for daily productivity. It is well suited for those who need to provide the lowest dose possible. And it provides options to expand your referral physician base and the services you provide to your community.

Revolution EVO is the next generation Volume CT with compact design and advanced technologies including Clarity Imaging system delivering up to 0.28mm of spatial resolution enabling you to see fine anatomical details, providing a pathway to a quick, confident diagnosis and delivering vastly improved image quality across the entire body enables you to broaden your clinical applications and potentially improve treatment paths for diverse patient needs. Diagnostic images at the right dose add up to great care. Our innovative iterative reconstruction technologies are designed to reduce noise levels, improve low-contrast detectability and reduce dose for all patients. Additional Smart Dose technologies like organ dose modulation and XR-29 capabilities help you monitor, measure and manage your dose delivery.

Often the only thing you can predict about your workday is how unpredictable it will be. Revolution EVO is designed to help you manage this unpredictability - quickly and compassionately. Revolution EVO Smart Flow technologies are designed to help you improve productivity by streamlining user workflow and access to information, enabling you to perform more studies in less time and manage your patient flow up to 40% more efficiently.

Revolution EVO is designed to help you compete in your market by helping to manage the health of your patient population today with precision, efficiency and the right dose. ASiR-V low-dose capabilities make it ideal for pediatric scans, oncology and chronic disease follow-up. At the same time, Revolution EVO can give you the flexibility to expand your services to the fastest growing procedures like advanced coronary CCTA and TAVI planning.
Revolution EVO is designed for you

Clarity Imaging Chain

Completely redesigned imaging chain resulting in the best spatial resolution in its class. Including wide coverage of 40 mm and high resolution so that you can see details as small as just 0.28 mm. Clarity's patented design integrates the data acquisition system directly with the photo diode reducing the size of this integrated system by 75%, improving signal to noise by 44% and power consumption by 50% compared to previous systems. The Performix 40 Plus tube delivers exceptional performance. The new liquid bearing and dual focal spot design improves precision and up to 0.35 second routine rotation enables faster scan times. This may allow for shorter breath holds, may reduce the need for sedation and reduce patient motion artifacts.
Clarity Imaging Chain provides the following:

EXHIBIT B

GE Healthcare

Revolution EVO ES

Technical Data

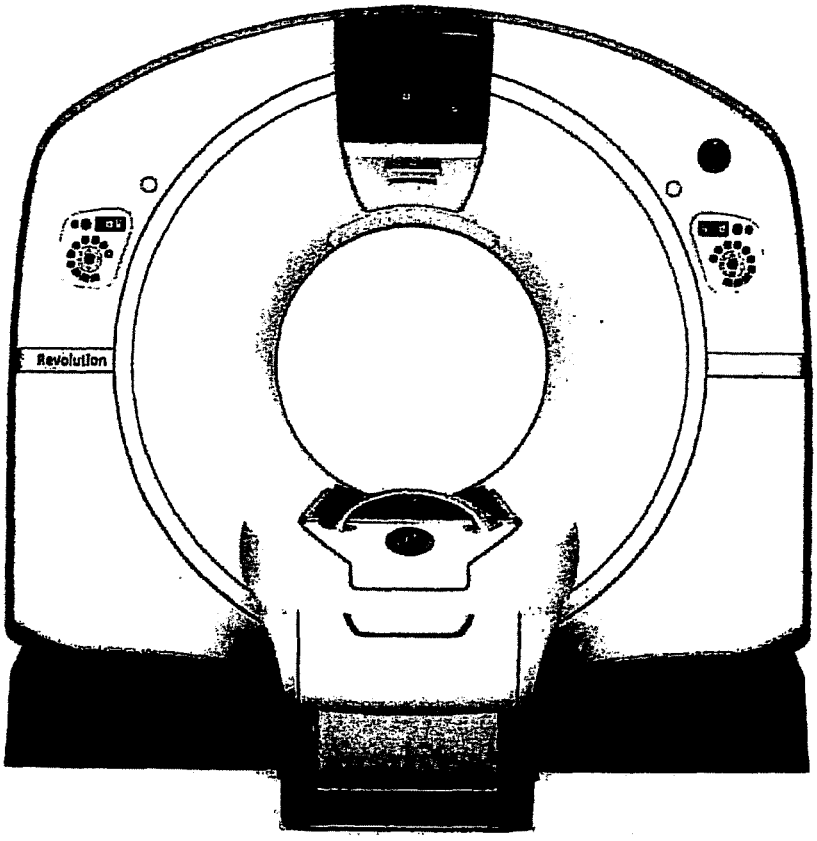

EXHIBIT C

System Hardware

Detector and data acquisition system	
HiLight Clarity detector	Inherited directly from our breakthrough Revolution CT system, the Clarity detector is the heart of Revolution EVO. With its high-resolution imaging capabilities, you can see details as small as 0.28 mm. The Clarity detector delivers improved dose efficiency and signal-to-noise ratio as well, plus large coverage with Z-axis uniformity.
Integrated Clarity data acquisition system	Thanks to its revolutionary, patented design, the data acquisition system is integrated directly onto the photo diode. This reduces the size of the data acquisition system by 75%, reduces electronic noise by 44%, and lowers power consumption by 90% compared to previous-generation systems.
HiLight™ scintillator	GE proprietary, patented scintillator was designed specifically for CT imaging and provides key performance properties that make it ideal for the task including high primary speed (affects spatial resolution at fast rotation speeds), low afterglow (affects artifacts) and high x-ray stopping power (affects image quality per dose).
Clarity 2D collimator	Designed to reduce scatter and improve image quality.
Maximum number of slices per rotation	32 (acquired slices), up to 64 (axial reconstructed slices)
Number of detector rows	64
Number of detector electronic channels	32
Number of detector elements	54,272
Number of views per rotation	861-1,968
Axial acquisition modes	32 x 0.625 mm, 32 x 1.25 mm, 16 x 0.625 mm, 8 x 0.625 mm, 4 x 0.625 mm, 2 x 0.625 mm

Axial & cine acquisition modes	Reconstructed slice thickness
32 x 1.25mm	32i – 1.25 mm 16i – 2.5 mm 8i – 5 mm 4i – 10 mm
32 x 0.625 mm	32i – 0.625 mm 16i – 1.25 mm 8i – 2.5 mm 4i – 5 mm 2i – 10 mm
16 x 0.625 mm	16i – 0.625 mm 8i – 1.25 mm 4i – 2.5 mm 2i – 5 mm 1i – 10 mm
8 x 0.625 mm	4i – 1.25 mm 2i – 2.5 mm 1i – 5 mm
4 x 0.625 mm	2i – 1.25 mm 1i – 2.5 mm
2 x 0.625 mm	1i – 1.25 mm

EXHIBIT D

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1) Is maintenance an additional $44,200 to what we currently pay for the annual contract? Is this for 18 months or per month?
   The standard warranty period is 12 months. The bid specified line item pricing for an 18-month warranty period so the $44,200 is the total price for the additional 6 months to comply with the 18-month warranty requirement for the 2 CTs.

2) Can the specification for live fluoro be pointed out on the specific machine?
   Both CT systems come with the Biopsy Mode Capability and only the Cardiac CT is configured with the live Fluoro.

3) Are both machines 32 acquired and 64 reconstructed slices?
   Both CT systems are 64 acquired and 64 reconstructed.

can you provide the page? the spe state 32 acquired.

4) Is the power output for both 48 KW with the 72 KW optional?
   No, both systems are configured to be 72 kW systems.

Can you provide page number? The IFB states 72KW option

5) Is the MHU minimum 7MHU?
   Yes, the CT Tube is a 7MHU tube, higher than the 5 MHU requirement.

6) Is the noise suppression 7880MR on the cardiac scanner? Is that optional or included?
   B7880MR is our SmartMAR item and is the Metal Artifact Reduction capability. It is included in both CT systems. Additionally, ASIR – Adaptive Statistical Iterative Reconstruction is included on both CT systems. ASIR is a noise suppression capability done with raw data that can reduce radiation dose up to 50% as compared to filter back projection reconstruction.

7) Are organ modulation and dose check optional? Unable to tell the way it is worded. (In the Ct brochure it states standard software)
   Organ Dose Modulation and Dose Check are included on both CT systems. With Organ Dose Modulation a 30% reduction of dose has been shown for neuro and small fields of view and a 40% reduction of dose for larger body areas.

