### ATTACHMENT - REQUIRED STATE AGENCY FINDINGS

#### **FINDINGS**

C = Conforming CA = Conditional NC = Nonconforming NA = Not Applicable

DECISION DATE: April 5, 2012 PROJECT ANALYST: Fatimah Wilson SECTION CHIEF: Craig R. Smith

PROJECT I.D. NUMBER: F-8771-12 / Mercy Hospital, Inc. d/b/a Carolinas Medical Center-

Mercy / Replace existing fixed MRI scanner / Mecklenburg County

### REVIEW CRITERIA FOR NEW INSTITUTIONAL HEALTH SERVICES

G.S. 131E-183(a) The Department shall review all applications utilizing the criteria outlined in this subsection and shall determine that an application is either consistent with or not in conflict with these criteria before a certificate of need for the proposed project shall be issued.

(1) The proposed project shall be consistent with applicable policies and need determinations in the State Medical Facilities Plan, the need determination of which constitutes a determinative limitation on the provision of any health service, health service facility, health service facility beds, dialysis stations, operating rooms, or home health offices that may be approved.

#### NA

Mercy Hospital, Inc. d/b/a Carolinas Medical Center-Mercy proposes to replace its GE Excite 1.5 Tesla (T) fixed magnetic resonance imaging (MRI) scanner at Carolinas Medical Center (CMC) Mercy and install a, Optima 1.5T General Electric (GE) replacement scanner in the CMC-Mercy MRI department. The applicant does not propose to increase the number of licensed beds in any category, add services, or acquire equipment for which there is a need determination in the 2012 State Medical Facilities Plan (SMFP).

There is one policy in the 2012 SMFP applicable to the review of the application:

Policy GEN-4: ENERGY EFFICIENCY AND SUSTAINABILITY FOR HEALTH SERVICE FACILITIES

"Any person proposing a capital expenditure greater than \$2 million to develop, replace, renovate, or add to a health service facility pursuant to G.S. 131E-178 shall include in its certificate of need application a written statement describing the project's plan to assure improved energy efficiency and water conservation.

In approving a certificate of need proposing an expenditure greater than \$5 million to develop, replace, renovate, or add to a health service facility pursuant to G.S. 131E-178, the Certificate of Need Section shall impose a condition requiring the applicant to develop and implement an Energy Efficiency and Sustainability Plan for the project that conforms to or exceeds energy efficiency and water conservation standards incorporated in the latest editions of the North Carolina State Building Codes. The plan must be consistent with the applicant's representation in the written statement as described in paragraph one of Policy GEN 4.

Any person awarded a certificate of need for a project or an exemption from review pursuant to G.S. 131E-184 are required to submit a plan for energy efficiency and water conservation that conforms to the rules, codes and standards implemented by the Construction Section of the Division of Health Service Regulation. The plan must be consistent with the applicant's representation in the written statement as described in paragraph one of Policy-GEN 4. The plan shall not adversely affect patient or resident health, safety, or infection control."

Regarding Policy GEN-4, in Section III.2, pages 52-54 and Section XI.7, pages 108-110 the applicant states:

"CHS is committed to energy efficiency and sustainability that balances the need for healthcare services and environmental sustainability in the communities it serves. The project's plan to assure improved energy and water conservation in accordance with Policy GEN-4 requirements is discussed below.

...CMC-Mercy will work with experienced architects and engineers to develop this proposed project to ensure energy efficient systems are an inherent part of the proposed project.

... CMC-Mercy utilizes and enforces engineering standards that mandate use of state-of-the-art components and systems. The proposed project will be designed in full compliance with applicable local, state, and federal requirements for energy efficiency and consumption."

The applicant adequately described the project's plan to assure improved energy efficiency and water conservation. Thus, the application is conforming to Policy GEN-4. Therefore, the application is conforming to this criterion.

- (2) Repealed effective July 1, 1987.
- (3) The applicant shall identify the population to be served by the proposed project, and shall demonstrate the need that this population has for the services proposed, and the extent to which all residents of the area, and, in particular, low income persons, racial and ethnic minorities, women, handicapped persons, the elderly, and other underserved groups are likely to have access to the services proposed.

Mercy Hospital, Inc. d/b/a Carolinas Medical Center-Mercy proposes to replace an existing magnetic resonance imaging (MRI) scanner at CMC-Mercy and install the replacement scanner in the existing MRI department.

## Population to be Served

In Section III.4, page 59, the applicant provides the current patient origin for the MRI service component provided at CMC-Mercy during Fiscal Year 2011, which is summarized below.

