ATTACHMENT - REQUIRED STATE AGENCY FINDINGS

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

DECISION DATE: October 25, 2013

PROJECT ANALYST: Jane Rhoe-Jones
TEAM LEADER: Lisa Pittman

PROJECT I.D. NUMBER: P-10148-13 / CarolinaEast Medical Center, Inc. / Expand and renovate existing space for women's and children's, emergency and surgical services / Craven 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.

C

CarolinaEast Medical Center, Inc. (CEMC), whose parent company is CarolinaEast Health System (CEHS) is a licensed 350-bed acute care hospital (bed complement consists of 307 general acute care beds, 20 in-patient rehabilitation beds and 23 psychiatry beds). CEMC, located in New Bern at 2000 Neuse Boulevard is the only hospital in Craven County, serves as regional tertiary care provider and has provided services to the residents of eastern North Carolina for 50 years. In this application, CEMC proposes to expand and renovate space for women's and children's, emergency and surgical services. The applicant proposes to construct 45,470 square feet of new space and to renovate 96,029 square feet of existing space.

The applicant does not propose to develop beds or services or acquire equipment for which there is a need determination in the 2013 State Medical Facilities Plan (SMFP). However, Policy GEN-4: Energy Efficiency and Sustainability for Health Service Facilities, on page 43 of the 2013 SMFP, is applicable to the review of this proposal. Policy GEN-4 states:

"*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 of 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."

The applicant provides the energy and sustainability plan in Exhibit 18 which includes energy and water conservation, indoor air quality and sustainability design components. In Section III.2, page 98, and Section XI.7, page 182, the applicant states:

"*…engineering management constantly seeks ways to improve and conserve energy and more efficiently utilize hospital resources. …*"

The applicant's energy and sustainability plan adequately demonstrates the proposal includes improved energy efficiency sustainability and water conservation. Therefore, the application is consistent with Policy GEN-4 and 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.

C

CEMC is a licensed 350-bed acute care hospital (bed complement consists of 307 general acute care beds, 20 in-patient rehabilitation beds and 23 psychiatry beds). It is the only hospital in Craven County and serves as regional tertiary care provider. In this application, CEMC proposes to expand and renovate space for the following three departments: women's and children's, emergency and surgical services. The proposed renovation and expansion

also impacts the space occupied by three operating rooms, the hospital lobby, patient registration, general and acute care beds, the laboratory, administration and environmental services.

In Section II, pages 13-28, the applicant provides an overview of the scope of this project. The proposed changes are summarized below:

- Women's and Children's Pavilion: expand, renovate and consolidate women's and children's services to create a Women's and Children's Pavilion. CEMC will relocate an existing general medical/surgical (Med/Surg) bed unit to the second floor of the new construction.
- Emergency Department (ED): renovate and expand into the existing laboratory and patient registration space. The laboratory will relocate to the third floor of the new construction. Patient registration will relocate to space formerly occupied by administration on the first floor.
- Surgery Department: replace and right-size three existing operating rooms (ORs) via relocating one dedicated cesarean section (C-Section) room to the Women's and Children's Pavilion. Develop two replacement ORs in space vacated by environmental services and created by new construction.
- Entrance, Administration and Public Spaces: create a new main entrance and public corridor. Relocate administration and public spaces to first floor new construction.

The expected project completion date is October 2018. The applicant proposes to complete the project in five phases over a period of five years. See Exhibits 2 and 3 for the existing and proposed line drawings (the existing and proposed line drawings of CEMC's first floor show five intensive care unit beds in their current location in the catheterization laboratory. On page 15, the applicant states it explained in a previously approved cardiac catheterization application [Project ID# P-10082-13], that CEMC is in the process of relocating these acute care beds within the medical center). The five project phases are described below from pages 14-15.