8) Please confirm lowest KVP selection is 80
   Yes, 80 kVp is the lowest kVp setting.

9) Confirm that the cardiac capable ma range is 10-600mA
   Yes, that is correct.

10) Which scanner has the S7880 AB package . It is not clearly stated. It seems like it fits under the non cardiac
    The S7880AB Package is the 5-Beat Low Dose Cardiac Package and is included in the Cardiac CT configuration.

11) Clarify why a 64 Channel detector upgrade will be needed?
    It allows the Cardiac system to be a 64 acquired, 64 reconstructed system for Cardiac imaging.

if it is 64 acquired, why would we need the upgrade?

EXHIBIT E

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Follow up response to Questions 3, 4 and 11:

3) Are both machines 32 acquired and 64 reconstructed slices?

Both CT systems are 64 acquired and 64 reconstructed.

GMHA: can you provide the page? The specs state 32 acquired.

JMI: Please refer to:

Imaging Performance Images and Specs TAB Cover Page 1, Item No. 4 "There are 64 Detector Rows, 54,272 Detector Elements and 64 Slices/Rotation.

It can also be found in:

System Detail Description TAB 1, Page 9, Catalog No. B78B0CE is the 64 Channel Detector that is included in the configuration for the Cardiac CT offer

System Detail Description TAB 2, Page 7, Catalog No. B78B0CE is the 64 Channel Detector that is included in the configuration for the non-Cardiac CT offer

4) Is the power output for both 48 KW with the 72 KW optional?

No, both systems are configured to be 72 kW systems.

GMHA: can you provide the page number? The IFB states 72KW Option.

Please refer to:

System Detail Description TAB 1, Page 9, Catalog No. B7880CH is the 72kW power that is included in the configuration for the Cardiac CT offer

System Detail Description TAB 2, Page 7, Catalog No. B7880CH is the 72kW power that is included in the configuration for the non-Cardiac CT offer

11) Clarify why a 64 Channel detector upgrade will be needed?

It allows the Cardiac system to be a 64 acquired, 64 reconstructed system for Cardiac imaging.

GMHA: If it is 64 acquired, why would we need the upgrade?

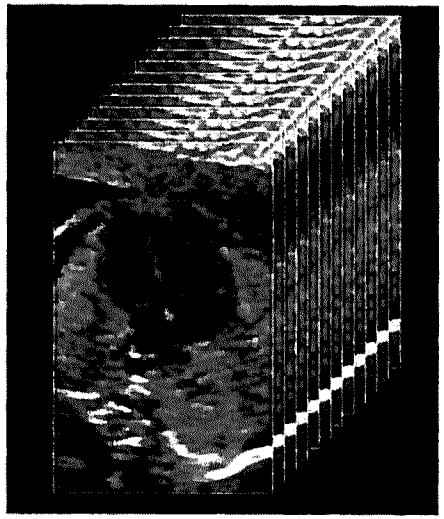
The Base System starts at 32 detectors so that is why the B78B0CE 64 Channel Detector Upgrade is configured for both CT Systems.

EXHIBIT F

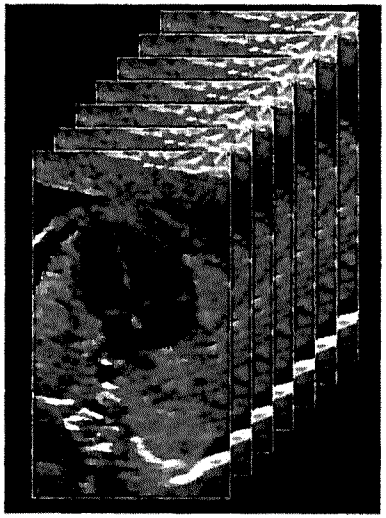
Half as many AQUIRED SLICES, Less DIGITAL INFORMATION (*FEWER*, "VIEWS", "PROJECTIONS", "SAMPLES")