**CMC-Mercy MRI Patient Origin** 

civic ivicity which i divent origin				
County	% Patients			
Mecklenburg	71.5%			
York, SC	6.0%			
Union	5.1%			
Gaston	4.3%			
Cabarrus	2.2%			
Other*	10.9%			
Total	100.0%			

\*Other includes Aiken, Alamance, Alexander, Anderson, Anson, Ashe, Avery, Barnwell, Beaufort, Berkeley, Brunswick, Buncombe, Burke, Caldwell, Calhoun, Catawba, Charleston, Chatham, Cherokee (NC & SC), Chester, Chesterfield, Clay, Cleveland, Colleton, Darlington, Davidson, Davie, Durham, Fairfield, Florence, Forsyth, Georgetown, Granville, Greenville, Greenwood, Guilford, Henderson, Horry, Iredell, Jackson, Lancaster, Lexington, Lincoln, Macon, Marion, McDowell, Mitchell, Montgomery, Moore, Nash, New Hanover, Newberry, Oconee, Orange, Orangeburg, Pender, Pickens, Polk, Randolph, Richland, Richmond, Robeson, Rockingham, Rowan, Rutherford, Sampson, Scotland, Spartanburg, Stanly, Sumter, Surry, Swain, Transylvania, Union (SC), Wake, Watauga, Wayne, Wilkes, Williamsburg, and Yadkin counties, as well as other states.

In Section III.5, page 61, the applicant provides the projected patient origin for the MRI service component provided at CMC-Mercy during the first two years of operation following completion of the project, which is summarized below.

County	Year 1: Projected # Patients	Year 1: % of Total Patients	Year 2: Projected # Patients	Year 2: % of Total Patients
Mecklenburg	3,175	71.5%	3,231	71.5%
York, SC	266	6.0%	271	6.0%
Union	226	5.1%	230	5.1%
Gaston	191	4.3%	194	4.3%
Cabarrus	98	2.2%	99	2.2%
Other*	484	10.9%	493	10.9%
TOTAL	4,440	100.0%	4,519	100.0%

\*Other includes Aiken, Alamance, Alexander, Anderson, Anson, Ashe, Avery, Barnwell, Beaufort, Berkeley, Brunswick, Buncombe, Burke, Caldwell, Calhoun, Catawba, Charleston, Chatham, Cherokee (NC & SC), Chester, Chesterfield, Clay, Cleveland, Colleton, Darlington, Davidson, Davie, Durham, Fairfield, Florence, Forsyth, Georgetown, Granville, Greenville, Greenwood, Guilford, Henderson, Horry, Iredell, Jackson, Lancaster, Lexington, Lincoln, Macon, Marion, McDowell, Mitchell, Montgomery, Moore, Nash, New Hanover, Newberry, Oconee, Orange, Orangeburg, Pender, Pickens, Polk, Randolph, Richland, Richmond, Robeson, Rockingham, Rowan, Rutherford,

Sampson, Scotland, Spartanburg, Stanly, Sumter, Surry, Swain, Transylvania, Union (SC), Wake, Watauga, Wayne, Wilkes, Williamsburg, and Yadkin counties, as well as other states.

The applicant states the following assumption regarding projected patient origin:

"CMC-Mercy projects that Mecklenburg County will remain its primary service area and Union, Gaston, and Cabarrus counties in North Carolina and York County in South Carolina will be secondary service areas. Over 70 percent of CMC-Mercy's MRI patients originate from Mecklenburg County. Patients from the medical center's secondary service area represent approximately 18 percent of MRI patients. In total, CMC-Mercy's primary and secondary service area represent nearly 90 percent of MRI patients. The proposed project is not expected to result in any change to CMC-Mercy's MRI patient origin."

The applicant provides patient origin and the assumption that the patient origin will remain the same for the proposed project for the first two years of operation following completion of the project. Therefore, the applicant adequately identifies the population to be served by the proposed project.

# Need for the Proposed Replacement MRI Scanner

CMC-Mercy proposes to purchase a new General Electric, Optima 1.5 Tesla magnetic resonance system to replace the existing MRI scanner that currently serves the medical center, which as been in service for 23 years. In Section III.1, pages 32-45, the applicant states,

"The primary need for the proposed project is to optimize MRI services for more efficient delivery of care.

...As noted in Section II.1 and as discussed below, the existing MRI scanner is outdated and at the end of its useful life. As a result, the existing MRI scanner is not as efficient as it must be in order to allow CMC-Mercy to continue to provide patients and families the high quality of care that they expect from CMC-Mercy. Thus, the unmet need that necessitates the proposed project is primarily qualitative, involving the need of patients and physicians for updated equipment, which directly impacts the ability of the radiology department to provide the best possible care in the most efficient manner."

Furthermore, the applicant also discusses the continued and increasing demand for MRI technology for patients and physicians and supporting demographic information.

### Growing Population

"The population growth in Mecklenburg County is driving increased utilization of healthcare services. Mecklenburg County and its surrounding communities are among the fastest growing regions in the country.