- Phase I: Construct new three story addition --- relocate administration and public spaces to first floor, relocate post-surgical acute care bed unit (PACU) to second floor, relocate laboratory to third floor (Reorient rehabilitation entrance). Upfit existing space on second floor for six relocated pediatric beds. Upfit existing space on fifth floor for 12 relocated acute care beds; and replace two ORs in space vacated by environmental services and created by new construction (for part of replaced ORs, support space and environmental services displaced by OR replacements)
- Phase II: Renovate existing space on second floor (vacated by PACU) for 16 post-partum rooms. Backfill vacated administrative suite on first floor with patient registration. Develop public access corridor.
- Phase III: Renovate existing space on second floor to house Labor & Delivery (L&D), gynecology (GYN) beds, the C-Section suite and the nursery
- Phase IV: Renovate space vacated on first floor by laboratory (Lab) and patient registration for expanded ED; including registration and waiting areas
- Phase V: Renovate existing ED space on first floor

In Section II.1, pages 16-28, the applicant provides additional information about the current layout, proposed renovation and the proposed new construction per floor. Below is a summary:

First Floor – Existing/Renovation

Emergency Department (main ED only; not separate 15 room minor ED):

- renovate 15,770 square feet and expand by 11,582 square feet
- increase 34 treatment rooms to 45 rooms
- expand to allow secure space for psychiatric patients
- expand to include other areas/functions that support emergency care

Surgery Department:

- renovate 8,508 square feet and add 1,825 square feet of new construction
- replace 3 of 12 ORs
  - right-size 2 ORs in new construction, and
  - relocate third replacement OR (dedicated C-Section room) to 2nd floor Women's and Children's Pavilion
- combine 8 pre-operative and 12 post-operative bays and expand to a total combined 22 pre-operative/post-operative bays

Public Space (lobby, gift shop and snack shop):

- demolish 4,198 square feet and develop new three story tower

First Floor – New Construction

Entrance:

- develop new main entrance and public access corridor to connect new lobby and ED entrance

Administration and Public Spaces (information desk, lobby, gift shop and snack shop):

- relocate to 1st floor of new construction
- improve public access

Second Floor – Existing/Renovation

Women's Services:

- expand and consolidate (400 wing)
- 5 L&D rooms including 1 semi-private = 6 L&D beds;
- 3 triage rooms (400 wing)
- nursery with 22 Level I bassinets (400 wing)
- 22 OB/GYN beds (200 wing)
- increase patient room size, improve nursing support space flow, improve ambience

Labor & Delivery:

- privatize all L&D rooms

- add 1 unlicensed L&D room for a total of 7

Nursery – Level I Bassinets:

- relocate to 200 wing of 2nd floor in the Women's and Children's Pavilion and expand
- enhance to meet current code requirements

OB/GYN Beds:

- increase 22 licensed OB beds to 28 OB beds
  - 12 to be located in 200 wing
  - develop 16 post-partum beds (to be located in 500 wing in space vacated by current post surgical acute care bed unit)

Women's Triage Rooms:

- increase from 3 sharing same space to 4 as separate rooms (400 wing)

Post-Surgical Acute Care Bed Unit/2 Surg (PACU):

- 23-bed general medical/surgical unit (relocate from 500 wing to 2nd floor new construction)

100 Wing:

- 14-bed general medical/surgical unit on 2nd floor vacated
- vacated portion will be renovated for pediatric unit currently on 3rd floor
- pediatric unit will house 6 beds (decreased from 8)
- renovate remaining space for portion of relocated PACU

Second Floor – New Construction

Post-Surgical Acute Care Bed Unit/2 Surg:

- relocate to 2nd floor new construction to allow expansion and consolidation of women's and children's services.
- 21 beds post-project

Third Floor – Existing/Renovation

Pediatric:

- relocate current 8-bed pediatric unit (100 wing) to 6-bed space on 2nd floor (100 wing) in proposed Women's and Children's Pavilion
- renovate current pediatric space for new laboratory space

Third Floor – New Construction

Laboratory:

- 7,721 square feet
- relocate to 3rd floor new construction (a blood draw station remains on 1st floor)

Mechanical Space:

- support new construction and portion of existing medical center

Fifth Floor – Existing/Renovation

Acute Care Bed Unit

- renovate existing space for 12 licensed med/surgical beds displaced by this project on 1st floor
- maintains 307 acute care bed complement

On pages 27-28, to further simplify the expansion/renovation project, the applicant provides a floor by floor synopsis of this project as depicted in the following table.

