Comments on WakeMed's CON Application to Expand Emergency Department and CT Services at WakeMed North

submitted by

Rex Hospital, Inc. d/b/a UNC REX Healthcare

In accordance with N.C. GEN. STAT. § 131E-185(a1)(1), Rex Hospital, Inc. ("UNC REX") submits the following comments related to an application to expand the emergency department and acquire a CT scanner at WakeMed North Family Health & Women's Hospital ("WakeMed"). UNC REX's comments include "*discussion and argument regarding whether, in light of the material contained in the application and other relevant factual material, the application complies with the relevant review criteria, plans and standards*." *See* N.C. GEN. STAT. § 131E-185(a1)(1)(c). In order to facilitate the Agency's review of these comments, Rex has organized its discussion by issue, noting some of the general CON statutory review criteria and specific regulatory criteria and standards creating the non-conformity relative to each issue, as they relate to the following application:

- **WakeMed and Wake Property Services, Project ID # J-11301-17**

GENERAL COMMENTS

While the nature of the proposed project (emergency department expansion and an additional CT scanner) may seem benign, UNC REX believes there are several issues with the application which indicate that it has not been well-planned and is not as straightforward as it may seem with only a cursory read. The Agency has previously denied both emergency department expansion projects and proposals for additional CT scanners. A thorough review of the application will reveal multiple reasons that it is non-conforming with applicable statutory and regulatory criteria and therefore, that it should be denied.

ISSUE-SPECIFIC COMMENTS

1. <u>The written statement of the project's plan to assure improved energy efficiency and water conservation is insufficient and unreasonable</u>.

   Section B.11 asks for the plan to ensure energy efficiency and water conservation, corresponding with Policy GEN-4 in the *State Medical Facilities Plan*, and thereby Criterion 1. Since the proposed capital cost exceeds $5 million, the applicant is required by the policy to provide a written plan in the application, and then, if approved, to submit a plan conforming to the Construction Section's rules. According to the Policy, the plan submitted to the Construction Section must be "consistent with the applicant's representation in the written statement" in the CON application. Thus, the plan in the CON application creates the foundation and boundaries for the plan submitted to the Construction Section.

   The plan described on pages 24 and 25 of the application is inconsistent with the scope of the proposed project; therefore, it is unreasonable to believe that the applicant has

the ability to provide a plan to the Construction Section that is consistent with the application's statements. Specifically:

a. The section discusses the use of energy-efficient windows and high-efficiency heating and HVAC systems; however, the line drawings do not appear to include the renovation of any windows, and the proposed capital costs do not appear to include any additional heating or HVAC systems. Further, since the proposed project involves only renovation, not the addition of new space, the need for additional HVAC or heating systems has not been demonstrated.
b. The section discusses the development of new HVAC "zones" and the installation of a "building management system," yet as a renovation-only project, it is unclear why these new systems are needed and why they are not already in place with the existing building.
c. The section discusses multiple design features utilized by WakeMed for energy efficiency and water conservation, most of which involve exterior construction or other features that do not appear to be part of this project, such as:
    i. Design of the building envelope;
    ii. Sunshades and light shelves;
    iii. High performance windows;
    iv. High efficiency heating and HVAC;
    v. Recovering of heat from vented exhaust; and,
    vi. Low-flow faucets and showerheads, and waterless urinals.

The language in the application appears to speak to WakeMed's general approach or goals in construction, but do not appear to be related to the proposed project. Thus, the application fails to provide a plan for energy efficiency and water conservation that relates to the project and that can be carried out if the project is approved.

WakeMed's failure to develop real and implementable plans that meet this policy is particularly concerning, given its historical opposition to Policy GEN-4. As expressed in a letter regarding the initial development of this policy for the *2011 SMFP*, WakeMed opposed the CON Section's oversight of this policy, believing that the CON Analysts were incapable of fairly and adequately reviewing this policy, and preferring instead that it be overseen by the Construction Section through hospital licensure rules. Please see Attachment 1 for the letter from WakeMed expressing this position regarding Policy GEN-4. Nonetheless, the *2017 SMFP* contains Policy GEN-4 and is written to require the plan to be included in certain CON applications and reviewed by the CON Section. The CON Section has used its authority in past reviews to find applications non-conforming with this policy and thereby with Criterion 1. Given the clear inapplicability of the statements in the application to the proposed renovations, and in light of WakeMed's historical opposition to the review of this policy by the CON Section, the language in the application **does not demonstrate conformity with Policy GEN-4 and the application should be found non-conforming with Criterion 1**.

2. The application provides inconsistent or non-existent plans for relocating existing services and spaces that will be impacted by the proposed project.

   On pages 26 and 27, the application describes the impact of the proposed renovations on the existing space and services. However, for several existing services that will be impacted, the application provides no description of how those services will be provided following the project's development or, in the case of relocated spaces, what the cost of such a relocation will be and whether those costs have been properly included as part of this project.

   For example, on page 26, the application proposes converting patient triage space to treatment beds. While this may increase the availability of treatment rooms, the deletion of triage space may create logistical and operational issues that will far outweigh any alleged benefits of developing more treatment spaces. The application fails to discuss the replacement of the displaced triage space, or how patients will be triaged once the space is eliminated. Given the lack of this space and the proposed open registration area located in close proximity to the waiting area, patient privacy and the ability to discuss health issues discretely will be negatively impacted with the proposed project.

   On page 27, the application describes the relocation of the supervisor's and manager's offices. While the proposed drawings include a manager's office, they do not include a replacement for the supervisor's office. If the replacement office will be located elsewhere, it is unclear whether the cost of the relocation is properly included in the capital cost for the proposed project. If no replacement office is proposed, the application fails to explain why the space is no longer needed, particularly as an additional supervisor will be added following development of the project, as shown on Form H on page 175.

   Also on page 27, the application states that new Exam 1 will be created from "unused circulation space in the laboratory." However, from the line drawings in Exhibit K.2, the space to be used to create Exam 1 appears (in very small print) to be part of the histology/cytology work space in the lab, not circulation. Given the importance of these lab tests to women's health in particular, the loss of this space is concerning, and the description of the existing space in the application does not correspond with the labels on the line drawings. The application expresses WakeMed's belief that emergency department visits, as well as inpatient admissions, will continue to increase in the future. Under that assumption, it seems impractical to reduce laboratory space for histology and cytology studies.

   Given these issues, the application fails to demonstrate the need for the proposed changes, to provide an explanation of how the eliminated services/spaces will not negatively impact patients currently being cared for using those services and spaces, to demonstrate that the proposed project is the most effective or least costly alternative, or to demonstrate that all of the necessary costs are included in the application. **As such, the proposed project should be found non-conforming with Criteria 3, 3a, 4, and 5.**

3. The application fails to demonstrate that the capital costs are reasonable.

   The projected capital costs were certified by WakeMed's Vice President of Facilities and Construction, Thomas Cavender. While Mr. Cavender's signature includes his designation as a professional engineer, it is not clear what recent experience with similar projects he has had on which he based the projected costs. In particular, the application notes in multiple places that the proposed renovations will cost less than new construction; given this assumption, it is unclear what similar renovation projects Mr. Cavender has experience with that would inform him of the costs for this project.

   Whether related to Mr. Cavender's experience or not, the projected capital costs are not supported by the assumptions shown on page 156 of the application. For example, Line B9 on the capital cost sheet (page 155) projects $1,239,366, noted as permitting, testing, and contingency. The assumptions on page 156 state that permitting and testing total $75,000 and that contingency is 25 percent of the renovation cost. The renovation costs are $4,162,950; thus, 25 percent of those costs are $1,040,738. The total of the permitting, testing, and contingency costs are therefore $1,115,738, not $1,239,366. The reason for the remaining $123,628 of costs is not provided; therefore, the reasonableness of it cannot be determined.

   Another missing assumption in the capital cost sheet is for Line C12. Although this line is for "other equipment," no assumption is provided regarding what is included in this number or how it was calculated. The medical equipment line above it is stated to include the cost of the CT scanner, ED beds and related equipment, so it is unclear what other equipment is needed in the renovated space.

   As a result of this missing or unreasonable assumptions, the application should be found non-conforming with Criteria 5 and 12.

4. The application fails to demonstrate need for the proposed increased number of emergency department treatment rooms.

   Data in the application, such as Table Q.3 on page 144, show the total growth of volume in the WakeMed North Emergency Department was 3.3 percent from 2013 to 2015. However, the compound annual growth rate ("CAGR") for that period is only 1.7 percent. Despite this historical reality, Table Q.6 unreasonably projects growth in each intervening and projected year to exceed the 1.7 percent CAGR—by more than double, in fact, in most years.

   To support these growth trends, the application cites factors on pages 147 and 148, as follows:

   a. Annual population growth (2.2 percentage points of the growth rate);
   b. Closing of Franklin Medical Center; and,
   c. WakeMed North's transition to inpatient hospital.

   However, these factors do not support the projected growth rates, as explained below.

a. Population growth: the application cites the population growth of the northern Wake County primary service area (2.2 percent) as the base growth rate. On page 146, the application states that the PSA population experienced total growth from 2012 of 8.4 percent. However, an examination of WakeMed North's historical ED volume trends since 2012 do not indicate that they correspond with this population growth. Table Q.1 on page 143 shows 2012 volume of 34,728 and 2015 volume of 36,081, a total growth of 1,353 visits or 3.9 percent. This is less than one-half the population growth during the same time. The growth rate from 2015 to 2016 included multiple "one-time" events, as described in the application, accounting for 85 percent of the total growth, according to the applicant's own estimates. Assuming this estimate to be accurate, only 15 percent of the growth came from non-one-time events. Thus, of the total growth from 2015 to 2016, 6,203, a maximum of 930 can be attributed to normal growth. Adding this number to the 2015 volume results in 37,011; assuming normal volume growth of 34,728 (2012) to 37,011 (2016) for a total growth of 6.6 percent, still well below the population growth for the same time period. Thus, using the population growth as a base is not reasonable, given these facts and circumstances.