### Aging Population

By 2020, 12.1 percent of the total population in Mecklenburg County will be over the age of 65 (more than 128,000 people). Based on NC OSBM projections, Exhibit 16, <sup>1</sup> of the counties in North Carolina, Mecklenburg County will have the largest number of residents over the age of 65 in 2020. Further, over the next decade, Mecklenburg County's 65+ population is projected to grow by 58.1 percent. These data are significant because, typically, older residents utilize healthcare services at a higher rate than those who are younger.<sup>2</sup>

NEED AT CMC-MERCY FOR UPDATED MRI SERVICES

The primary driver of the proposed project is the internal need at CMC-Mercy for its existing patient population, which is continuing to grow.

## Aging of the Existing MRI Scanner

The scanner existing GE Excite 1.5T fixed MRI scanner was purchased in 1989 and has been in continuous operation at CMC-Mercy since that time, more than four times the length of its depreciable useful life of five years according to the American Hospital Association.

...The existing 1988 model unit is 23 years old, the oldest in the system. While the existing unit was state-of-the-art when it was installed in 1989, significant advancements in technology have occurred in the intervening time since its installation.

... The age of the existing equipment raises concerns relative to accreditation and clinical application that drive the need to replace the existing equipment at this time.

### **Accreditation Concerns**

...The speed of the existing equipment, which is attributable to the age of the equipment, makes it difficult for CMC-Mercy to adhere to the American College of Radiology (ACR) imaging guidelines.

... CMC-Mercy may have difficulty securing ACR accreditation going forward which may impact reimbursement as insurance carriers have indicated a preference for such designation in negotiations with hospitals.

<sup>&</sup>lt;sup>1</sup> The NC OSBM no longer provides population data by age group, as such, please note that the data provided in this table was last updated May 3, 2010.

<sup>&</sup>lt;sup>2</sup> Please see Exhibit 17, National Center for Health Statistics (NCHS) available at <a href="http://www.cdc.gov/nchs/data/nhsr/nhsr029.pdf">http://www.cdc.gov/nchs/data/nhsr/nhsr029.pdf</a> (noting that in 2007, those aged 65 years and over accounted for just 13 percent of the U.S. population, but 37 percent of the hospital discharges, and 43 percent of the days of care. In contrast, 15-44 year-olds comprised 42 percent of the population and 31 percent of the hospital discharges, but only 24 percent of the days of care. Children under age 15 years, who make up 20 percent of the population, were only six percent of the hospitalizations and used only six percent of the days of care.).

## Clinical Limitations of Existing Equipment

Another factor related to the age of the existing equipment that drives the need to replace it is the clinical limitations of the existing equipment.

...In particular, there are no more software updates available for the existing unit.

...The age of the existing equipment has affected the MRI cooling system as well. Currently, the MRI scanner operates on one water chiller. The water chiller has a rusted radiator that requires constant supervision.

...According to CMC-Mercy's radiology department, eventually the patient table will reach a point where it can no longer be repaired.

### Bariatric Patient Need

Given limitations associated with the age and inherent in the outdated design of the existing MRI equipment, CMC-Mercy cannot serve all of its existing patients. In particular, the existing MRI scanner cannot accommodate the bariatric patient population.

## **Other Renovations**

The proposed project also involves the development of a patient staging area and storage space.

... Currently, space is limited and there is no private patient staging area. Instead, patients must wait in the hallway outside the MRI scan room on a stretcher.

... The proposed inpatient staging area creates a comfortable and private space for inpatients who arrive before the scan room to wait. The creation of this space will create a more patient friendly environment."

#### **Utilization Projections**

In Section IV.1, page 66, the applicant provides the following utilization projections for the volume of weighted MRI procedures for its MRI scanner through the first three years of operation after completion of the proposed project. In the third year the applicant's total weighted MRI projected utilization is 5,891 procedures.

CMC-Mercy Annual Utilization Projections Weighted MRI Procedures						
1 <sup>st</sup> Full FY 2 <sup>nd</sup> Full FY 3 <sup>rd</sup> Full FY FY 13 FY 14 FY 15						
MRI Scanner						
# of Units 1 1 1						
# <b>of Scans</b> 4,440 4,519 4,599						
# of Weighted Scans	5,687	5,788	5,891			

These projections are based on the following discussion of actual data and its assumptions and projection methodology. In Section IV.1, page 66, the applicant states:

"As defined in the 2012 State Medical Facilities Plan, the annual maximum capacity of a single fixed MRI scanner is 6,864 procedures based on operation of the scanner for 66 hours per week and 52 hours per year with an average procedure time of 30 minutes per MRI procedure."

In Section III.1., pages 47-50, the applicant states the following assumptions and methodology used to project MRI utilization through the third year of the proposed project.

"The following table provides CMC-Mercy's historical un-weighted and weighted MRI scans.