CEMC SERVICE COMPONENTS CURRENT AND PROPOSED LOCATION		
Current Location	**Proposed Location**	
	Renovated Space	**New Construction/Floor**
First Floor		
Laboratory		Relocate to new tower/3rd Floor
ED	Renovate existing space & expand into vacated Laboratory/Patient Registration space/1st Floor	
ORs	Replace 2 existing ORs involve renovation /expand existing space to right-size 2 ORs/1st Floor	
Environmental Services (EVS)		Displaced by OR replacement & relocate to new construction adjacent to replacement ORs/1st Floor
Dedicated C-Section Room	Replace 1 existing C-Section OR by relocating to the Women's & Children's Pavilion/ 2nd floor	
Public Space*		Expansion becomes part of new main entrance & public access corridor/ new tower 1st Floor
Patient Registration	Renovate existing space vacated by Administrative Suite/ 1st Floor	
Second Floor		
OB/GYN	Renovate existing space and expand to vacated general Medical/Surgical space on 2nd floor 500 wing/ 2nd Floor	
L&D	Renovate existing space and expand to vacated Nursery space/ 2nd Floor	
Nursery	Renovate existing space vacated by OB/GYN / 2nd Floor	
General Med/Surg - 500 Wing**		Relocate to new tower 2nd Floor
General Med/Surg - 100 Wing	Relocate 12 beds to existing space on 5th Floor	
Third Floor		
Pediatric Unit	Relocate to existing space (vacated by general Medical/Surgical beds on 2nd Floor 100 wing)	

***Lobby, gift shop, snack shop & Administration, ****PACU, "2 Surg"

In Section II, page 26, the applicant provides the current and post-project bed complement at CEMC. The applicant proposes to add six beds to the obstetrics/gynecology (OB/GYN) bed complement by removing two pediatric beds and four general Med/Surg beds. The applicant

notes that with the exception of 20 of the 21 beds on the PACU, all of the acute care licensed beds will be relocated in renovated space.

On page 15, the applicant states:

> "*… the proposed project involves the relocation of licensed acute care beds, CEMC's total licensed acute care bed complement will remain constant. … With this project CEMC does not propose any new services that it is not currently offering, … … the proposed project will result in the modernization of the medical center with more appropriate allocation of space for increased patient safety, clinical quality, patient privacy, and staff and patient satisfaction.*"

The table below summarizes CEMC's bed complement including the net change in beds.

CEMC TOTAL LICENSED BED COMPLEMENT CURRENT AND POST-PROJECT			
Licensed Acute Care Beds in Proposed Project	**Existing**	**Proposed**	**Net Change**
Med/Surg			
OB/GYN	22	28	+6
Pediatric	8	6	-2
General Med/Surg	37	33	-4
PACU 2 Surg (current location: 2nd floor, 500 Wing; proposed location: 2nd floor new addition)	23	21	
Second Floor Unit (current location: 100 Wing)	14	0	
Fifth Floor Unit (current & proposed location: 600 Wing)	0	12	
Total Med/Surg in Proposed Project	**67**	**67**	**0**
Med/Surg Beds Not in Proposed Project	240	240	0
Total Licensed Acute Care Bed Complement	**307**	**307**	**0**
Psychiatric Beds	23	23	0
Rehabilitation Beds	20	20	0
Total Licensed Bed Complement	**350**	**350**	**350**

Population to be Served

In Section III, pages 74-96, the applicant provides projections and utilization for medical/surgical, women's and children's, surgical, emergency department and laboratory services.

In Section III.5(a), page 105, the applicant provides patient origin and states:

> "*CEMC projects that Craven, Jones and Pamlico counties will remain its primary service area and Carteret and Onslow counties will be the secondary service area. … FY 2012, approximately 77.6 percent of total general acute care inpatient services originated from the primary service area, while about 15.9 originated from the secondary service area. In total, CEMC's primary and secondary service areas represented 93.5 percent of general acute care inpatient admissions in FFY 2012.*"

The following tables illustrate historical and projected patient origin for the proposed service components for the last full federal fiscal year (FFY) and the first two operating years of the project, as reported by the applicant in Section III.4(b), pages 101-105, and Section III.5(c), pages 107-111.

CEMC GENERAL MED/SURG BEDS			
County	**FFY 2012**	**Project Year 1 FFY 2019**	**Project Year 2 FFY 2020**
Craven	63.4%	58.5%	57.8%
Pamlico	9.0%	13.4%	7.4%
Onslow	8.4%	9.3%	13.7%
Carteret	8.0%	8.0%	10.4%
Jones	5.3%	4.9%	4.9%
Other*	5.9%	5.9%	5.9%
Total	100.0%	100.0%	100.0%

*****Other: Beaufort, Brunswick, Cumberland, Duplin, Durham, Forsyth, Greene, Johnston, Lenoir, Nash, Northhampton, Pender, Pitt, Randolph, Robeson, Rowan, Sampson, Wake, other NC counties & other states.