Neusoft Medical Systems

NeuViz 64 En/In



64 Acquired Slices



32 Acquired Slices

GE imagination at work

Revolution EVO ES

EXHIBIT G

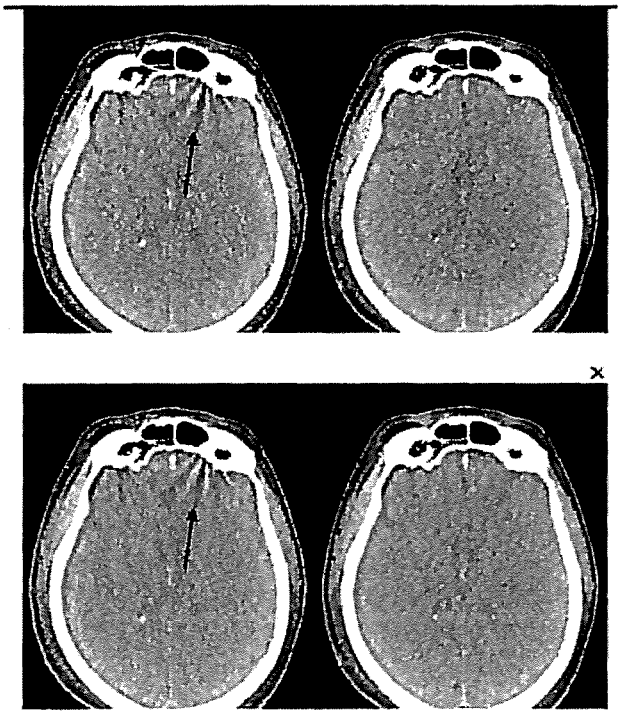


Fig. 10 Reduction of spiral artifacts with the z-flying focal spot technique. Left: A head specimen scanned with 32 × 0.6 collimation at a pitch of 1.4, without z-flying focal spot. Right: A head specimen scanned at the same pitch with 64 × 0.6 mm slice acquisition using the z-flying focal spot technique. Due to the improved longitudinal sampling, spiral interpolation artifacts (the windmill structures indicated by the arrow) are suppressed without degradation of the z-axis resolution.

Performance Evaluation of a 64-Slice CT System with z-Flying Focal Spot

T. Flohr[1,2], K. Stierstorfer[1], R. Raupach[1], S. Ulzheimer[1], H. Bruder[1]Fortschr Röntgenstr 2004; 176(12): 1803-1810
DOI: 10.1055/s-2004-813717

EXHIBIT H

11) **Bidder:** Printer requirement- not all vendors have the ability to provide a printer as requested. In lieu of this requirement, would a rebate be an acceptable alternative to this requirement?

GMHA: It would depend on the vendor and whatever they are proposing ...information about your company or the equipment, etc. Must include in your proposal

12) **Bidder:** Injector requirement-in Amendment 6 there is reference to an injector. This does not appear as part of the Technical Specifications, not in Appendix B Pride Bid Form. Can you clarify if this is a requirement for this proposal? Would there be a vendor preference and mounting preference (ceiling or pedestal)?

GMHA: Be advised that the injector requirement is omitted from scope of work and the requirements for de-installation and installation of the CT Scanners.

13) **Bidder:** Generator- In the technical Specifications for generator size, 100kW is requested for the Cardiac System and 80kVp for the non-cardiac system. Can you clarify if the 80kVp should actually read 80kW, as the kW is the measure of generator size?

GMHA: Bidders are instructed to state the range of settings available for the CT system and provide ample evidence of system capability to handle the range of exams specified and patient load. The maximum kVp and ma should be stated with evidence of optimal image quality especially in thicker body parts and/or patients over 250 lbs.

14) **Bidder:** Cardiac perfusion-in Amendment 6, response 9, it states that Cardiac perfusion needs to be included in the workstation. There is no reference to Cardiac Perfusion in the technical specifications. Can you clarify if this should read 'cardiac AND perfusion"?

GMHA: Yes, it should read separately as "cardiac and perfusion".

15) **Bidder:** In the Procurement Checklist (Checklist of Forms and Documents required to be submitted in conjunction with the Bid)-page 5 of the IFB, what are the requirements being referred to in items 14 & 15?

GMHA: It is a reminder to vendors to include whatever the vendor wants to propose ...information about your company or the equipment, etc. It would depend on the vendor.

16) **Bidder:** It has been our experience that vendors are allowed to use the forms and documents already notarized based on the original bid date. Due to the large amount of the bid can you please confirm that we'll be allowed to use the ones we already had notarized based on the first bid date.

EXHIBIT I