Un-weighted MRI Scans	CY 2008	CY 2009	CY 2010	CY 2011*
Inpatient w/ Contrast or Sedation	552	459	573	601
Inpatient w/o Contrast or Sedation	544	419	508	571
Outpatient w/ Contrast or Sedation	1,627	1,337	1,302	1,253
Outpatient w/o Contrast or Sedation	2,361	2,173	1,828	1,880
Total Un-weighted Scans	5,084	4,388	4,211	4,305

Source: CMC-Mercy Internal Data

Note: Numbers may not foot due to computer rounding

The applicant assessed MRI utilization by converting the historical un-weighted scans in the preceding table by type to weighted scans using the conversion factors in the table below pursuant to the need methodology in the SMFP and criteria and standards for MRI scanners.

<sup>\*</sup>Annualized based on nine months of actual data from 1/1/11 through 9/30/11

	Weighted Conversion Factor
Inpatient w/ Contrast or Sedation	1.8
Inpatient w/o Contrast or Sedation	1.4
Outpatient w/ Contrast or Sedation	1.4
Outpatient w/o Contrast or Sedation	1.0

The resulting historical weighted MRI scans are provided in the table below:

Weighted MRI Scans	CY 2008	CY 2009	CY 2010	CY 2011*
Inpatient w/ Contrast or Sedation	994	826	1,031	1,082
Inpatient w/o Contrast or Sedation	762	587	711	799
Outpatient w/ Contrast or Sedation	2,278	1,872	1,823	1,755
Outpatient w/o Contrast or Sedation	2,361	2,173	1,828	1,880
Total Un-weighted Scans	6,394	5,458	5,393	5,516

Note: Numbers may not foot due to computer rounding

The applicant states that the decline in MRI utilization from 2008 to 2010 is attributed mostly to the downturn in the economy that had a similar effect on the utilization of healthcare services in general. In addition, the applicant states that this decline is not expected to continue, based on the nine months of actual data for 2011 that was available at the time of preparing this application, CMC-Mercy believes that its MRI utilization is on an upward swing.

In Section III.1., pages 48-49, the applicant states,

"While its annualized 2011 unweighted and weighted MRI procedure volume represents a 2.2 percent and 2.3 percent increase over 2010 volumes, respectively, and despite the fact that CMC-Mercy expects an overall increase in MRI utilization to result from the replacement of its outdated equipment, the medical center has chosen to very conservatively project future MRI utilization based on population growth. More than 70 percent of CMC-Mercy's MRI patients originate from Mecklenburg County. According to the NC Office of State Budget and Management population statistics (Exhibit 15), the population of Mecklenburg County is projected to grow by a compound annual growth rate (CAGR) of 1.8 percent from 2010 to 2020.

To be as conservative as possible, CMC-Mercy applied an annual growth rate of 1.8 percent to its total 2010 un-weighted MRI scans through 2015, the third year of the proposed project. Note that this methodology results in a lower projection of MRI procedures in 2011 than the annualized data provided above suggests is actually likely to be realized. CMC-Mercy then distributed the total projected un-weighted MRI scans by type based on the actual mix experienced in 2010, the last full year of

<sup>\*</sup>Annualized based on nine months of actual data from 1/1/11 through 9/30/11

data available. The resulting un-weighted MRI scans through the third year are provided in the following table.

Unweighted MRI Scans	<i>CY</i> 2011	<i>CY</i> 2012	PY 1: CY 2013	PY 2: CY 2014	PY 3: CY 2015
Inpatient w/ Contrast or Sedation	583	594	604	615	626
Inpatient w/o Contrast or Sedation	517	526	536	545	555
Outpatient w/ Contrast or Sedation	1,325	1,349	1,373	1,397	1,422
Outpatient w/o Contrast or Sedation	1,861	1,894	1,927	1,962	1,997
Total Unweighted Scans	4,286	4,362	4,440	4,519	4,599

Note: Numbers may not foot due to computer rounding

Unweighted scans were then converted to weighted MRI scans using the same conversion factors previously discussed, resulting in the following projected MRI scans at CMC-Mercy through the third year of the proposed project."

Weighted MRI Scans	CY 2011	<i>CY</i> 2012	PY 1: CY 2013	PY 2: CY 2014	PY 3: CY 2015
Inpatient w/ Contrast or Sedation	1,050	1,068	1,087	1,107	1,127
Inpatient w/o Contrast or Sedation	724	737	750	763	777
Outpatient w/ Contrast or Sedation	1,855	1,888	1,922	1,956	1,991
Outpatient w/o Contrast or Sedation	1,861	1,894	1,927	1,962	1,997
Total Weighted Scans	5,489	5,587	5,687	5,788	5,891

There is no need for additional MRI scanners in the applicant's MRI Service Area; however, this application is for a replacement MRI scanner. Projected utilization is reasonable based on historical utilization and population growth in the applicant's MRI service area. Therefore, the applicant adequately demonstrates the need for replacement of one MRI scanner is reasonably projected to perform at least 5,891 weighted MRI procedures per scanner in the third year of operation following completion of the proposed project, as required by 10A NCAC 14C .2703(b)(3)(E).