CEMC WOMEN'S SERVICES* (OB/GYN, L&D, C-SECTION & TRIAGE)			
County	**FFY 2012**	**Project Year 1 FFY 2019**	**Project Year 2 FFY 2020**
Craven	85.2%	76.8%	75.8%
Pamlico	4.8%	4.2%	4.1%
Onslow	2.6%	10.3%	11.3%
Carteret	2.6%	4.0%	4.2%
Jones	1.8%	1.5%	1.5%
Other*	3.2%	3.2%	3.2%
Total	100.0%	100.0%	100.0%

*****Other: Ashe, Beaufort, Burke, Columbus, Duplin, Forsyth, Halifax, Johnston, Lenoir, New Hanover, Pasquotank, Pitt, Vance, Wake, other NC counties & other states to avoid double counting patients, CEMC provides patient origin for combined women's services. One patient may use one or more of the services during a single hospital stay.

CEMC NURSERY			
County	**FFY 2012**	**Project Year 1 FFY 2019**	**Project Year 2 FFY 2020**
Craven	88.6%	80.2%	79.2%
Pamlico	4.4%	3.9%	3.8%
Jones	2.5%	2.3%	2.2%
Carteret	2.2%	3.6%	3.8%
Onslow	1.2%	8.9%	9.9%
Other*	1.1%	1.1%	1.1%
Total	100.0%	100.0%	100.0%

*Other: Beaufort, Burke, Duplin, Lenoir, New Hanover, Pitt

CEMC PEDIATRICS			
County	**FFY 2012**	**Project Year 1 FFY 2019**	**Project Year 2 FFY 2020**

Craven	72.8%	72.8%	72.8%
Pamlico	7.1%	7.1%	7.1%
Jones	5.5%	4.6%	4.6%
Carteret	4.7%	4.7%	4.7%
Onslow	4.6%	5.5%	5.5%
Other*	5.3%	5.3%	5.3%
Total	100.0%	100.0%	100.0%

*Other: Beaufort, Buncombe, Duplin, Guilford, Lenoir, Nash, Orange, Pitt, Rutherford, Wake, Wayne & other states.

CEMC SURGERY DEPARTMENT			
County	**FFY 2012**	**Project Year 1 FFY 2019**	**Project Year 2 FFY 2020**
Craven	60.4%	55.4%	54.8%
Carteret	11.8%	13.1%	13.3%
Onslow	9.8%	14.8%	15.5%
Pamlico	7.6%	6.7%	6.6%
Jones	4.6%	4.2%	4.1%
Other*	5.7%	5.7%	5.7%
Total	100.0%	100.0%	100.0%

*****Other: Alamance, Beaufort, Bertie, Brunswick, Buncombe, Burke, Columbus, Cumberland, Dare, Duplin, Durham, Edgecombe, Forsyth, Franklin, Granville, Greene, Guilford, Halifax, Henderson, Hyde, Johnston, Lenoir, Martin, Nash, New Hanover, Northhampton, Pender, Pitt, Robeson, Rowan, Sampson, Tyrell, Wake, Washington, Wayne, Wilson, & other states.

CEMC EMERGENCY DEPARTMENT			
County	**FFY 2012**	**Project Year 1 FFY 2019**	**Project Year 2 FFY 2020**
Craven	74.2%	69.2%	68.6%
Carteret	3.9%	5.2%	5.4%
Onslow	2.6%	7.6%	8.3%
Pamlico	7.6%	6.7%	6.5%
Jones	5.5%	5.0%	5.0%
Other*	6.2%	6.2%	6.2%
Total	100.0%	100.0%	100.0%

*****Other: Alamance, Alexander, Alleghany, Anson, Avery, Beaufort, Bertie, Bladen, Brunswick, Buncombe, Burke, Cabarrus, Caswell, Catawba, Chatham, Cherokee, Clay, Columbus, Cumberland, Currituck, Dare, Davidson, Duplin, Durham, Edgecombe, Forsyth, Franklin, Granville, Greene, Guilford, Halifax, Harnett, Haywood, Henderson, Hertford, Hoke, Hyde, Iredell, Johnston, Lee, Lenoir, Lincoln, Macon, Martin, McDowell, Mecklenburg, Mitchell, Moore, Nash, New Hanover, Northhampton, Orange, Pasquotank, Pender, Person, Pitt, Randolph, Richmond, Robeson, Rowan, Rutherford, Sampson, Scotland, Stanly, Stokes, Surry, Tyrell, Union, Vance, Wake, Warren, Washington, Watauga, Wayne, Wilkes, Wilson, Yadkin & other states