Even though the historical rate of growth has been less than population growth, the application unreasonably increases the projected growth rate using "non-population factors." The application states that these non-population factors will continue to impact growth, but at a declining rate through the projection period. Even with this assumed decline in impact, however, these factors do not support the projected growth rates, as explained below.

b. Closing of Franklin Medical Center: On page 145, the application explains the assumption that a significant portion of its FY 16 volume growth (50 percent) stemmed from this event, but states that this volume has reached "equilibrium and remains at this level." The application also discusses the impact on other facilities of the FMC closure. However, now that FMC has been closed for more than one year, there will not be another "one-time event" from its closure that impacts WakeMed North's ED volume. The application even states that the volume increase has not continued, as referenced above. It is unreasonable, therefore, to project that the ED volume "will continue to be impacted" by this event, above any normal growth factor for this patient population, even at a declining rate. The use of this factor as a continued basis for growth is also unreasonable given recent known events concerning FMC. As noted in the application (page 47), Duke LifePoint has been selected to reopen the emergency department at FMC. Although the applicant believes that the timing of the re-opening is unclear, public statements by Duke LifePoint indicate that it should occur within approximately one year, with estimates of serving up to 10,000 patients the first year[1]. Regardless of the exact timing, it is clear that a more reasonable assumption than assuming the impact of the closure not only persists but continues to increase, would be to assume that the volume of

[1] http://www.newsobserver.com/news/business/health-care/article110285617.html

patients from Franklin County will actually decrease over time, likely even before the completion of the proposed project.

c. Transition to inpatient care: The second "non-population" factor cited by the application is the development of inpatient services at WakeMed North, which, according to the application, has increased awareness of the facility's existence and created "synergies" from the introduction of new services and physicians. Although it is unclear how the new services and physicians relate to emergency department growth, the application cites these factors as a "one-time event." Even assuming this factor was part of the one-year growth in FY 16, similar to the FMC closure, it cannot happen again, as the facility has made this transition and will not need to transition to inpatient care again. Although the application states that additional inpatient services will continue to be developed, it does not explain how these *inpatient* services will drive growth of *emergency* services. As shown in Table Q.3, some of the highest growth rates for emergency departments in Wake County have been at those without inpatient care (e.g. Brier Creek and Garner). Moreover, the primary factor cited as increasing the public's familiarity with WakeMed North's ED was the increased awareness as the inpatient services were opened for the first time. This event is complete. Even though planned expansions may occur in the future, they will not be the first time inpatient services are offered at the facility, and the application does not explain why the addition of these inpatient services will increase the number of emergency department visits.

Given these issues, Table Q.6 on page 148 showing the application's projected utilization is clearly not based on reasonable assumptions. The projected 6.0 percent growth for FY 17 is completely unsupported, and the application does not provide any actual data for FY 17 to support the projection, even though the application was submitted more than one-third of the way into FY 17. The subsequent years are also unreasonably high, based on the historical growth trends at the facility, apart from the "one-time" events, which should not be included as the basis for future growth, as explained in the above analysis.

The lack of support for the application's utilization projections is particularly important to consider given the historical utilization at the facility. As shown on Table Q.6, the last historical year prior to the "one-time events," FY 15, resulted in per-room volume of approximately 1,900 visits, just slightly above the planning threshold of 1,800 used by WakeMed and cited in its application. Thus, with a reasonable growth rate being much lower than that used in the application, the need for ED treatment rooms is far less than that proposed by the applicant.

The planning threshold of 1,800 used in the application is also questionable, particularly in terms of demonstrating need for additional capacity. The application provides no information about wait times, crowded conditions, patients leaving without being seen or treated, or other data to show that the facility has experienced any difficulty operating at its current utilization. This information is important, since, as noted above, it is only in the most recent year that the volume per room has been substantially above that number, and a significant portion of that volume is likely to repatriate to Franklin

County in the future, as discussed above. Moreover, other WakeMed emergency departments are operating above this threshold, but have not indicated any operational issues. Specifically, WakeMed Garner Healthplex reported 32,659 emergency visits in FY 2016 on its 2017 License Renewal Application. With 12 treatment rooms, it treated more than 2,722 visits per room, well above the maximum number of visits per room projected in the WakeMed North application. With another facility in the same system able to accommodate more than 2,700 patients per room per year, even if WakeMed North could achieve the projected 51,929 visits in year three, with the current 19 treatment rooms, it would barely exceed the per-room volume of its related facility in Garner.

Based on these issues, the application failed to demonstrate the need of the patient population for the project, that it is the most effective or least costly alternative, or that it would not unnecessarily duplicate existing health service. As such, it should be found non-conforming with Criteria 3, 4, and 6.

5. The application fails to demonstrate the need for a second CT scanner.

The application shows CT volume for FY 2016 as 11,122 scans and projects that volume to grow four percent annually through the third project year to 13,129 scans. The application fails to demonstrate that this growth rate is reasonable or that the existing CT scanner cannot accommodate the current and projected number of CT scans, based on the following analysis.

First, the application fails to demonstrate that the existing CT scanner cannot reasonably accommodate the projected utilization. The existing CT scanner is a brand new scanner, which replaced the previous scanner and appears to have been made operational in 2016. Although the date is not given in the application, the exemption confirmation for the replacement scanner from the CON Section is dated April 2016; thus, even if the unit was ordered and replaced soon thereafter, the majority (if not all) of the 11,122 scans performed in FY 2016 were performed on the previous CT scanner. See Attachment 2 for the exemption request and determination. As documented in the letter from WakeMed in Attachment 2, the previous scanner experienced "significant downtime," yet it was still capable of performing scans at a rate of 11,122 per year. The new scanner was noted as having "faster scanning times, which will improve patient throughput." Thus, the new scanner's capacity exceeds the previous scanner's capacity. Yet, the application failed to provide a realistic capacity definition in the application. On pages 52 and 53, the application assumes the capacity of a single CT scanner is 8,760 scans per year; however, that is based on only 12 hours of operation each day, and both the existing and proposed scanners are located in the emergency department, which operates 24 hours per day. Thus, the actual capacity of WakeMed North's CT scanners, using its own definition but utilized 24 hours per day, is 17,520 scans per year. This is clearly more reasonable than the 8,760 capacity cited in the application, since the previous CT scanner performed 11,122 scans in FY 2016, and the new, recently replaced scanner is capable of even faster scanning times and higher throughput. Even if one assumed that the existing CT scanner were only available 18 hours per day, and that no scans were performed during the other six hours—even emergency scans—the capacity

is 13,140 scans (two scans per hour x 18 hours x 365 days), which is sufficient to meet the projected year three patient volume of 13,129 without a second CT scanner.

Second, the projected utilization is unreasonable. The application projects 4.0 percent growth per year, stating this is conservative compared to the historical CAGR of 6.4 percent. However, similar to the problems with the ED utilization projections, the CT projections assume that the one-time events that impacted recent utilization will continue in the future, even at a reduced rate. As discussed above regarding the ED projections, it is reasonable to assume that at some point in the near future, the re-opening of the Emergency Department in Franklin County will negatively impact CT volume derived from ED visits. The application asserts that the growth in inpatient care will drive CT volume as well; however, as most of the care currently provided at WakeMed North is related to obstetrics and neonatal patients,[2] for whom CT scans are contraindicated except in rare circumstances, the growth in this inpatient volume will not increase CT volume. The application also discusses the potential for non-obstetrics volume in the future; however, the lack of a timetable, projected utilization, or any discussion of the types of patients expected to be treated and whether they typically need CT scans is not provided. Therefore, there is no reasonable basis to assume that CT volume will increase at the rate projected in the application. Also similar to the ED volume, the application projects volume for FY 17, without providing any information about the year-to-date utilization and whether the trends for the first few months of the year support the projected utilization.

Finally, the application fails to demonstrate conformity with the rules for CT scanners, as discussed in detail below.

For these reasons, the application should be found non-conforming with Criteria 3, 4, and 6.

6. <u>The application fails to demonstrate conformity with the CT rules.</u>

On pages 63 through 65, the application responds to the performance standards promulgated by the CON Section for CT scanners. The responses in the application are either unreasonable or incomplete, and the application is therefore non-conforming with the rules, as shown in the following analysis.

- 10A NCAC 14C .2303(1): This standard requires applicants to demonstrate <u>projected</u> utilization of the proposed CT scanner will exceed 5,100 HECT units by the third year. As demonstrated above, the projected utilization of the CT scanner is not reasonable, and therefore, the application fails to demonstrate that it meets this rule.

- 10A NCAC 14C .2303(2): This standard requires applicants to demonstrate that the <u>historical</u> utilization of all CT scanners owned by the applicant or a related and controlled entity in the service area was at least 5,100 HECT units in the 12 months prior to the application's submittal. The application provides

[2] All but 25 days of care were obstetrics or neonatal in FY 2016 according to the 2017 HLRA.

information for WakeMed North's existing CT scanner for the year ending September 2016. The application was filed February 15, 2017, and the application fails to provide information for any portion of the period between the end of September and the filing date.

Moreover, the application fails to provide information for the other CT scanner owned by WakeMed and located in the service area. The response to Section G.1, starting on page 83, indicates that the service area includes several ZIP codes in northern Wake County and all of Franklin County. The application lists several CT scanners in that service area, including the CT scanner at WakeMed North, and the CT scanner at WakeMed Brier Creek Healthplex ("Brier Creek"). Although the Brier Creek CT scanner is cited by the application as being located in the service area, the application fails to demonstrate that its utilization in the 12 months prior to the application's filing exceeded 5,100 HECT units. The application shows that the reported FY 16 (through September 2016) volume barely exceeded this standard (5,577 HECT units); thus, it would be unreasonable and improper to assume that the volume of this scanner exceeded the required standard in the 12 months prior to the application's submittal.

- 10A NCAC 14C .2303(3): This standard requires applications to demonstrate that all existing and proposed CT scanners owned by the applicant or related entities in the service area are projected to be at least 5,100 HECT units in the third project year. As noted above under .2303(1), the projected utilization of the proposed scanner at WakeMed North is not reasonable. Similarly, the projected utilization of the existing scanner at WakeMed North is not reasonable. See discussion under # 4 above. Moreover, *the application fails to provide any projected utilization for the Brier Creek CT scanner,* either in response to the rules or in Section Q or anywhere else in the application. The application makes it clear that the Brier Creek and North facilities are in overlapping service areas, and that the expansion of one has an impact on the other. Page 45 of the application cites to the opening of the Brier Creek facility in 2012 as a reason for the decreased ED volume at WakeMed North. The application states on page 150 that the addition of new CT scanners drove the decrease in utilization at WakeMed North from 2012 to 2014. Thus, with the proposed project to expand ED and CT capacity at WakeMed North, it would be reasonable to assume that Brier Creek would experience a negative impact on its ED and CT volume. As such, the application fails to demonstrate (or even attempt to project) that the Brier Creek CT will perform at least 5,100 HECT units in year three.

Based on these issues, the application is non-conforming with the CT rules, and should also be found non-conforming with Criteria 3 and 6.