Based on the above projections, the applicant demonstrates that its MRI scanner would be utilized an average of 5,891 weighted procedures per scanner, which exceeds the 4,805 weighted MRI procedures required by the SMFP in counties with more than four MRI scanners in the third operating year.

In Section VIII.2, page 94, the applicant includes the cost of a mobile MRI rental in the fixed equipment purchase/lease cost. In a request for supplemental information, the applicant states,

"CMC-Mercy intends to temporarily park an exiting vendor-owned mobile unit at CMC-Mercy on a temporary basis while the existing fixed unit is removed from CMC-Mercy and the permanent fixed replacement is obtained and installed. During this time, the mobile MRI unit will be temporarily placed on-site for imaging of outpatient and inpatient MRI studies only. Once CMC-Mercy's permanent fixed replacement magnet is installed, the temporary equipment would of course be returned to the vendor and at no time would CMC-Mercy operate more than one MRI scanner."

The applicant states that the permanent replacement MRI is expected to be operational in a little over four and a half months and that CMC-Mercy does not expect the temporary mobile MRI to be on-site for more than that time.

Therefore, the applicant adequately demonstrated the need to replace the MRI scanner at CMC-Mercy. Consequently, the application is conforming with this criterion.

(3a) In the case of a reduction or elimination of a service, including the relocation of a facility or a service, the applicant shall demonstrate that the needs of the population presently served will be met adequately by the proposed relocation or by alternative arrangements, and the effect of the reduction, elimination or relocation of the service on the ability of low income persons, racial and ethnic minorities, women, handicapped persons, and other underserved groups and the elderly to obtain needed health care.

NA

(4) Where alternative methods of meeting the needs for the proposed project exist, the applicant shall demonstrate that the least costly or most effective alternative has been proposed.

CA

In Section III.3, pages 54-57, the applicant discussed several alternatives considered prior to submitting this application:

- 1) <u>Maintain the Status Quo</u>. The applicant rejected this alternative because it would not be in the best interest of the medical center's patients, as it would not provide current standards in MRI technology.
- 2) Replace and Update Components of the Existing System. The applicant rejected this alternative because it was not considered to be a viable or sustainable option because it does not represent a lasting solution.

- 3) Relocate and Replace the Existing Scanner. The applicant rejected this alternative because it was not cost prohibitive.
- 4) Replace the Existing MRI Scanner with a 3.0T. The applicant rejected this alternative because it was not considered to be a viable option because it would effectively limit certain patient populations from receiving scans on the equipment.
- 5) Replace the Existing MRI Scanner with a 1.5T. The applicant determined that this was the most effective alternative because the new equipment will be state-of-the-art and will enable the medical center to more effectively treat patients.

The application is conforming to all applicable statutory and regulatory review criteria. See Criteria (3), (5), (6), (7), (8), (12), (13), (14), (18a) and (20). Therefore, the applicant adequately demonstrates that its proposal is the most effective alternative and the application is conforming with this criterion and is approved subject to the following conditions.

- 1. Mercy Hospital, Inc. d/b/a Carolinas Medical Center-Mercy shall materially comply with all representations made in its certificate of need application.
- 2. Mercy Hospital, Inc. d/b/a Carolinas Medical Center-Mercy 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 that would otherwise require a certificate of need.
- 3. Mercy Hospital, Inc. d/b/a Carolinas Medical Center-Mercy 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.
- (5) Financial and operational projections for the project shall demonstrate the availability of funds for capital and operating needs as well as the immediate and long-term financial feasibility of the proposal, based upon reasonable projections of the costs of and charges for providing health services by the person proposing the service.

 $\mathbf{C}$ 

In Section VIII, page 93-94, the applicant projects the total capital cost for the project will be \$2,903,500, for fixed equipment acquisition and the mobile MRI rental unit. In Section IX, page 99, the applicant states that there are no start-up or initial operating expenses, as this is not a new facility or service.

In Section VIII.8, page 96, the applicant states that the project will be financed through a bond. Exhibit 27 contains a January 16, 2012 letter signed by Greg A. Gombar, Executive VP and CFO for Carolinas Health System, which states:

"As the Chief Financial Officer of The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas HealthCare System (CHS), I am responsible for the financial operations of CHS and CMC-Mercy. As such, I am very familiar with the organization's financial position. The total capital expenditure for this project is estimated to be \$2,903,500. There are no start-up costs related to this project.

Carolinas Healthcare System will fund the capital cost from bonds issued in 2011. This expenditure will not impact any other capital projects currently underway or planned for at this time. For verification of the availability of these funds and our ability to finance this project internally, please refer to the cover page from the official statements from bond issue 2011A, which has been included with this letter."

Exhibit 27 contains a cover page from the official statements from bond issue 2011A, which documents the availability of \$149,995,000 that will, in part, be used to finance CMC-Mercy's MRI replacement MRI scanner.