CEMC LABORATORY TESTS			
County	**FFY 2012**	**Project Year 1 FFY 2019**	**Project Year 2 FFY 2020**

Craven	73.0%	68.0%	67.3%
Pamlico	6.8%	5.8%	5.7%
Carteret	6.1%	7.5%	7.6%
Jones	4.7%	4.3%	4.2%
Onslow	4.7%	9.7%	10.3%
Other*	4.8%	4.8%	4.8%
Total	100.0%	100.0%	100.0%

*Other: Alamance, Alexander, Alleghany, Ashe, Avery, Beaufort, Bertie Blade, Brunswick, Buncombe, Burke, Cabarrus, Camden, Caswell, Catawba, Chatham, Chowan, Clay, Columbus, Cumberland, Currituck, Dare, Davidson, Davie, Duplin, Durham, Edgecombe, Forsyth, Franklin, Gaston, Granville, Greene, Guilford, Halifax, Harnett, Haywood, Henderson, Hertford, Hoke, Hyde, Iredell, Jackson, Johnston, Lee, Lenoir, Macon, Martin, McDowell, Mecklenburg, Mitchell, Moore, Nash, New Hanover, Northhampton, Orange, Pasquotank, Pender, Person, Pitt, Randolph, Richmond, Robeson, Rockingham, Rowan, Rutherford, Sampson, Scotland, Stanly, Stokes, Surry, Transylvania, Tyrrell, Union, Vance, Wake, Warren, Washington, Watauga, Wayne, Wilkes, Wilson, Yadkin & other states.

The applicant adequately identifies the population to be served.

Need for the Proposed Project

The applicant discusses the need for the project in Section III, pages 38-115. The applicant states the need to renovate and expand the existing service components is based on the following goals:

- Modernize and remedy age-related deficiencies in CEMC's physical plant to meet codes/regulatory compliance
- Provide and support current and future patient care
- Allocate space appropriately for clinical quality, advanced technology, infant, children and adult patient safety, privacy and satisfaction.
- Support primary care nursing delivery model
- Accommodate technology and information systems in rooms and nursing stations
- Provide appropriate amount of space for emergency department patients

In Exhibit 19, the applicant provides data regarding acute care need projections and operating room inventory for providers in CEMC's service area from data compiled by the Sheps Center for Health Services Research. In Exhibit 20, the applicant provides 2013 hospital LRAs for hospitals in Carteret and Onslow counties. The LRAs contain utilization data for emergency services, acute care services and surgical services – the service components in this application. In Section III.6(a), pages 112-113, the applicant states, "*CEMC is the only hospital in Craven County*. … *there are no acute care hospitals located in either of the other counties in the primary service area (Pamlico and Jones counties).*"

In Section III, page 46, the applicant states, "*Moreover, not only is CEMC the only acute care provider in Craven County, it also serves as a tertiary hospital for North Carolina's Eastern Region, which includes a significant military presence. In fact, CEMC is closest to the largest concentration of Marines and Sailors in the world. As an increasing number of*

personnel return from deployment, CEMC must be prepared for the corresponding increase in demand for these services during the immediate post-deployment period. While the exact impact of this population is unknown, it is the medical center's responsibility as a tertiary hospital for North Carolina's Eastern Region to ensure access to this population, which includes the supporting civilian population."