Attachment 1

WakeMed
WakeMed Health & Hospitals
3000 New Bern Avenue
Raleigh, North Carolina 27610
919-350-8000

TO: Medical Facilities Planning Section
NC Division of Health Service Regulation
2714 Mail Service Center
Raleigh, NC 27699-2714

FROM: W. Stan Taylor
Vice President, Corporate Planning

DATE: August 18, 2010

RE: RESPONSE TO COMMENTS SUBMITTED ON PROPOSED POLICY GEN-4 IN PROPOSED 2011 SMFP

WakeMed supports the principle of improving energy efficiency and sustainable building design in healthcare facilities as expressed in Governor Perdue's letter to the State Health Coordinating Council approving the 2010 State Medical Facilities Plan, and we appreciate the efforts of the Facility Energy Efficiency and Sustainability (FEES) Work Group in trying to address this issue. We also strongly support the comments and suggestions submitted by Mike Vicario of NCHA, because we believe they represent a fairer and more effective way to meet the goals stated by the Governor. Especially important in advancing the objective is the suggestion that this effort be overseen by the Division of Health Service Regulation's Construction Section using licensure rules approved by the Medical Care Commission. WakeMed respectfully provides the following points supplemental to those already submitted regarding Proposed Policy GEN-4.

In order to be fair there should be a single set of standards that all like facilities need to meet in achieving overall improvements in energy efficiency and water conservation. However, that cannot occur if Policy GEN-4 is to be implemented through the certificate of need (CON) process, for two reasons: 1) in N.C.G.S. §131E-184, the CON Statute specifically exempts many projects from the requirement to obtain a CON, including heating or cooling systems and other basic plant or mechanical improvements, replacement nursing home and assisted living facilities at the same location, and improvements needed to meet licensure, certification or accreditation standards; and, 2) there is no authority to apply the policies in the State Medical Facilities Plan to projects that do not require a CON. Therefore, many projects, including some that provide the greatest opportunity to improve energy efficiency and sustainability, would not be covered by the proposed Policy GEN-4.

In order for the FEES effort to be effective, the standards need not only to be uniform, but applied at the right time and enforced by the most knowledgeable officials. Both of those attributes would be missing if implemented at the CON application level. At the time CON applications are submitted construction plans are still preliminary, usually only schematically developed. CON applications are reviewed by a staff of project analysts with backgrounds in healthcare administration, law, and clinical services, not by engineers, architects or environmental specialists. The CON project analysts would have difficulty distinguishing between alternative energy efficiency proposals even if they were provided in detail in the CON application. Winning applicants would then build projects according to their own proposals

rather than to uniform standards. The DHSR's Construction Section employs staff with more applicable expertise to evaluate proposals for energy efficiency and sustainability.

The dilemma faced by the FEES Work Group is not any shortcoming of the objective, or the effort its members are putting forth. Rather, it is simply the tools the Work Group has available through the SMFP. Both fairness and effectiveness can be improved through the suggestions made in the comments from NCHA, which propose that this be implemented by the Medical Care Commission and administered by the DHSR Construction Section, using licensure rules adopted by the Medical Care Commission and building codes applicable to the specific project. We hope the SHCC will make this recommendation to Governor Perdue.

Thank you for the opportunity to provide these comments. If you have questions or require additional information, please call me at 919-350-8108 or email to: staylor@wakemed.org.

Attachment 2

North Carolina Department of Health and Human Services
Division of Health Service Regulation

Pat McCrory
Governor

Richard O. Brajer
Secretary DHHS

Mark Payne
Assistant Secretary for Audit and
Health Service Regulation

April 7, 2016

W. Stan Taylor, Vice President, Corporate Planning
WakeMed Health & Hospitals
3000 New Bern Ave
Raleigh NC 27610

Exempt from Review – Replacement Equipment

Record #:	**1918**
Facility Name:	WakeMed North
FID #:	990974
Business Name:	WakeMed
Business #:	2007
Project Description:	Replace CT scanner
County:	Wake

Dear Mr. Taylor:

The Healthcare Planning and Certificate of Need Section, Division of Health Service Regulation (Agency), determined that based on your letter of March 29, 2016, the above referenced proposal is exempt from certificate of need review in accordance with G.S 131E-184(a)(7). Therefore, you may proceed to acquire, without a certificate of need, the Philips CT scanner. This determination is based on your representations that the unit will be removed from North Carolina and will not be used again in the State without first obtaining a certificate of need.

Moreover, you need to contact the Agency's Construction and Acute and Home Care Licensure and Certification Sections to determine if they have any requirements for development of the proposed project.

It should be noted that the Agency's position is based solely on the facts represented by you and that any change in facts as represented would require further consideration by this office and a separate determination. If you have any questions concerning this matter, please feel free to contact this office.

Healthcare Planning and Certificate of Need Section
www.ncdhhs.gov
Telephone: 919-855-3873 • Fax: 919-715-4413
Location: Edgerton Building • 809 Ruggles Drive • Raleigh, NC 27603
Mailing Address: 2704 Mail Service Center •Raleigh, NC 27699-2704
An Equal Opportunity/ Affirmative Action Employer

Sincerely,

Michael J. McKillip
Project Analyst

Martha J. Frisone,
Assistant Chief, Certificate of Need

cc: Construction Section, DHSR
Kelli Fisk, Program Assistant, Healthcare Planning, DHSR
Acute and Home Care Licensure and Certification Section, DHSR

990974

WakeMed
WakeMed Health & Hospitals
3000 New Bern Avenue
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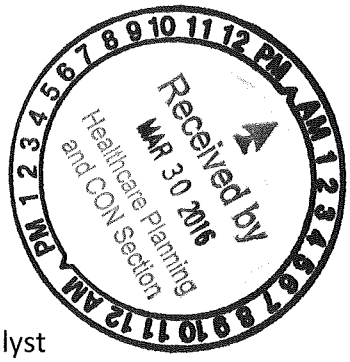
919-350-8000



March 29, 2016

HAND-DELIVERED

Mr. Michael McKillip, Project Analyst
Division of Health Service Regulation
Healthcare Planning & Certificate of Need Section
2704 Mail Service Center
Raleigh, NC 27699-2704

Re: Request for Exemption from Review - Replacement of Fixed CT Scanner at WakeMed North

Dear Mr. McKillip:

This letter is to inform you of WakeMed's intent to replace the fixed CT scanner located at WakeMed North, 10000 Falls of Neuse Road, Raleigh, NC 27614. Replacement of this equipment will allow WakeMed to continue to provide quality of care and technology that meets the needs of its patients. WakeMed will purchase a Philips Ingenuity Core, a 64-slice CT scanner, replacing an 11 year old scanner which has outdated technology, inferior image quality, and significant downtime. The new scanner will allow for faster scanning times, which will improve patient throughput, reduce patient exposure to radiation, provide enhance image quality, and reduce maintenance costs.

The unit of equipment to be replaced was originally acquired in 2003 through a certificate of need application (Project No. J-6940-03). Please see Attachment 1 for a copy of the CON.

The estimated total cost of this project is $729,300, including $494,928 for the replacement CT scanner. Please see Attachment 2 for the equipment quote from the vendor, as well as Attachment 3 for the Project Capital Cost worksheet. The equipment to be replaced, a Philips Brilliance 16 unit, is assumed to have salvage value of $47,500, and will be un-installed and removed from service in North Carolina. Please see Attachment 4 for the Equipment Comparison Chart.

The proposed project will not change the inventory of fixed CT scanners at WakeMed North, in the WakeMed system, or in Wake County. Further, the project will not change current hospital operations. Minor renovations of the Imaging Services Department will be required to accommodate the new equipment, but will not result in the offering of a new institutional health service.

WakeMed believes the project does not represent a "new institutional health service per G.S. §131E-176(16) and meets the definition of "replacement equipment" per G.S. §131E-176(22a). Therefore, WakeMed believes the project is exempt from certificate of need review, pursuant to G.S. §131E-184(a)(7). WakeMed is requesting a determination as to whether it may proceed with the project without a CON.

Thank you for your attention to this matter. If you have questions or require additional information, please contact me at 919-350-8108.

Sincerely,

W. Stan Taylor
Vice President, Corporate Planning

Attachments

ATTACHMENT 1

STATE OF NORTH CAROLINA
Department of Health and Human Services
Division of Facility Services

CERTIFICATE OF NEED
for
Project Identification Number J-6940-03
FID# 990794

ISSUED TO: **WakeMed (Lessee) and WakeMed Property Services, Inc. (Lessor)**
P.O. Box 14465
Raleigh, NC 27620-4465

Pursuant to N.C. Gen. Stat. § 131E-175, et. seq., the North Carolina Department of Health and Human Services hereby authorizes the person or persons named above (the "certificate holder") to develop the certificate of need project identified above. The certificate holder shall develop the project in a manner consistent with the representations in the project application and with the conditions contained herein and shall make good faith efforts to meet the timetable contained herein. The certificate holder shall not exceed the maximum capital expenditure amount specified herein during the development of this project, except as provided by N.C. Gen. Stat. § 131E-176(16)e. The certificate holder shall not transfer or assign this certificate to any other person except as provided in N.C. Gen. Stat. § 131E-189(c). This certificate is valid only for the scope, physical location, and person(s) described herein. The Department may withdraw this certificate pursuant to N.C. Gen. Stat. § 131E-189 for any of the reasons provided in that law.

SCOPE: **Renovate space to expand emergency services to WakeMed North to include radiology services, including acquisition of x-ray, and ultrasound equipment and a new fixed CT scanner/Wake County**

CONDITIONS: **See Reverse Side**

PHYSICAL LOCATION: **WakeMed North**
10000 Falls of the Neuse Road

MAXIMUM CAPITAL EXPENDITURE: **$7,096,235**

TIMETABLE: **See Reverse Side**

FIRST PROGRESS REPORT DUE: June 15, 2005

This certificate is effective as of the 16th day of April, 2004.

Lee B. Hoffman

Chief, Certificate of Need Section
Division of Facility Services

CONDITIONS:

1. WakeMed (Lessee) and WakeMed Property Services, Inc. (Lessor) shall materially comply with all representations made in its certificate of need application, as amended by the conditions of approval.

2. WakeMed (Lessee) and WakeMed Property Services, Inc. (Lessor) shall not acquire, as part of this project, any equipment that is not included in the project's proposed capital expenditure in Section VIII of the application, or any equipment that would otherwise require a certificate of need, or for which there are criteria and standards in the administrative rules.

3. WakeMed (Lessee) and WakeMed Property Services, Inc. (Lessor) shall acknowledge acceptance of and agree to comply with all conditions stated herein to the Certificate of Need Section in writing prior to issuance of the certificate of need.

A letter acknowledging acceptance and compliance with all conditions stated in the conditional approval letter was received by the Certificate of Need Section on March 26, 2004.