Exhibit 42 contains audited financial statements for The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas HealthCare System for the years ended December 31, 2010 and 2009. The line item "Cash and cash equivalents," shows \$128.6 million as of December 31, 2010. The applicant adequately demonstrated the availability of sufficient funds for the capital and working capital needs of the project.

The applicant provided pro forma financial statements in the Pro Forma Section (immediately following Section XII) for the first three operating years of the project following completion. The applicant projects that revenues will exceed operating costs in each of the first three years of operation for the MRI service component. The revenue projections provided on Forms D and E, are as follows:

	1st Full FY 2013	2nd Full FY 2014	3rd Full FY 2015
# of Procedures	4,440	4,519	4,599
Projected Average Charge per Procedure	\$2,986	\$3,076	\$3,168
Gross Revenue	\$13,257,552	\$13,900,251	\$14,570,829
Projected Average Net Revenue (Reimbursement) per Procedure	\$903	\$930	\$958
Net Revenue	\$4,009,614	\$4,203,992	\$4,406,802

Source: Proforma Section, pages 114-122.

See Section XII, pages 119-122 for the pro forma assumptions. The projected costs and revenues are based on reasonable assumptions, including projected utilization. The applicant

adequately demonstrated that the financial feasibility of the proposal is based upon reasonable projections of costs and charges and the application is conforming with this criterion.

(6) The applicant shall demonstrate that the proposed project will not result in unnecessary duplication of existing or approved health service capabilities or facilities.

 $\mathbf{C}$ 

The applicant proposes to replace its existing, outdated GE Excite 1.5T MRI scanner with a new GE Optima MR450w 1.5T fixed MRI scanner and to renovate existing space to accommodate the replacement equipment. The applicant adequately demonstrated the need to replace the outdated equipment. Further, the applicant provides actual and projected utilization data as discussed in Criterion (3) that shows the volume of patients served is reasonable and expected to grow. Therefore, the applicant adequately demonstrated that the proposal would not result in the unnecessary duplication of existing or approved health service capabilities. Consequently, the application is conforming with this criterion.

(7) The applicant shall show evidence of the availability of resources, including health manpower and management personnel, for the provision of the services proposed to be provided.

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In Section VII.1, page 86, the applicant provides the current and projected staffing for the proposed project. The applicant also states that no new positions will result from this project.

	Current Sta	Current Staffing CY 2011		Proposed Staffing CY 2014		
Position	Total # of FTE Positions Employed	Average Annual Salary per FTE Position	Total # of FTE Positions Employed	Average Annual Salary per FTE Position		
Radiology						
Technologists	4.0	\$58,292	4.0	\$63,697		
Clerical						
Tech Assistant	1.5	\$25,428	1.5	\$27,786		
Total	5.5		5.5			

The applicant demonstrates the availability of adequate health manpower and management personnel to provide the proposed services and is conforming with this criterion.

(8) The applicant shall demonstrate that the provider of the proposed services will make available, or otherwise make arrangements for, the provision of the necessary ancillary and support services. The applicant shall also demonstrate that the proposed service will be coordinated with the existing health care system.

Mercy Hospital, Inc. d/b/a Carolinas Medical Center-Mercy is an existing health service facility and provides ancillary and support services for its inpatient and outpatient services. In Section II.2, page 22, the applicant states:

"CMC-Mercy has been in operation as an acute care facility for 105 years. The hospital campus, the site of the proposed project, currently has all ancillary and support services in place necessary to support hospital operations. These existing ancillary and support services will also support the replacement MRI proposed in this application. CMC-Mercy's existing ancillary and support services, including pre-admission testing, laboratory, radiology, pharmacy, dietary, housekeeping, maintenance, and administration, among others, are available to support the proposed replacement equipment. Please see Exhibit 5 for a letter from Janet Handy, Vice-President and Chief Nursing Officer of CMC-Mercy, verifying the availability of ancillary and support services for this project."

The applicant adequately demonstrated the availability of the necessary ancillary and support services and that the proposed services would be coordinated with the existing health care system. Therefore, the application is conforming with this criterion.

(9) An applicant proposing to provide a substantial portion of the project's services to individuals not residing in the health service area in which the project is located, or in adjacent health service areas, shall document the special needs and circumstances that warrant service to these individuals.

#### NA

- (10) When applicable, the applicant shall show that the special needs of health maintenance organizations will be fulfilled by the project. Specifically, the applicant shall show that the project accommodates: (a) The needs of enrolled members and reasonably anticipated new members of the HMO for the health service to be provided by the organization; and (b) The availability of new health services from non-HMO providers or other HMOs in a reasonable and cost-effective manner which is consistent with the basic method of operation of the HMO. In assessing the availability of these health services from these providers, the applicant shall consider only whether the services from these providers:
  - (i) would be available under a contract of at least 5 years duration;
  - (ii) would be available and conveniently accessible through physicians and other health professionals associated with the HMO;
  - (iii) would cost no more than if the services were provided by the HMO; and
  - (iv) would be available in a manner which is administratively feasible to the HMO.