In Section II, pages 58-74 and 77, the applicant provides the methodology and assumptions regarding population and patient growth in the CEMC service area. The applicant highlights the factors driving the medical center growth:

"*The methodologies for each service … include assumptions related to the projected population growth in CEMC's five county service area.*

1. *As shown below, each of the five counties is projected to experience population growth from 2012 to 2021, which is expected to lead to increased utilization.*"

CEMC SERVICE AREA 2012 – 2021 POPULATION COMPOUND ANNUAL GROWTH RATES					
	Carteret	**Craven**	**Jones**	**Onslow**	**Pamlico**
2012	68,645	105,788	10,409	188,154	13,242
2021	77,275	113,312	10,494	221,756	13,469
Population CAGR	1.3%	0.8%	0.1%	1.8%	0.2%

Source: Application, page 59

2. "*… the service area's popularity as a retirement destination has led to a disproportionate share of residents over 65 years of age. As shown below, four of the five counties in CEMC's service area have a percent of population age 65 and older greater than North Carolina as a whole. … typically, older residents utilize healthcare services at a higher rate than those who are younger (National Center for Health Statistics). For these residents, the improvement in access to services at CEMC will support the expected higher utilization of this population group.*"

2012 PERCENT OF POPULATION AGE 65 & OLDER						
	Carteret	**Craven**	**Jones**	**Onslow**	**Pamlico**	**North Carolina**
2012	20.5%	16.0%	17.9%	8.0%	23.7%	13.8%

Source: Application, page 59

3. "*Although these patients are not typically included in data provided from Truven as acute care patients, CEMC's acute care beds are also vital to the medical center's ability to care for increasing numbers of observation patients, many of whom have lengths of stay exceeding 24 hours and are treated in acute care beds.*"
4. "*… CEMC's proximity to three military installations, Marine Corps Air Station Cherry Point, Marine Corps Base Camp Lejeune, and Marine Corps Air Station New River, necessitates that sufficient acute care and other capacity be available to accommodate the large swings in military population, dependents, and induced growth that results from base realignment and as well as the return of personnel from deployment.*

The applicant states that its methodology began with the assumption that every existing provider currently serving Carteret, Craven, Jones, Onslow and Pamlico counties will maintain their existing patient base. Projected growth in patient discharges is based only on population growth by county, as shown below:

CEMC SERVICE AREA MARKET SHARE ACUTE CARE PATIENTS – FFY 2012							
	Carteret	**Craven**	**Jones**	**Onslow**	**Pamlico**	**Total Service Area**	**% Market Share**
CEMC	1,026	8,500	422	937	972	11,917	34.9%
Other Providers	6,598	2,968	294	12,152	231	22,243	65.1%
Total Market Discharges	7,694	11,468	716	13,089	1,203	34,170	100.0%

On page 62, the applicant discusses incremental discharges and states,

> "*CEMC believes the proposed renovations to and expansion of its facility will enable it to more effectively serve patients in its service area. Thus, for the three counties without another acute care provider (Craven, Jones, and Pamlico), it assumes that the projected incremental discharges will be cared for at CEMC. Although Carteret and Onslow counties have existing acute care providers located within their geographic boundaries, neither of those hospitals provides tertiary services or as broad a range of non-tertiary services as CEMC. … Due to the existence of these other hospitals, CEMC conservatively expects to serve one-half of the incremental patients from Carteret and Onslow counties.*"

The following table from page 62 captures all incremental discharges. On page 63, the applicant provides a table that depicts the assumption of only one-half the incremental discharges from Carteret and Onslow counties will go to CEMC; while all of the incremental discharges from Craven, Jones and Pamlico will go to CEMC.

CEMC PROJECTED INCREMENTAL DISCHARGES						
	Carteret	**Craven**	**Jones**	**Onslow**	**Pamlico**	**Total**
FFY 2012 Market DCs	7,694	11,468	716	13,089	1,203	34,170
Pop CAGR (2012-2021)	1.3%	0.8%	0.1%	1.8%	0.2%	
2013 Incremental	102	88	1	241	2	434
2014 Incremental	205	176	1	487	5	874

2015 Incremental	310	266	2	737	7	1,321
2016 Incremental	416	356	3	992	9	1,775
2017 Incremental	523	446	3	1,251	11	2,235
2018 Incremental	632	538	4	1,515	14	2,702
2019 Incremental (PY1)	742	630	5	1,784	16	3,177
2020 Incremental (PY2)	854	722	5	2,058	18	3,658
2021 Incremental (PY3)	967	816	6	2,338	21	4,147

The applicant provides the worksheet for this table in Exhibit 13.