TIMETABLE:

Completion of final drawings and specifications	September 15, 2004
Contract Award	January 5, 2005
25% completion of construction	April 30, 2005
50% completion of construction	June 30, 2005
75% completion of construction	August 1, 2005
Completion of construction	September 15, 2005
Order Equipment	March 31, 2005
Operation of Equipment	October 1, 2005

ATTACHMENT 2

PHILIPS HEALTHCARE
A division of Philips Electronics North America Corporation
22100 Bothell Everett Highway
P.O. Box 3003
Bothell, Washington 98041-3003

PHILIPS

Quotation #: 1-1DPBUM9	**Rev:** 7	**Effective From:** 18-Feb-16	**To:** 18-Apr-16

Presented To:

WAKEMED NORTH
10000 FALLS OF NEUSE RD
RALEIGH, NC 27614-7838

Tel:

Alternate Address:

Presented By:

Bethann Griffith-Subik
Account Manager
Tel: (919) 677-9046
Fax: (919) 677-9047

Amy Morrow
Regional Manager
Tel: (828) 553-3118
Fax:

Date Printed: 18-Feb-16

Submit Orders To:

22100 BOTHELL EVERETT HWY
BOTHELL WA 98021
Tel: (888) 564-8643
Fax:(425) 458-0390

IMPORTANT NOTICE: Health care providers are reminded that if the transactions herein include or involve a loan or discount (including a rebate or other price reduction), they must fully and accurately report such loan or discount on cost reports or other applicable reports or claims for payment submitted under any federal or state health care program, including but not limited to Medicare and Medicaid, such as may be required by state or federal law, including but not limited to 42 CFR 1001.952(h).

Quote Solution Summary

Line #	Product	Qty	Price
	100032 Ingenuity Core	1	$494,928.85
		Equipment Total:	$494,928.85

Solution Summary Detail

Product	Qty	Each	Monthly	Price
100032 Ingenuity Core	1	$494,928.85		$494,928.85

Buying Group: NOVATION **Contract #: XR11011 CT**

Addt'l Terms:

Each Quotation solution will reference a specific Buying Group/Contract Number representing an agreement containing discounts, fees and any specific terms and conditions which will apply to that single quoted solution. If no Buying Group/Contract Number is shown, Philips' Terms and Conditions of Sale will apply to the quoted solution.

Each equipment system listed on purchase order/orders represents a separate and distinct financial transaction. We understand and agree that each transaction is to be individually billed and paid.

Payment Terms: 0% Down, 80% Shipment, 20% Due When the Product is Available for First Patient Use, Net due 10 days from date of invoice

Quote Summary

100032 Ingenuity Core

Qty	Product
1	**NNAC435 Ingenuity Core 2014**
1	NCTD272 Bariatric Table
1	NCTA176 Operator's Manual - English
1	NCTA485 Keyboard Language - English
1	NCTA132 Operator's Chair
1	NCTA131 Computer Table
1	NCTB870 Rate Responsive CV Toolkit
1	NCTB850 Load and Unload Foot Pedals
1	NCTB370 30 Min Console UPS
1	989605200562 Teal 100kVA Isotran LM
1	989801292425 CT Cardiac Add OffSite Educ 28h
1	989801292450 CT Cardiac Add OnSite Educ 24h
1	989801210007 Medrad Stellant ISI Interface Unit
1	SP019 Trade in Allowance
1	SP019 Trade in Allowance

Options

Qty	Product
1	989801210106 Bayer Stell DH/DF CT Inj w/CD-Medium OCS

100032 Ingenuity Core

System Type: New
Freight Terms: FOB Destination
Warranty Terms: Part numbers beginning with two (2) asterisks (**) are covered by a System 12 Months Warranty. All other part numbers are third (3rd) party items.
Special Notations: Contingencies must be removed 120 days before scheduled shipment to assure delivery on specified date. Any rigging costs are the responsibility of the Purchaser.
Additional Terms:

Line #	Part #	Description	Qty
1	**NNAC435	Ingenuity Core 2014	1

Ingenuity Core Configuration

Low-dose, high-quality imaging and coverage, and the ability to personalize image quality* patient by patient. Expect excellence in routine imaging, with improved image quality across a range of patients. Ingenuity Core offers you all of this, in addition to in-room upgradability to Ingenuity Elite or Ingenuity Elite with IMR so its capabilities can grow as your needs grow.

Philips Ingenuity Core offers 4 cm coverage for excellent image quality and is also available with iDose4, our iterative reconstruction technique. With a focus on clinical integration and collaboration, patient focus, and improved economic value, the scanner provides improved image quality at low dose with up to 57% improvement in spatial resolution. Now you can personalize image quality based on your patients' needs at low dose. And with Ingenuity Core with iDose4, reconstruction is achieved in seconds rather than minutes.

iDose4 is an iterative reconstruction technique that gives you control of the dial so you can personalize image quality based on your patients' needs at low dose. When used in combination with the advanced technologies of the iCT, Ingenuity, and Brilliance scanner families, this provides a unique approach to managing important factors in patient care – a new era in low energy, low dose and low injected contrast imaging.

With Ingenuity Core, the majority of factory protocols reconstructed using iDose4 are completed in 60 seconds or less. One click from the start of the scan and you're ready to read at the workstation or portal. Additionally, the Ingenuity core includes iPatient: an advanced platform that delivers focused innovations to facilitate patient-centered imaging, now and in the future.

Ingenuity Core Key Features

- iDose4 Premium Package
- iPatient
- 4 cm of coverage
- kV stations of 80, 100, 120, 140 kVp
- MRC Ice X-Ray Tube
- 80 kW Generator
- Upgradability

Intelligent Technologies

The Ingenuity family is built on the best in Philips class intelligent technologies for the speed, accuracy, and reliability to enhance your workflow on a daily basis.

iPatient

Philips' iPatient is an advanced platform that delivers focused innovations to facilitate patient-centered imaging, now and in the future. This powerful Windows® 7-based platform will put our customers in control of innovative solutions that drive confidence and consistency through personalized patient centric workflow, increase the ability to do complex and advance procedures with ease and efficiency. iPatient removes unnecessary complexity and allows our customers to

get the job done while driving confidence and consistency 24/7, and prepares for future innovations that will help improve the care being delivered to the patient.

ExamCards
ExamCards are the evolution of the scanning protocol. With ExamCards, the results are planned, not the acquisition as traditionally done in CT; this reduces decision points and clicks, saves time and improves operator-to-operator consistency. ExamCards can include axials, coronals, sagittals, MPRs, MIPS, and other results, all of which will be automatically reconstructed and can be sent off to where they will be read with no additional work required by the operator.

MRC Ice X-ray Tube
Liquid coolant carries heat away from the MRC Ice X-ray tube, so Ingenuity Core is ready for the most demanding scans, one right after the other. The Philips MRC Ice X-ray tube is designed to be one of the most reliable in the industry. Built for high volume and 24-hour consistency, there is no waiting for the tube to warm up before the scan and no waiting for it to cool down.

Detector
Detector design is fundamental to the objective of acquiring high quality images while managing patient dose. Unlike single matrix detectors that simply sum elements, Philips designs configuration-specific detectors that minimize the separation between elements to always provide the highest geometric detector efficiency. Direct-to-digital signal conversion with TACH2 technology reduces dose and improves image quality.

Generator
The Ingenuity generator uses low-voltage slip ring technology to provide a constant high voltage to the CT x-ray tube assembly.

Scan Times
0.5, 0.75, 1, 1.5, 2 seconds for full 360° scans

Reconstruction

iDose4 Premium Package
The iDose4 Premium Package includes two leading technologies that can improve image quality – the iDose4 iterative reconstruction technique and metal artifact reduction for large orthopedic implants (O-MAR). iDose4 is a 4th-generation advanced iterative reconstruction technique that improves image quality* through artifact prevention and increased spatial resolution at low dose. O-MAR reduces artifacts caused by large orthopedic implants. Together they produce high image quality with reduced artifacts.

With the iDose4 Premium Package, reconstruction is achieved in seconds rather than minutes. This is due to the innovative RapidView IR reconstruction engine. Designed to support iDose4, this proprietary technology allows for this iterative reconstruction technique to be used routinely in inpatient, outpatient, and emergency-care settings. The design seamlessly integrates into your CT department, and provides you the look and feel of conventional, higher-dose images without long processing times.

ClearRay Reconstruction
A revolutionary solution to beam hardening and scatter artifact, modeling and simulation technology pre-computes and stores beam hardening and scatter corrections in a database that is later referenced to create a correction that is personalized to each individual patient. As a fully three-dimensional technique, contrast scale stability is preserved across different patient sizes, image uniformity is improved, and organ boundaries are better visualized.

Evolving Reconstruction
Provides real-time 256 x 256 matrix image reconstruction and display in step with spiral

acquisition. Images can be modified for window width and level, zoom and pan prior to reconstruction. At the end of the acquisition, all images are updated with the desired viewing settings.

Adaptive filtering
Adaptive filters reduce pattern noise (streaks) in nonhomogenous bodies, improving overall image quality.

HyperSight IR Reconstruction
HyperSight IR reconstruction is the result of years of advanced research, and was designed specifically to satisfy the performance requirements and processing power needed to seamlessly integrate the iDose4 Premium Package and iPatient into your department. HyperSight IR provides dramatic improvements in workflow by displaying images at breakthrough rates, regardless of acquisition speed or reconstruction parameter. The majority of factory protocols with iDose4 are reconstructed in less than a minute, with reconstruction speeds up to 18 images per second with iDose4 and up to 20 images per second with standard reconstruction.

ConeBeam Reconstruction Algorithm – COBRA
Philips patented Cone Beam Reconstruction Algorithm (COBRA) enables true three-dimensional data acquisition and reconstruction in helical scanning.

Ultra High Resolution Matrix Sizes
Exclusive to Philips, 768 × 768 and 1024 × 1024 image reconstruction matrix sizes display all of the high-resolution data acquired in applications, such as inner ear, spine and high-resolution lung imaging. As scan resolution increases, larger reconstruction matrix sizes are required maintain the full scan resolution for the reconstructed field of view.

Dose Management
Philips' DoseWise philosophy is a set of principles and practices that ensures the best possible outcomes with minimal risk to patients and staff. The Ingenuity platform employs a number of features that help provide high dose efficiency.

NEMA XR-29 Compliance
This system complies with the NEMA XR-29-2013 Standard Attributes on CT Equipment Related to Dose Optimization and Management. The standard includes a group of CT attributes that contribute to or help perform optimization/management of doses of ionizing radiation while still enabling the system to deliver the diagnostic image quality needed by the physician. It encompasses: DICOM Radiation Dose Structured Reporting, Dose Check Feature (Dose Notification and Dose Alerts), Automatic Exposure Control (Dose Modulation) and Reference Adult & Pediatric Protocols.

NEMA XR-25 (DoseCheck)
DoseCheck enables the ability to set dose thresholds and provides alerts and notifications to the scan operator when radiation dose levels will be exceeded.

There are two threshold level values: Notification Values, Alert Values

Notification values apply to a single image series, and Alert values apply to an overall exam. Both CTDIvol and Dose Length Product (DLP) values can be set.

For Alert values that will be exceeded, the system requires the user provide name and password information before proceeding to scan. Also, an additional indication will appear in the Dose Info Page Series when the Notification or Alert values have been exceeded during a scan.