#### NA

- (11) Repealed effective July 1, 1987.
- (12) Applications involving construction shall demonstrate that the cost, design, and means of construction proposed represent the most reasonable alternative, and that the construction

project will not unduly increase the costs of providing health services by the person proposing the construction project or the costs and charges to the public of providing health services by other persons, and that applicable energy saving features have been incorporated into the construction plans.

### NA

- (13) The applicant shall demonstrate the contribution of the proposed service in meeting the health-related needs of the elderly and of members of medically underserved groups, such as medically indigent or low income persons, Medicaid and Medicare recipients, racial and ethnic minorities, women, and handicapped persons, which have traditionally experienced difficulties in obtaining equal access to the proposed services, particularly those needs identified in the State Health Plan as deserving of priority. For the purpose of determining the extent to which the proposed service will be accessible, the applicant shall show:
  - (a) The extent to which medically underserved populations currently use the applicant's existing services in comparison to the percentage of the population in the applicant's service area which is medically underserved;

 $\mathbf{C}$ 

In Section VI.13., page 83, the applicant provides the payor mix for MRI procedures as a percent of total procedures for Calendar Year 2010.

CMC-Mercy MRI Calendar Year 2010 Current Procedures as Percent of Total Utilization				
Self-Pay/Other*	9.5%			
Medicare / Medicare Managed Care	49.2%			
Medicaid	14.9%			
Commercial / Managed Care	26.4%			
Total	100.0%			

In Section VI., pages 25 and 27, the applicant states:

"CMC-Mercy provides services to all persons in need of medical care, regardless of race, sex, creed, age, national origin, handicap, or ability to pay."

... Patients lacking coverage receive financial counseling to determine eligibility for Public Assistance or Charity Care. Patients who do not qualify for either of these programs will be offered an installment plan. Patients will receive the appropriate medical screening examination and any necessary stabilizing treatment for emergency medical conditions, regardless of ability to pay.

CMC-Mercy's services are and will remain accessible to Medicare and Medicaid recipients, the uninsured, and the underinsured."

The Division of Medical Assistance (DMA) maintains a website which offers information regarding the number of persons eligible for Medicaid assistance and estimates of the percentage of uninsured for each county in North Carolina. The following table illustrates those percentages as of March 2009, respectively. The data in the table was obtained on March 27, 2012. More current data, particularly with regard to the estimated uninsured percentages, was not available.

	Total # of Medicaid Eligibles as % of Total Population	Total # of Medicaid Eligibles Age 21 and older as % of Total Population	% Uninsured CY 2005 (Estimate by Cecil G. Sheps Center)
Mecklenburg County	15.0%	5.1%	20.1%
Statewide	17.0%	6.7%	19.7%

Source: DMA Website: <a href="http://www.ncdhhs.gov/dma/pub/index.htm">http://www.ncdhhs.gov/dma/pub/index.htm</a>

The majority of Medicaid eligibles are children under the age of 21. This age group does not utilize the same health services at the same rate as older segments of the population, particularly the services offered by CMC-Mercy.

Moreover, the number of persons eligible for Medicaid assistance may be greater than the number of Medicaid eligibles who actually utilize health services. The DMA website includes information regarding dental services which illustrates this point. For dental services only, DMA provides a comparison of the number of persons eligible for dental services with the number actually receiving services. The statewide percentage was 48.6% for those age 20 and younger and 31.6% for those age 21 and older. Similar information is not provided on the website for other types of services covered by Medicaid. However, it is reasonable to assume that the percentage of those actually receiving other types of health services covered by Medicaid is less than the percentage that is eligible for those services.

The Office of State Budget & Management (OSBM) maintains a website which provides historical and projected population data for each county in North Carolina. However, as of March 27, 2012, no population data was available by age, race or gender. Even if the data were available, a direct comparison to the applicants' current payor mix would be of little value. The population data by age, race or gender does not include information on the number of elderly, minorities or women utilizing health services. Furthermore, OSBM's website does not include information on the number of handicapped persons.

The applicant demonstrates that medically underserved populations have adequate access to CMC-Mercy's existing services and the application is conforming with this criterion.

(b) Its past performance in meeting its obligation, if any, under any applicable regulations requiring provision of uncompensated care, community service, or access by minorities and handicapped persons to programs receiving federal assistance, including the existence of any civil rights access complaints against the applicant;

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Recipients of Hill-Burton funds were required to provide uncompensated care, community service and access by minorities and handicapped persons. In Section VI.11, page 30, the applicant states:

"CMC-Mercy has had no obligations to provide uncompensated care during the last three years. As stated earlier, the medical center provides, without obligation, a considerable amount of bad debt and charity care and in CY 2010 provided approximately \$39.6 million in bad debt and charity care.

