# Capital Equipment Specifications
# CT Scanner – Beckley VA Medical Center
# PO # 517-B70703

This request is for one CT scanner to be located at the Beckley VA Medical Center order # 517-B70726

**CT Scanner Technical Requirements**

1. Scanner shall provide the ability for the user to independently operate the table, gantry and CT fluoroscopy mode while performing biopsy or patient related exams. This ability would be in addition to the control happening in the control room. (preferred)
2. Gantry aperture ≥ 70cm (mandatory)
3. 360 Degree rotation ≤.35 sec (required)
4. Minimum number of samples per rotation (images, slices) ≥ 128 (mandatory)
5. Wide detector system 8 cm (mandatory)
6. Multiple kVp settings to include 80, 100, 120, 140kVp (mandatory)
7. Ability to "lock" protocols from changes without proper authorization/authority (mandatory)
8. Display CTDIvol (dose) before scan (mandatory)
9. Display DLP (dose) after exposure (mandatory)
10. Automated ma regulation (required)
11. Iterative reconstruction, both model- and statistical-based, or similar dose reduction ability (required, specify % of reduction typically achieved in mSv)
12. Metal artifact reduction (required)
13. High resolution matrixes (required)
14. Specify the speed of transfer of dataset onsite and offsite (mandatory)
15. Contrast timed injections bolus chase (mandatory)
16. ROI triggered cases in which contrast attenuation during the scan during the injection using a placed gate ROI in aorta or pulmonary artery for CTA and CCTA (mandatory)
17. Reconstruction of images <>24 per second (preferred)
18. HL7 integration (HIS/RIS) (mandatory)
19. DICOM and IHE- Q/R, MWM, STORAGE COMMIT SCU, MPPS with structured dose report (required)
20. DICOM 3.0 or higher compatibility (mandatory)
21. Workflow interface with Vista Imaging (required)
22. Power conditioning (as defined by vendors) (mandatory)
23. UPS (designed to cover the time required to switch to Emergency Power) (mandatory)
24. Latest operating systems supported (e.g. Linux, Windows 7 or greater) (mandatory)

**Injector Technical Requirements**

1. Dual head contrast injector (mandatory), ceiling mounted (mandatory), easy-loading (optional)
2. Injection/scanner interface that enables scans to be initiated by starting the injector (optional)
3. Contrast timed injections bolus chase (preferred)

**Table Technical Requirements**
1. Full articulation of the table (required, self-centering preferred)
2. Patient weight capacity ≥ 200kg or 440lb (mandatory)
3. Long (2000 mm) table (preferred)
4. Table lowers for patient exit (<20 inches preferred)

**Workstation Technical Requirements**
1. Operators table console with at least 2 monitors including UPS (mandatory)
2. Technologist advanced workstation (such as Tera Recon) including UPS (mandatory)
3. Attached DVD burner at workstation (integrated is preferred, and FIPS compliant mandatory)

**Advanced Applications**
1. Pulmonary Nodule Detection and quantification (required), volumetric measurements (preferred)
2. CT Fluoroscopy (required)
3. Upgradable to CT Perfusion (optional)
4. Cardiac CT to include EKG and prospective and retrospective gating (required)
5. Integration to Advanced Visualization System (mandatory)
7. Dose Tracking Software (preferred), including ability to 'flag' if patient has had more than 10 CT exams

**Training**
Technologist Training:
1. Initial Onsite Applications Training (minimum 4 days) – to be used 1 week prior to Go-Live for technologists
2. Go-Live Onsite Applications Training (minimum 4 days) – to be used for technologists
3. Offsite Training – for 2 Radiology technologists required
4. Offsite Training Travel Package – for 2 Radiology technologists including Lodging, Meals, Transportation required
5. Additional 2 weeks on-site training, separated by 1 month
6. On-going vendor-provided training resources (preferred)

**Physician Training:**
1. Go-Live On-site Applications Training (minimum 4 days) – to be used for Physicians
2. Follow-up Onsite Applications (minimum 4 days) – to be used within the first 9 months from Go-Live for Physicians

**Technical Training:**
1. Off-site training for 1 Biomedical Engineer, mandatory
2. 1 Biomedical Engineering Training Travel Package Lodging/Meals/Transportation, mandatory (for 1 engineers preferred)

**Support and other Documentation to Provide:**
1. First year warranty
2. Provide DICOM Conformance Statement
3. Provide completed Pre-procurement Assessment form (6550) and MDS2 document

4.  Provide information about your company's applications and technical support structure during the warranty period (i.e. a listing of Field Service Engineer locations and availability, support 800 phone number(s), remote support, etc.)
5.  Provide information about your company's applications and technical support structure after the warranty period (i.e. a listing of Field Service Engineer locations and availability, support 800 phone number(s), remote support, etc.)
6.  24/7/365 access to Vendor Help Center (mandatory)
7.  Remote service capability via VPN (mandatory)
8.  Full access to service diagnostic software for service, maintenance, trouble-shooting (mandatory)
9.  30 minutes Field Engineer response via telephone (mandatory)
10. 4-hour on-site presence by Field Engineer (highly desirable – if not 4 hour, then specify in bid)
11. Two copies of operator's instruction manuals (mandatory)
12. Two copies of complete technical service manuals including detailed troubleshooting guides, necessary diagnostic software, service keys, schematic diagrams, and parts lists
13. Two copies of a system manager's manual outlining back-up procedures, managing privilege group limits, routine tasks, etc.
14. Provide typical drawings for site preparation and layout that will include cooling and HVAC requirements, clearances around the equipment etc.

**Trade-in**

Vendor to de-install and remove old equipment (required)
Credit to facility for old CT equipment trade-in (required)
Vendor to install new equipment (required)
Vendor to include any additional rigging costs if applicable (required)