DICOM Structured Report for Dose (DICOM SR)
Dose SR complies with the IEC, DICOM PS and IHE standards for dose reporting. The report includes CTDIvol and DLP dose values.

Dedicated Pediatric Protocols
Developed in collaboration with top children's hospitals, age and weight-based infant and pediatric protocols enhance image quality at low dose.

DoseRight ACS (Automatic Current Selection)
Personalizes the dose for each patient based on the planned scan by suggesting the lowest mAs settings to maintain consistent image quality at low dose throughout the scan.

DoseRight Angular Dose Modulation
Automatically controls the tube current angularly, increasing the signal over areas of higher attenuation (e.g., lateral) and decreasing signal over areas of less attenuation (e.g., anteroposterior).

DoseRight Z-DOM (Longitudinal Dose Modulation)
Automatically controls the tube current, adjusting the signal along the length of the scan, increasing the signal over regions of higher attenuation (e.g., shoulders, pelvis), and decreasing the signal over regions of less attenuation (e.g., neck, legs).

Dose Displays
- Volume Computed Tomography Dose Index (CTDIvol)
- Dose-Length Product (DLP)
- Dose Efficiency

Scan and Image Acquisition
Scan Ruler
Provides a visual, highly interactive view of the entire procedure that allows 1-click updates to important study events.

Spiral Scanning
Multiple contiguous slices acquired simultaneously with continuous table movement during scans allowing for multiple, bidirectional acquisitions

Axial Scanning
Multiple-slice scan with incremental table movement between scans.

Test Injection Bolus Timing
Establishes the optimum contrast injection delay time using a test injection. A real-time graph of the enhancement in a selected region of interest is displayed. The delay time is then selected to provide optimal peak contrast enhancement and reduced contrast usage.

Bolus Tracking
An automated injection planning technique that permits a user to monitor actual contrast enhancement and to initiate scanning at a pre-determined enhancement level. Combine with SAS for full automation.

Spiral Auto Start
Spiral Auto Start allows the injector to communicate with the scanner. This allows the technologist to monitor the contrast injection and to start the scan (with a predetermined delay) while in the scan room.

NOTE:
- Costs to upgrade an approved injector and any cabling is the responsibility of the user.

- Compatible with following Injectors:
Medrad Envision/Stellant, Medrad Vistron, Liebel-Flarsheim, Tyco CT 9000, Medtron CT 2, Nemoto Dual Shot, Mallinckrodt OptiVantage DH, E-Z-EM Empower, Swiss Medicare, Ulrich Injectors

Image Management, Storage, and Filming
DICOM 3.0-compliant image format. Lossless image compression/decompression is used during image storage/retrieval to/from all local storage areas. Images can be auto-stored to selected archive media

- 500 GB Hard Disk
- Image Storage Capacity: 512 X 512 Image Matrix = 900,000 typical number of uncompressed images

DVD-RAM Storage
Provides a solution for data storage. DVD-RAM disks are written in a proprietary Philips format and are able to be read only on Philips EBW (v3.0.1 or higher), and CT scanner units (v2.3 or higher) with a DVD-RAM drive.

- 4.7 GB DVD-RAM
- Image Storage Capacity: 512 X 512 Image Matrix = 15,000 typical number of compressed images

Filming
Allows the user to set up and store filming parameters. Pre-stored protocols can be set to include auto-filming. The operator can film immediately after each image, at the end of a series, or after the end of a study, and review images before printing. The operator can also automatically film the study at three different windows and incorporate Combine Images functionality to manage large datasets. Basic monochrome and color DICOM print capability are supported.

Networking
Network connections should be located within 10 feet of the console. Supports 10/100/1000 Mbps (10/100/1000 BaseT) networks. For optimal performance, Philips recommends a minimum 100 Mbps network (1 Gbps preferred) and for the CT network to be segmented from the rest of the hospital network.

DICOM Connectivity
Full implementation of the DICOM 3.0 communications protocol allows connectivity to DICOM 3.0 compliant scanners, workstations, and printers; supports IHE requirements for DICOM Connectivity. Further details on connectivity and interoperability are provided within the DICOM Conformance statement.

Operator Console, Patient Handling, and Setup
Philips provides an operator work environment that is both flexible and easy to use. The operators' console includes the necessary hardware to use the scanner including host computer, cabinets, dual monitor configuration, and control box. The system provides applications that assist clinicians to improve workflow and planning aswell as post processing analysis and review to help you quickly gain the desired view. All of these combine in a graphical interface that allows you to easily execute scans and analyze images.

Manual Scan
Places slice-by-slice scans under operator control with on-line or off-line reconstruction, background image archiving to local or remote storage devices. At any time, the operator is able

to switch from automatic to manual scanand back.

Automatic Scan
Enables automatic execution of pre-planned studies, with concurrent, on-line or off-line reconstruction, background image archiving to local or remote storage devices, without operator intervention

Gantry Control Panels
Gantry Control Panels for gantry tilt, patient couch elevation and stroke are located at the operator's console as well as on front and back and left and right sides of the gantry. Additional functions at the operator's console include emergency stop, intercom and scan enable/pause buttons.
Gantry Aperture: 700 mm diameter
Gantry Tilt: -30° to +30°; 0.5° increments.

Infant Calibration Phantom
The Infant Calibration Phantom is a Philips-exclusive tool used to calibrate system parameters to optimize the system for scanning infants.

Patient Centering on Surview
Centering the patient properly is one of the most important factors in getting good image quality. Traditionally, patients are centered using the gantry laser lights; with this feature it is possible to improve patient centering using the lateral surview with real time feedback.

Intercom System and Multilingual Autovoice
The intercom system provides two-way communication between the scan room and the operator console. Additionally, a standard set of commands for patient communication before, during and after scanning is available in several pre-selected languages. Customized messages can also be created. Pre-selected languages available include: -English, Hebrew, German, French, Arabic, Danish, Spanish, Russian, Swedish, Italian, Georgian, Chinese, Japanese, Turkish and Portuguese.
Dual Surview Planning
Provides flexibility in exam planning with both anteroposterior and lateral surviews.
Automatic Procedure Selection
Maps the procedure selection from the HIS-RIS with individual scan protocol(s) simplifying the scanning process. Only the most relevant scan protocol(s) for any requested procedure are shown to the user, ensuring that only the desired scanning procedures are performed. This is especially useful for infrequent users of the CT scanner.

Table Accessories
Prevent fatigue and discomfort and give both patients and technologists a sense of security: patient restraint kit, table extension, standard head holder, table pad, IV Pole, arm rests, cushions, and pads.

Also Includes

- *Expert Protocol Planning*
- *Preset Post-Processing*
- *DICOM Modality Worklist*
- *Prefetch Study*
- *Split Study*

Applications

Organ ID
Automatically isolates lung images for better viewing, including lung limit detection, zoom and pan setting, lung windowing, image enhancement, and image filming.

Volume Rendering
Provides simultaneous visualization of vasculature, soft tissue, and bone. Offers real–time, interactive control of opacity and transparency to permit viewing through and beyond surrounding structures, such as metallic stents and arterial calcifications, and virtually eliminates the need for organ segmentation prior to
visualization.

Q-CTA - Quantitative CT Measurement Tool Package
Q-CTA is a tool kit for quantitative measurements of anatomic structures, such as vasculature pathology from 2-D, 3-D or volume-rendered images.
Also includes:

- *Surview Plan*
- *Guided Flow*

ScanTools and ScanTools Pro
The ScanTools package of advanced components and productivity features streamlines routine imaging studies, and comes standard with your scanner. ScanTools Pro is a supplemental set of tools standard on your scanner that enhances productivity, workflow, and diagnostic confidence. The components of ScanTools and ScanTools Pro are located throughout the quote under the appropriate headings.

Siting information
Power Requirements
- 200/208/240/380/400/460/415/480/500 VAC at 112.5 kVA (150 kVa preferred) and 50/60Hz
- Three-phase distribution source

Note: Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

Clinical Education Program for Ingenuity Systems:
Essentials OffSite Education: Philips will provide up to two (2) lead technologists, as selected by customer, with in-depth lectures covering basic clinical applications, Philips-specific imaging techniques, protocol optimization and scan parameters. A CT "system emulator" is used during the lab sessions to simulate all basic scanning operations without x-ray exposure. Students will graduate from this class with an 80% understanding of the base system functionality. The remaining 20% is covered during the Handover OnSite experience. This twenty-eight (28) hour class is located in Cleveland, Ohio, and is scheduled based on your equipment configuration, geography, and availability. Due to program updates, the number of class hours is subject to change without notice. Customer will be notified of current, total class hours at the time of registration. This class is a prerequisite to your equipment handover OnSite Education, and should be attended no earlier than two weeks prior to system installation. ASRT CEU credits may be available for each participant that meets the Guidelines provided by Philips during the scheduling process. Travel and lodging are not included, but may be purchased through Philips. It is highly recommended that 989801292078 (CT Full Travel Pkg OffSite) is purchased with all OffSite courses.
Handover OnSite Education: This twenty-eight (28) hour training event will fine tune and expand upon knowledge learned during the Essentials OffSite with focus on maximizing scanning

techniques and protocols. This session is to be attended by the same two (2) technologists from Essentials OffSite, and up to two (2) more of your dedicated CT Technologists, preferably from night or weekend shifts if necessary. ASRT CEU credits may be available for each participant that meets Philips Guidelines. Note: Site must be patient-ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

Follow-Up On-Site Education: Clinical Education Specialists will provide twenty-eight (28) hours of follow-up CT On-Site Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEUs are not available in all cases.

Follow-Up OnSite Education: Clinical Education Specialists will provide twenty-four (24) hours of follow-up CT OnSite Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEUs are not available in all cases. Please read Guidelines for more information, which will be provided to you during the scheduling process. Note: Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

Education expires one (1) year from equipment installation date (or purchase date if sold separately).

Ref# 618619620621-20110921

2 **NCTD272 Bariatric Table 1

The Bariatric Patient Support is designed to meet the CT imaging needs of the growing bariatric population. Allowing for patient loads of up to 295kg (650 lbs.), the Bariatric Patient Support provides CT imaging access to a larger patient population than current offerings.