See Exhibit 23 for a copy of the applicant's Policy and Procedure regarding CMC-Mercy's admission policies.

Regarding the applicant's obligation not to discriminate in the provision of care on the basis of race, age, etc., in Section VI.2, page 25, the applicant states:

"CMC-Mercy provides services to all persons in need of medical care, regardless of race, sex, creed, age, national origin, handicap, or ability to pay."

In Section VI.10, page 82, the applicant states that no complaints have been filed against any affiliated entity of CHS regarding civil rights equal access in the last five years. The application is conforming with this criterion.

(c) That the elderly and the medically underserved groups identified in this subdivision will be served by the applicant's proposed services and the extent to which each of these groups is expected to utilize the proposed services; and

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In Section VI.15, page 84, the applicant provides the following projected payor mix for calendar year 2013 of operations for the proposed project, as illustrated in the table below:

CMC-Mercy MRI Calendar Year 2013 Current MRI Procedures as % of Total Utilizations	
Self-Pay / Other*	9.5%
Medicare / Medicare Managed Care	49.2%
Medicaid	14.9%
Commercial / Managed Care	26.4%
Total	100.0%

In Section VI.15, page 84 the applicant states that the proposed project is not expected to impact the facility's payor mix.

The applicant demonstrated that medically underserved populations will have adequate access to the proposed services. Therefore, the application is conforming with this criterion.

(d) That the applicant offers a range of means by which a person will have access to its services. Examples of a range of means are outpatient services, admission by house staff, and admission by personal physicians.

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In Section VI.9, page 81, the applicant states,

"Persons have access to services at CMC-Mercy through referrals from physicians who have admitting privileges at the medical center. Patients of CMC-Mercy are also admitted through the emergency department."

Exhibit 21 contains a list of facilities with which the applicant has transfer agreements. The applicant adequately identified the range of means by which patients will have access to the proposed services. Thus, the information provided is reasonable and credible and supports a finding of conformity with this criterion.

(14) The applicant shall demonstrate that the proposed health services accommodate the clinical needs of health professional training programs in the area, as applicable.

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In Section V.1(a-c), pages 67-68, the applicant provides documentation that CMC-Mercy will continue to accommodate the clinical needs of area health professional training programs. The information provided is reasonable and credible and supports a finding of conformity with this criterion.

- (15) Repealed effective July 1, 1987.
- (16) Repealed effective July 1, 1987.
- (17) Repealed effective July 1, 1987.

- (18) Repealed effective July 1, 1987.
- (18a) The applicant shall demonstrate the expected effects of the proposed services on competition in the proposed service area, including how any enhanced competition will have a positive impact upon the cost effectiveness, quality, and access to the services proposed; and in the case of applications for services where competition between providers will not have a favorable impact on cost-effectiveness, quality, and access to the services proposed, the applicant shall demonstrate that its application is for a service on which competition will not have a favorable impact.

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In Section V.7, page 72, the applicant states:

"The proposed project will foster competition by promoting value, safety and quality, and access to services in the proposed service area and will thus be in compliance with the spirit and legislative intent of the CON Law."

See Sections II, III, V, VI and VII. The information provided by the applicant in those sections is reasonable and credible and adequately demonstrates that the proposal would have a positive impact on cost-effectiveness, quality and access to the proposed services because:

- The applicant adequately demonstrates that the proposal is needed and that it is a cost-effective alternative to meet the demonstrated need [see Criteria (1), (3), (4), (5), and (6) for additional discussion];
- o The applicant has and will continue to provide quality services [see Criteria (7), (8) and (20) for additional discussion];
- o The applicant has and will continue to provide adequate access to medically underserved populations [see Criterion (13) for additional discussion].

Therefore, the application is conforming to this criterion

- (19) Repealed effective July 1, 1987.
- (20) An applicant already involved in the provision of health services shall provide evidence that quality care has been provided in the past.

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Mercy Hospital, Inc. d/b/a Carolinas Medical Center-Mercy is accredited by the Joint Commission and certified for Medicare and Medicaid participation. According to the files in the Acute and Home Care Licensure and Certification Section, Division of Health Service Regulation, Carolinas Medical Center-Mercy operated in compliance with all Medicare Conditions of Participation within the 18 months immediately preceding the date of this decision. Therefore, the application is conforming with this criterion.

- (21) Repealed effective July 1, 1987.
- (b) The Department is authorized to adopt rules for the review of particular types of applications that will be used in addition to those criteria outlined in subsection (a) of this section and may vary according to the purpose for which a particular review is being conducted or the type of health service reviewed. No such rule adopted by the Department shall require an academic medical center teaching hospital, as defined by the State Medical Facilities Plan, to demonstrate that any facility or service at another hospital is being appropriately utilized in order for that academic medical center teaching hospital to be approved for the issuance of a certificate of need to develop any similar facility or service.

NA