In Section III.1(b), page 63, the applicant summarizes the projected number of acute care discharges to be served in the service area as shown below:

CEMC PROJECTED SERVICE AREA TOTAL ACUTE CARE DISCHARGES			
	CEMC Existing	**SA Incremental**	**Total SA**
2013	11,927	0	11,927
2014	11,927	0	11,927
2015	11,927	0	11,927
2016	11,927	0	11,927
2017	11,927	0	11,927
2018	11,927	0	11,927
2019 (PY1)	11,927	1,913	13,840
2020 (PY2)	11,927	2,202	14,129
2021 (PY3)	11,927	2,495	14,422

The applicant does not project incremental discharges until PY 1.

"*CEMC believes the total discharges projected above are reasonable as they represent an increase of less than three percentage points of market share for total service area discharges as summarized in the table below*."

CEMC SHARE OF TOTAL ACUTE CARE DISCHARGES			
	2012 Discharges	**2012-2021 Incremental**	**2021 Discharges**
CEMC	11,927	2,495	14,422
Total Market DCs	34,170	4,147	38,317
CEMC Share	34.9%	NA	37.6%

"*CEMC believes this market share increase is reasonable as it is one of only three hospitals in the service area, and the only one that provides tertiary services …*

In order to determine discharges from outside of its five-county service area, CEMC assumed its future inmigration rate will remain equal to its current level, 6.5 percent. … Finally CEMC assumed that its current acute care average length of stay (ALOS) of 3.9 days would remain unchanged through the project years. … CEMC predicts the following utilization of acute care services after the completion of the proposed project. Please note that the following table includes projections through FFY 2036 using the same assumptions as shown above. "

CEMC PROJECTED BASELINE ACUTE CARE UTILIZATION								
	CEMC SA DCs	**Inmigration DCs**	**Total DCs**	**ALOS**	**Total Days**	**ADC**	**Beds**	**Occupancy**
2013	11,927	829	12,756	3.9	50,150	137	307	44.8%
2014	11,927	829	12,756	3.9	50,150	137	307	44.8%
2015	11,927	829	12,756	3.9	50,150	137	307	44.8%
2016	11,927	829	12,756	3.9	50,150	137	307	44.8%
2017	11,927	829	12,756	3.9	50,150	137	307	44.8%
2018	11,927	829	12,756	3.9	50,150	137	307	44.8%
2019 (PY3)	13,840	962	14,802	3.9	58,195	159	307	51.9%
2020 (PY1)	14,129	982	15,111	3.9	59,409	163	307	53.0%
2021 (PY2)	14,422	1,002	15,424	3.9	60,639	166	307	54.1%
2022	14,718	1,023	15,741	3.9	61,886	170	307	55.2%
2023	15,019	1,044	16,063	3.9	63,150	173	307	56.4%
2024	15,324	1,065	16,389	3.9	64,432	177	307	57.5%
2025	15,633	1,087	16,719	3.9	65,732	180	307	58.7%
2026	15,946	1,108	17,054	3.9	67,049	184	307	59.8%
2027	16,264	1,130	17,394	3.9	68,385	187	307	61.0%
2028	16,586	1,153	17,739	3.9	69,740	191	307	62.2%
2029	16,913	1,176	18,088	3.9	71,114	195	307	63.5%
2030	17,244	1,199	18,443	3.9	72,507	199	307	64.7%
2031	17,580	1,222	18,802	3.9	73,919	203	307	66.0%
2032	17,921	1,246	19,166	3.9	75,351	206	307	67.2%
2033	18,266	1,270	19,536	3.9	76,804	210	307	68.5%
2034	18,616	1,294	19,910	3.9	78,277	214	307	69.9%
2035	18,971	1,319	20,290	3.9	79,770	219	307	71.2%
2036	19,332	1,344	20,675	3.9	81,285	223	307	72.5%

From page 65. The applicant does not project incremental discharges until PY1.

The applicant states on pages 65-66:

> "*As shown above, total CEMC patient days are projected to increase by a CAGR of 2.4 percent from FFY 2013 through FFY 2021, the third project year. Under these assumptions, CEMC will exceed its target occupancy of 71.4 percent under Policy AC-5 in FFY 2036, 15 years after the project's completion. Although this is a long-term projection horizon, given the useful life of the proposed construction, which will be more than twice the 15-year period, CEMC believes this analysis is useful in demonstrating the need for the project and the need to maintain the medical center's 307 acute care beds. …*"

The applicant adequately demonstrates projected utilization for acute care beds is based on reasonable, credible and supported assumptions. Furthermore, the applicant also discusses the effect of observation bed utilization and the military population on acute care bed utilization at CEMC.