Table Specifications:

Longitudinal motion:

Scannable range:
1750mm (iCT, Brilliance CT 16-slice, Brilliance CT Big Bore)
1860mm (Ingenuity Family)

Acquisition Speed: 0.5 to 185 mm/sec (iCT, Ingenuity Elite, Ingenuity Core, Ingenuity Core128)
0.5 to 100 mm/sec (Brilliance CT 16 - slice, Brilliance CT Big Bore)

Load/Unload Speed: 0.5 to 185 mm/sec (iCT, Ingenuity Elite, Ingenuity Core, Ingenuity Core 128)

Position accuracy: ±0.25 mm

Vertical motion:

Range: 578 to 1028 mm; 1.0 mm inc. (Brilliance CT 16-slice)
579 to 1022 mm; 1.0 mm inc (Ingenuity Core, Ingenuity Core 128, Ingenuity Elite)
579 to 1012 mm: 1.0mm increment (Brilliance CT Big Bore)
645 to 1065mm; 1.0 mm inc. (iCT)

Table load capacity: 295 kg (650 lbs)

Floating tabletop: Carbon-fiber table top with foot pedal and handrail control for easy positioning and quick release.

The Bariatric Patient Support includes the Radiology Flat Top Kit. This kit, comprised of a wide accessory flat top, wide mattress pad and extra long patient restraint straps, provides additional comfort and security for patients. A quality assurance phantom holder fitted for the flat top is also included. Note: This flat top is not qualified for oncology radiation therapy usage and cannot be used to support the iCT calibration phantom.

3 **NCTA176 Operator's Manual - English 1

Line #	Part #	Description	Qty
4	**NCTA485	Keyboard Language - English	1
5	**NCTA132	Operator's Chair	1

One (1) standard height operator's chair.

6	**NCTA131	Computer Table	1

Computer Table, for the Brilliance Console or the Extended Brilliance Workspace, provides a large enough working space (120cm) to accommodate dual monitors and other peripheral devices.

7	**NCTB870	Rate Responsive CV Toolkit	1

The "Rate Responsive CV toolkit" package is a set of features designed to allow basic cardiovascular imaging of the heart. This package is a prerequisite to the cardiac packages and to the "Stand Alone" applications, it includes:

Acquisition Features

0.4 Second Rotation

0.4 second 360° rotation provides better temporal resolution in advanced clinical applications such as coronary artery imaging, cardiac perfusion and other high-speed, motion-free imaging. The higher speed especially benefits prospective gating, with up to a 20% improvement in temporal resolution.

DoseRight Cardiac

ECG Dose Modulation reduces the mA of the X-ray beam up to 80% during acquisition of non-desired phases (estimated overall dose reduction to the patient of ~45% for single-phase, end-diastolic imaging). For example, only one phase may be required for coronary CTA, and the system will reduce the mA during the other portions of the acquisition, saving considerable dose.

Retrospective Tagging

Spiral Retrospective Tagging allows the Brilliance CT system to acquire a volume of data while the patient's ECG is recorded. The acquired data is "tagged" using AccuTag and reconstructed retrospectively at any desired phase of the cardiac cycle. This phase selection is accomplished using the Philips' patented Beat-to-Beat Variable Delay Algorithm, which automatically finds the best phase for cardiac CT imaging.

Prospective Gating

Prospective Gating automatically triggers axial multislice scan acquisitions using patient information from the ECG monitor. This feature uses Philips patented Beat-to-Beat variable delay algorithm for accurate and reproducible calcification scoring studies.

Integrated ECG Monitor

Philips' advanced ECG monitor with accompanying stand is used to collect the patient's ECG signal and then transfer the signal to the scanner for gated cardiac CT imaging. The ECG signal is stored on the system for later recall and display in the Brilliance Workspace. This can be used to interactively complete raw data reconstructions at different portions of the ECG cycle. Also can be used to correct reconstruction artifacts caused by irregular heartbeats.

Note: Gemini systems will ship with the GEMINI PET/CT ECG Gate.

Reconstruction Features

COBRA Reconstruction (COBRA Cardiac)

This reconstruction algorithm along with the adaptive multi-cycle reconstruction algorithm

Line #	Part #	Description	Qty

(MaxCycle) delivers the clearest images with the best temporal resolution possible at all times, as low as 53mseconds, in full 3-D conebeam resolution.

Review Features

Cardiac Viewer
Provides a comprehensive set of user tools that allows quick visualization of one or multiple cardiac phases, synchronization of multiple cardiac phases with interactive slab-MIP tools for review purposes, cine mode for cardiac axes views and a simple "Area-Length" calculation of End Systolic Volume (ESV), End Diastolic Volume (EDV), Cardiac Output (CO) and Ejection Fraction (EF) for basic ventricular functional assessment.

Calcium Scoring
Cardiac scoring program which provides Agatston, Volume and Mass scores. Incorporates a database of > 5,000 asymptomatic multislice cardiac scoring patients.

Reporting Features

CT Reporting
Provides reporting capabilities for paper print of clinical results from the Philips Brilliance Workspace including display of key images and results frames. The report is available for paper or electronic distribution to referring physicians, patients, or for medical records. Each report is editable and new default templates can be easily created and included in the system configuration. The report can be saved as a PDF file for digital transfer or printed.

8	**NCTB850	**Load and Unload Foot Pedals**	1

Load and Unload foot pedals allow the operator to move the patient couch to the load or unload position using a foot pedal thus improving patient handling efficiency by the freeing the operator's hands to prepare, restrain, or release the patient.

Prerequisite: Rear Gantry Panel for Field Upgrades

9	**NCTB370	**30 Min Console UPS**	1

Uninterruptible Power Supply (UPS) provides up to 30 minutes of battery backup for computer/reconstruction system.

10	**989605200562	**Teal 100kVA Isotran LM**	1

Teal 100kVA Isotran LM

11	**989801292425	**CT Cardiac Add OffSite Educ 28h**	1

Philips will provide one (1) lead technologist with twenty-eight (28) hours of training, which will give the participant a complete understanding of the Brilliance Cardiac functionality. A fully loaded Brilliance Cardiac system is used during the lab sessions to perform all areas of image manipulation and advanced processing. The Essentials OffSite Education is a prerequisite to this course. This class is located in Cleveland, Ohio, and is scheduled based on your equipment configuration, geography, and availability. Due to program updates, the number of class hours is subject to change without notice. Customer will be notified of current, total class hours at the time of registration. CEU credits may be available for each participant that meets the Philips Guidelines. Tuition and lunch expenses are included. Travel and lodging are not included, but may be purchased through Philips. It is highly recommended that 989801292078 (CT Full Travel Pkg OffSite) is purchased with all OffSite courses.

Education expires one (1) year from equipment installation date (or purchase date if sold separately).

100032 Ingenuity Core

Line #	Part #	Description	Qty
12	**989801292450	**CT Cardiac Add OnSite Educ 24h**	1

Clinical Education Specialists will provide twenty-four (24) hours of tailored CT Cardiac OnSite Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEUs are not available in all cases. Please read Guidelines for more information, which will be provided to you during the scheduling process. Note: Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.
Education expires one (1) year from equipment installation date (or purchase date if sold separately).

13	**989801210007	**Medrad Stellant ISI Interface Unit**	1

Medrad Stellant "ISI Interface Unit: Medrad Catalog # 3010434 The Medrad Stellant "ISI" Interface Unit provides the needed interface between the Stellant CT Injector and the SAS Option of the Brilliance CT Scanner.

14	SP019	**Trade in Allowance**	1

Customer represents and warrants that (i) Customer has, and shall have when title passes, good and marketable title to the equipment being traded in and (ii) has the authority to effect such trade in.

Product: 100002.000 Brilliance CT 16 Power
Serial Number: TBD
Manufacturer: PHILIPS HEALTHCARE

Trade-In authorization number:	34539
Trade-In Value:	$47,500.00
De-install Date:	4/9/2016

Customer will be trading-in equipment that is described on the attached System Disclosure Form (the "Trade-In"), which Trade-In the parties agree (i) will be removed on the De-install Date and (ii) is currently in the condition as represented on the System Disclosure Form. In addition, the parties agree as follows:

1. Customer represents and warrants that Customer has good and marketable title to the Trade-In as of the date of this Quotation and will have good and marketable title when Philips removes the Trade-In from Customer's site (the "Removal Date");
2. Title to the Trade-In shall pass from Customer to Philips on the Removal Date, unless otherwise agreed by Philips and the Customer;
3. Notwithstanding anything to the contrary in any Business Associate Addendum, Customer represents and warrants that as of the Removal Date all Protected Health Information will have been de-identified or removed from the Trade-In;
4. Philips may test and inspect the Trade-In prior to de-installation. If the condition of the Trade-In is not substantially the same on the Removal Date (ordinary wear and tear excepted) as it is identified on the System Disclosure Form, then Philips may reduce the price quoted for the Trade-In;
5. If the removal date is delayed until after the De-Install Date, unless Philips causes the delay, then Philips may reduce the price quoted for the Trade-In by six percent (6%) per month.
6. Philips is responsible for normal de-installation costs of the Trade-In.
7. The trade-in value will not include costs associated for any facility modifications and/or rigging required for de-installation and must be accounted for separately.
8. Customer is responsible for all plumbing necessary to properly drain coolant from chiller system and cap the lines.
9. Prior to the Removal Date, Customer shall remove from the room all equipment that is not being de-installed.

Line #	Part #	Description	Qty

15 **SP019** **Trade in Allowance** **1**

Customer represents and warrants that (i) Customer has, and shall have when title passes, good and marketable title to the equipment being traded in and (ii) has the authority to effect such trade in.

Product: 70408 BUCKY DIAGNOST
Serial Number: 249601
Manufacturer: PHILIPS HEALTHCARE

Trade-In authorization number: 39399

Trade-In Value: $0.00

De-install Date: 4/25/2016

Customer will be trading-in equipment that is described on the attached System Disclosure Form (the "Trade-In"), which Trade-In the parties agree (i) will be removed on the De-install Date and (ii) is currently in the condition as represented on the System Disclosure Form. In addition, the parties agree as follows:

1. Customer represents and warrants that Customer has good and marketable title to the Trade-In as of the date of this Quotation and will have good and marketable title when Philips removes the Trade-In from Customer's site (the "Removal Date");
2. Title to the Trade-In shall pass from Customer to Philips on the Removal Date, unless otherwise agreed by Philips and the Customer;
3. Notwithstanding anything to the contrary in any Business Associate Addendum, Customer represents and warrants that as of the Removal Date all Protected Health Information will have been de-identified or removed from the Trade-In;
4. Philips may test and inspect the Trade-In prior to de-installation. If the condition of the Trade-In is not substantially the same on the Removal Date (ordinary wear and tear excepted) as it is identified on the System Disclosure Form, then Philips may reduce the price quoted for the Trade-In;
5. If the removal date is delayed until after the De-Install Date, unless Philips causes the delay, then Philips may reduce the price quoted for the Trade-In by six percent (6%) per month.
6. Philips is responsible for normal de-installation costs of the Trade-In.
7. The trade-in value will not include costs associated for any facility modifications and/or rigging required for de-installation and must be accounted for separately.
8. Customer is responsible for all plumbing necessary to properly drain coolant from chiller system and cap the lines.
9. Prior to the Removal Date, Customer shall remove from the room all equipment that is not being de-installed.

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LIST PRICE	
DISCOUNT	
TRADE IN AMOUNT	
NET PRICE	$494,928.85

Buying Group: NOVATION Contract #: XR11011 CT

Addt'l Terms:

Each Quotation solution will reference a specific Buying Group/Contract Number representing an agreement containing discounts, fees and any specific terms and conditions which will apply to that single quoted solution. If no Buying Group/Contract Number is shown, Philips' Terms and Conditions of Sale will apply to the quoted solution.

Each equipment system listed on purchase order/orders represents a separate and distinct financial transaction. We understand and agree that each transaction is to be individually billed and paid.

Price above does not include any applicable sales taxes.

The preliminary delivery request date for this equipment is:_____.

If you do not issue formal purchase orders indicate by initialing here_____.

Tax Status:

Taxable_____ Tax Exempt_____

If Exempt, please indicate the Exemption Certification Number:_____, and attach a copy of the certificate.

Delivery/Installation Address:

_____

_____

_____

Invoice Address:

_____

_____

_____

Contact Phone #:

_____

Contact Phone #:

_____

Purchaser approval as quoted:

_____

Date:

_____

Title:

_____

This quotation is signed and accepted by an authorized representative in acknowledgement of the system configuration, terms and conditions stated herein.

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OPTIONS

SELECTION OF ANY OPTION WILL INCREASE THE CONTRACT PRICE BY THE AMOUNT SHOWN IN THE PRICE COLUMN. OPTIONAL EQUIPMENT PRICING VALID ONLY IF PURCHASED IN CONJUNCTION WITH EQUIPMENT QUOTED.

Line #	Part #	Description	Qty	Each	Price	Initial
1	**989801210106	**Bayer Stell DH/DF CT Inj w/CD-Medium OCS**	1	$30,506.50	$30,506.50	_____

Bayer Healthcare Stellant Dual Head/Dual Flow CT Injector w/ Console Display - Medium OCS:

Bayer Catalog # SCT322PH:

- 3032458 Stellant Dual Head Pedestal Injector with Console Display, informatics ready.

- 3016426 Medium OCS (850mm)

- 3012559 Dual Flow

- 3016436 Ceiling Plate

- INST SCT Installation

The Stellant Dual Head/Dual Flow CT Injection System is comprised of the injector head located in the screening room and a Console Display Station is typically located in the control room. The two components are connected by a communication link.

Control console system with Dual 200 ml variable speed injector head with automatic docking, Auto Advance and Auto retract. Includes touch screen display input, 75 ft. cable to control console, injector head overhead mount, operation manual and two 200 ml syringe kits.

Philips representatives are responsible for the unpacking, assembly and installation of the CT Injector equipment. Bayer will be available for technical assistance, by phone: call (412) 767-2400. Bayer will also provide an operational checkout, final calibration, in-service of the equipment and initial applications training. Please contact the local Bayer sales office at least two weeks in advance to schedule installation. Call (412) 767-2400.

Philips does not warranty the Bayer Stellant CT Injector System but will pass on the Bayer warranty. Bayer warrants each new injector system; including control unit, display control, remote panel and injector head sold in North America and Europe against defects in material and workmanship, under proper, normal use and service for a period of one year (12 months) from the date of installation. There will be no charge for any action deemed necessary by Bayer, including parts, travel, or labor to fulfill the terms of the warranty, during normal business hours (8:30am to 5:00pm, local time, Monday through Friday, except holidays).

PHILIPS PRODUCT WARRANTY

COMPUTED TOMOGRAPHY (CT) SYSTEMS

This product warranty document is an addition to the terms and conditions set forth in the quotation to which this warranty document is attached. The terms and conditions of the quotation are incorporated into this warranty document. The capitalized terms herein have the same meaning as set forth in the quotation.

TWELVE (12) MONTH SYSTEM WARRANTY
Philips warrants to Customer that the Philips CT System (the "System") will be free from defects in material and manufacturing workmanship for a period of twelve (12) months after completion of installation or availability for patient use, whichever occurs first. If an X-ray tube, Chiller Unit, Power Conditioner Unit, CT Injector Unit, Option, Upgrade or Accessory is purchased from Philips, they will be covered by the special warranty set forth below.

PLANNED MAINTENANCE
During the warranty period, Philips service personnel will schedule planned maintenance visits, in advance, at a mutually agreeable time on weekdays, between 8:00 A.M. and 5:00 P.M., excluding Philips observed holidays.

SYSTEM OPTIONS, UPGRADES OR ACCESSORIES
Any commercially available options, upgrades, or accessories for the System which are delivered and/or installed on the System during the original term of the System warranty shall be subject to the same warranty terms contained in the first paragraph of this warranty, except that such warranty shall expire on the later of: a) upon termination of the initial twelve (12) month warranty period for the System on which the option, upgrade or accessory is installed, b) after ninety (90) days for parts only from the date of installation. Any commercially available options, upgrades, or accessories for the System which are delivered and/or installed on the System after the original term of the System warranty has expired shall be subject to the same warranty terms contained in the first paragraph of this warranty, except that such warranty shall expire the later of: a) after ninety (90) days for parts only from the date of installation, or b) on the twelve (12) month renewal date of any current service agreement then in effect on the System.

X-RAY TUBE WARRANTY
BRILLIANCE CT SERIES -MRC X-RAY TUBES:
INGENUITY CT SERIES - MRC X-RAY TUBES:
iCT SERIES - MRC X-RAY TUBES:
MX16 SERIES – CTR2150 X-RAY TUBES:
The CT X-ray Tube ("tube") warranty period is for twelve (12) months from the date of installation or availability for patient use, whichever occurs first. If a tube becomes inoperative or fails when operated within this twelve (12) month warranty period, upon return of the tube, Philips will provide a replacement tube at no additional charge. The replacement tube will be warranted for the balance of the original twelve (12) month warranty.

All claims under this Tube warranty must be made within sixty (60) days of failure, or fourteen (14) months of (1) the date of installation (if installation of the tube is performed by Philips) or (2) the delivery (if installation of the tube is not performed by Philips), which ever comes first.

CHILLER UNIT, POWER CONDITIONER UNIT OR INJECTOR UNIT WARRANTY
The System can be purchased with an optional Chiller Unit, Power Conditioner Unit or Injector Unit. If any of these Units are purchased with the System, Philips will include these Units under the twelve (12) month System warranty as an OEM Warranty pass through. Authorized representatives of the Original Equipment Manufacturer will perform warranty service on each of these units.

SYSTEM SOFTWARE AND SOFTWARE UPDATES
The software provided with the System will be the latest version of the standard software available for that system as of the 90th day prior to the date the System is delivered to Customer. Updates to standard software for the System that do not require additional hardware or equipment modifications will be performed as a part of normal warranty service during the term of the warranty. "Updates" shall mean changes to the right of the decimal point for the software shipped with the product

All software is and shall remain the sole property of Philips or its software suppliers. Use of the software is subject to the terms of a separate software license agreement. Customer must sign all such license agreements prior to or upon the delivery of the product. No license or other right is granted to Customer or to any other party to use the software except as set forth in the license agreements.

Any Philips maintenance or service software and documentation provided with the product and/or located at Customer's premises is intended solely to assist Philips and its authorized agents to install and to test the System, to assist Philips and its authorized agents to maintain and to service the System under a separate support agreement with Customer, or to permit Customer to maintain and service the System. Customer agrees to restrict the access to such software and documentation to Philips' employees and those of its authorized agents, and to authorized employees of Customer only.

WARRANTY LIMITATIONS
Philips' obligations under the System warranty are limited, at Philips' option, to the repair or the replacement of the System or a portion thereof, or to a credit or refund of a portion of the purchase price paid by Customer. Any refund will be paid to Customer when the System is returned to Philips. Certain of the parts used in the manufacture or installation of, or in the replacement parts for, this System may contain refurbished components. If such components are used, they will be subject to the same quality control and inspection procedures as new components. Any System warranty is made on condition that Philips receives written notice of a System defect during the warranty period, and within thirty (30) days following the discovery of the defect by Customer. Philips' obligations under the System warranty do not apply to any System defects resulting from: improper or inadequate maintenance or calibration by Customer or its agents; Customer or third party supplied software, interfaces, or supplies; use or operation of the product other than in accordance with loss, or damage in transit; improper site preparation; operation of the system outside its environmental, electrical, or performance specifications; unauthorized maintenance or Philips' applicable product specifications and written instructions; abuse, negligence, accident, modifications to the System; or to viruses or similar software interference resulting from the connection of the product to a network. Philips does not provide a warranty for any such third party products furnished to Customer by Philips; however, Philips shall use reasonable efforts to extend to Customer the third party warranty for the product. The obligations of Philips described above are Philips' only obligations and Customer's sole and exclusive remedy for a breach of a System warranty. Repairs or replacement parts do not extend the term of this warranty.

THE WARRANTIES SET FORTH IN PHILIPS' WARRANTY DOCUMENT WITH RESPECT TO THIS SYSTEM (INCLUDING THE SOFTWARE PROVIDED WITH THE SYSTEM) ARE THE ONLY WARRANTIES MADE BY PHILIPS IN CONNECTION WITH THE SYSTEM, THE SOFTWARE, AND THE TRANSACTIONS CONTEMPLATED BY THE QUOTATION, AND ARE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

ACCESS TO SYSTEM
Philips shall have full, free and safe access to the System and Customer's operation, performance and maintenance records for the System, on each scheduled or requested warranty service visit. Philips shall also have access to and use of any machine, service, attachment, features or other equipment required to perform the necessary service contemplated herein at no charge to Philips. Customer waives warranty service if it does not provide such access to the System and Customer's records. Should Philips be denied access to the System and Customer's records at the agreed upon time, a charge equal to the appropriate hourly rate will be accepted by Customer for "waiting time."

WARRANTY SERVICE
In the event it is not possible to accomplish warranty service within normal working hours (8:00 A.M. to 5:00 P.M., Monday through Friday, excluding Philips observed holidays), or in the event Customer specifically requests that warranty service be performed outside of Philips normal working hours, Customer agrees to pay for such services at Philips standard service rates in effect. Customer Support Agreements are available for extended coverage.

TRANSFER OF SYSTEM
In the event Customer transfers or relocates the System, all obligations under this warranty will terminate unless Customer receives the prior written consent of Philips for the transfer or relocation. Upon any transfer or relocation, the System must be inspected and certified by Philips as being free from all defects in material, software and workmanship and as being in compliance with all technical and performance specifications. Customer will compensate Philips for these services at the prevailing service rates in effect as of the date the inspection is performed. Any System, which is transported intact to pre-approved locations and is maintained as originally installed in mobile configurations, will remain covered by this warranty.

CONDITIONS
This warranty is subject to the following conditions: the System (a) is to be installed by authorized Philips representatives (or is to be installed in accordance with all Philips installation instructions by personnel trained by Philips), (b) is to be operated exclusively by duly qualified personnel in a safe and reasonable manner in accordance with Philips written instructions and for the purpose for which the products were intended, (c) is to be maintained and in strict compliance with all recommended and scheduled maintenance instructions provided with the System, and (d) Customer is to notify Philips immediately in the event the System at any time fails to meet its printed performance specifications.

LIMITATIONS OF LIABILITY AND DISCLAIMERS

The liability, if any, of Philips AND ITS AFFILIATES for damages whether arising from breach of the terms in the quotation, breach of warranty, negligence, indemnity, strict liability or other tort, or otherwise with respect to the products and services is limited to an amount not to exceed the price of the product or service giving rise to the liability.

IN NO EVENT SHALL PHILIPS OR ITS AFFILIATES BE LIABLE FOR ANY INDIRECT, PUNITIVE, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR PROFITS, OR THE COST OF SUBSTITUTE PRODUCTS OR SERVICES WHETHER ARISING FROM BREACH OF THE TERMS IN THIS QUOTATION, BREACH OF WARRANTY, NEGLIGENCE, INDEMNITY, STRICT LIABILITY OR OTHER TORT. PHILIPS SHALL HAVE NO LIABILITY FOR ANY GRATUITOUS ADVICE PROVIDED TO THE CUSTOMER.

FORCE MAJEURE
Philips and Customer shall each be excused from performing its obligations arising from any delay or default caused by events beyond its reasonable control including, but not limited to: acts of God, acts of third parties, acts of the other party, acts of any civil or military authority, fire, floods, war, embargoes, labor disputes, acts of sabotage, riots, accidents, delays of carriers, subcontractors or suppliers, voluntary or mandatory compliance with any government act, regulation or request, shortage of labor, materials or manufacturing facilities.

Philips system specifications are subject to change without notice Document Number 4535 983 03551 999

Non Disclosure Agreement for Philips Confidential Pricing Information

The parties specified below agree to the following terms:

A. Philips

Name	Philips Healthcare, a division of Philips Electronics North America Corporation
Address	22100 Bothell-Everett Highway, Bothell, WA 98021 United States of America

B. Company

Name	WAKEMED NORTH
Address	10000 FALLS OF NEUSE RD RALEIGH, NC 27614-7838

C. Confidential Information

Authorized Purpose	To evaluate Philips' confidential information relating to pricing for imaging equipment ("Pricing") in connection with the potential purchase of such imaging equipment.
Period	Begins on the date Pricing is first disclosed and continues for 5 years from date Pricing is last disclosed.

D. Philips Contact

Name	Bethann Griffith-Subik
Title	
Telephone	(919) 677-9046
Fax	(919) 677-9047
e-mail	
Signature	

Company Contact

Name	
Title	
Telephone	
Fax	
e-mail	
Signature	

1. The following terms and conditions (the "Agreement") apply to Pricing disclosed by Philips and its Affiliates ("Philips") to Company and its Affiliates ("Company"), in connection with the Authorized Purpose.

   (a) Subject to Philips' prior written consent, Company may disclose, or request that Philips disclose, Pricing to Company's Affiliates that need to know the Pricing for carrying out the Authorized Purpose, provided they are advised of and agree to be bound by this Agreement. Company is responsible for any breach of this Agreement by its Affiliates.

   (b) An Affiliate is any corporation, company, or other entity, that: (i) is under the Control of a party hereto; or (ii) has Control of a party hereto; or (iii) is under common Control with a party hereto. For this purpose "Control" means that more than fifty percent (50%) of the controlled entity's shares or ownership interest representing the right to make decisions for such are owned or controlled, directly or indirectly, by the controlling entity.

2. Philips may disclose Pricing to Company with respect to the Authorized Purpose in writing, orally, or otherwise. All information is assumed to be Pricing, and confidential, if the confidential or proprietary nature is reasonable under the circumstances.

3. All Pricing disclosed by Philips shall remain Philips' the property. Company does not, by implication, estoppel, or otherwise, acquire any intellectual property right, title, or ownership, nor a license to any such intellectual property right, with respect to any Pricing disclosed by Philips hereunder.
   ALL PRICING IS PROVIDED ON AN "AS IS" BASIS, WITHOUT ANY WARRANTY WHATSOEVER. PHILIPS SHALL HAVE NO LIABILITY WHATSOEVER RESULTING FROM THE USE OF THE INFORMATION PROVIDED.

4. Company shall:
   (a) not use the Pricing for any purpose other than the Authorized Purpose;
   (b) not disclose the Pricing to any third party;
   (c) protect the Pricing against disclosure in the same manner and with the same degree of care with which Company protects its own confidential information but not less than a reasonable degree of care; and
   (d) limit circulation of the Pricing to Company's employees as have a need to know in connection with the Authorized Purpose.

   These obligations shall survive the termination of this Agreement. Philips may terminate this Agreement at any time by means of a written notice to Company. Company shall return to Philips, or certify destruction of, all Pricing, immediately upon termination or expiration of this Agreement.

5. Information disclosed by Philips to Company pursuant to this Agreement shall not be confidential to the extent that the information:
   (a) is or becomes part of the public domain without violation of this Agreement or any other obligation of confidentiality;
   (b) is known by Company prior to disclosure by Philips;
   (c) is lawfully obtained by Company from a third party without any breach of confidentiality or violation of law; or
   (d) is developed by Company completely independently of any such disclosure by Philips.

6. If Company is required, pursuant to administrative or judicial action or subpoena, to disclose the Pricing, Company shall use its best efforts to maintain the confidentiality of the Pricing, e.g. by asserting in such action any applicable privileges. Immediately after gaining knowledge or receiving notice of such action or subpoena, Company shall notify Philips and give Philips the opportunity to seek any other legal remedies so as to maintain such Pricing in confidence, including a reasonable protective order.

7. Company may not transfer or assign any or all of its rights and/or obligations or delegate the performance of any or all of its obligations under this Agreement, directly or indirectly, through acquisition, merger or otherwise, without the prior written consent of Philips. Any transfer, assignment or delegation in contravention of the foregoing shall be void.

8. Company shall not disclose, export or release the Pricing in contravention of any applicable laws or regulations.

9. This Agreement shall be governed and construed in accordance with the laws of the State of New York, without giving effect to its conflict of laws provisions.

10. This Agreement contains the entire understanding of the parties and supersedes any previous understandings or agreements with respect to the subject matter hereof. This Agreement may be amended only in writing signed by authorized representatives of each party.

ATTACHMENT 3

PROPOSED TOTAL CAPITAL COST OF PROJECT

Project Name: CT REPLACEMENT AT WAKEMED NORTH
Provider/Company: WAKEMED

A. Site Costs			
(1) Full purchase price of land		$ 0	
Acres _____ Price per Acre _____	$ 0		
(2) Closing costs		$ 0	
(3) Site Inspection and Survey		$ 0	
(4) Legal fees and subsoil investigation		$ 0	
(5) Site Preparation Costs [Include]:			
Soil Borings	$		
Clearing and Grading	$		
Roads and Parking	$		
Sidewalks	$		
Water and Sewer	$		
Excavation and Backfill	$		
Termite Treatment	$		
Sub-Total Site Preparation Costs		$ 0	
(6) Other (Specify) _____		$ 0	
(7) **Sub-Total Site Costs**			$ 0
B. Construction Contract			
(8) Cost of Materials [Include]:			
General Requirements	$		
Concrete/Masonry	$		
Woods/Doors & Windows/Finishes	$		
Thermal & Moisture Protection	$		
Equipment/Specialty Items	$		
Mechanical/Electrical	$		
Sub-Total Cost of Materials		$ 78,588	
(9) Cost of Labor		$ 96,052	
(10) Other (Specify) Construction Contingency		$ 8,732	
(11) **Sub-Total Construction Contract**			$ 183,372
C. Miscellaneous Project Costs			
(12) Building Purchase		$ 0	
(13) Fixed Equipment Purchase/Lease		$ 494,928	
(14) Movable Equipment Purchase/Lease		$	
(15) Furniture		$	
(16) Information Services		$ 8,000	
(17) Consultant Fees			
Architect and Engineering Fees	$ 30,000		
Legal Fees	$		
Market Analysis	$		
Other - Plan Review, Radiation Shielding	$ 13,000		
Total Consultant Fees		$ 43,000	
(18) Financing Costs (e.g. Bond, Loan, etc.)	$ 0		
(19) Interest During Construction	$ 0		
(20) Other (Specify)	$ 0		
(21) Sub-Total Miscellaneous			$ 545,928
(22) Total Capital Cost of Project (Sum A-C above)			$ 729,300

I certify that, to the best of my knowledge, the costs of the proposed project named above are complete and correct.

_____ Date Certified: _____
(Signature of Licensed Architect or Engineer)

I assure that, to the best of my knowledge, the above costs for the proposed project are complete and correct and that it is my intent to carry out the proposed project as described.

_____ Date Signed: 3/23/16
(Signature and Title of Officer Authorized to Represent Provider/Company)

EQUIPMENT COMPARISON

	EXISTING EQUIPMENT	REPLACEMENT EQUIPMENT
Type of Equipment (List Each Component)	CT Scanner	CT Scanner
Manufacturer of Equipment	Philips	Philips
Tesla Rating for MRIs	N/A	N/A
Model Number	Brilliance 16	Ingenuity Core
Serial Number	51101	TBD
Provider's Method of Identifying Equipment	Capital asset control number	Capital asset control number
Specify if Mobile or Fixed	Fixed	Fixed
Mobile Trailer Serial Number/VIN #	N/A	N/A
Mobile Tractor Serial Number/ VIN #	N/A	N/A
Date of Acquisition of Each Component	April 2005	TBD - 2016
Does Provider Hold Title to Equipment or Have a Capital Lease?	Title	Title
Specify if Equipment Was/Is New or Used When Acquired	New	New
Total Capital Cost of Project (Including Construction, etc.) <Use Attached Form>	N/A	$729,300
Total Cost of Equipment	$945,000	$494,928
Fair Market Value of Equipment	$47,500	$494,928
Net Purchase Price or Equipment	N/A	$494,928
Locations Where Operated	WakeMed North 10000 Falls of Neuse Rd. Raleigh, NC 27614	WakeMed North 10000 Falls of Neuse Rd. Raleigh, NC 27614
Number Days In Use/To Be Used in N.C. Per Year	365	365
Percent Change in Patient Charges (by Procedure)	N/A	0%
Percent of Change in Per Procedure Operating Expenses (by Procedure)	N/A	0%
Type of Procedures Currently Performed on Existing Equipment	Diagnostic CT imaging	N/A
Type of Procedures New Equipment is Capable of Performing	N/A	Diagnostic CT imaging

ATTACHMENT 4