The applicant discusses observation patient bed utilization beginning on page 66:

"As noted above, CEMC is caring for a rapidly increasing number of observation patients. It is important to understand that these are not short-stay patients that are initially expected to be observation patients, such as post-procedure or ED holding patients. Rather, these are patients that are admitted as inpatients, cared for in acute care beds and provided an inpatient level of care. The change in their patient status (from inpatient to observation) is usually not made until reimbursement is received from the payor, which can occur months after the patient is discharged. Although, just like inpatients, some of these patients are discharged within 24 hours of admission, CEMC has excluded all patients with a stay of less than 24 hours in its analysis. The following table demonstrates the patients who were designated as observation by their payor and who had an ALOS of 24 hours or more. CEMC believes that these patients should be included in the consideration of its acute care bed need, as they require acute care beds during their stay."

CRMC HISTORICAL OBSERVATION PATIENTS GREATER THAN 24 HOUR STAYS				
FFY	**Observation Patients**	**Total Observation Hours**	**ALOS (Hours)**	**Days**
2010	1,149	44,781	39.0	1,866
2011	1,134	45,171	39.8	1,882
2012	1,619	64,420	39.8	2,684
CAGR	18.7%	19.9%	1.0%	19.9%

CRMC Internal Data. From page 67.

"*As the table above shows, observation patients with greater than 24 hour stays have grown at CRMC 18.7 percent annually since FFY 2012; and their lengths of stay (LOS) have also grown, resulting in growth in days associated with these patients of 19.9 percent annually over the same period. For example, in FFY 2012 there were 319 observation patients with a LOS over two days and 82 observation patients with a LOS over three days. Clearly, these patients should be considered as part of CEMC's acute care bed need given their uncertain patient status at the time of care. Further, as shown in a recent article in Exhibit 14, Medicare is considering changing it rule so that patients staying two midnights would always be 'inpatients,' even though historically, some could have been classified as 'observation' patients. As the article notes, even Medicare patients who stay for weeks in a hospital can currently be considered 'observation' depending on their diagnosis and status. Thus, if the rule changes, many of these patients will be more properly classified as inpatients. It should be noted that patients in a bed for up to 47 hours, essentially two days, would still be 'observation' status.*

CEMC believes it is reasonable to assume that observation days will increase by an annual growth rate of five percent. This assumption is conservative as five percent is approximately one quarter of the historical growth rate of observation days for these patients. This does not assume that changes in payor policy will reclassify these patients; nonetheless, given their LOS, CEMC believes it is reasonable to consider this utilization, regardless of the patient's final status determination. …"

CEMC

PROJECTED OBSERVATION DAYS	
FFY	**Observation Days**
2013	2,818
2014	2,959
2015	3,107
2016	3,263
2017	3,426
2018	3,597
2019 (PY1)	3,777
2020 (PY2)	3,966
2021 (PY3)	4,164
CAGR	5.0%

On page 68, the applicant continues:

> "*With the inclusion of observation patients with an ALOS greater than or equal to 24 hours, CEMC will exceed its total acute care target occupancy of 71.4 percent in FFY 2031, ten years after project's completion …*"

CEMC PROJECTED ACUTE CARE UTILIZATION INCLUDING OBSERVATION DAYS				
	Total Acute Days	**Observation Days**	**Total Days**	**Occupancy**
2013	50,150	2,818	52,968	47.3%
2014	50,150	2,959	53,109	47.4%
2015	50,150	3,107	53,257	47.5%
2016	50,150	3,263	53,413	47.7%
2017	50,150	3,426	53,576	47.8%
2018	50,150	3,597	53,747	48.0%
2019 (PY1)	58,195	3,777	61,972	55.3%
2020 (PY2)	59,409	3,966	63,375	56.6%
2021 (PY3)	60,639	4,164	64,803	57.8%
2022	61,886	4,372	66,258	59.1%
2023	63,150	4,591	67,741	60.5%
2024	64,432	4,820	69,252	61.8%
2025	65,732	5,061	70,793	63.2%
2026	67,049	5,314	72,364	64.6%
2027	68,385	5,580	73,966	66.0%
2028	69,740	5,859	75,599	67.5%
2029	71,114	6,152	77,266	69.0%
2030	72,507	6,460	78,966	70.5%
2031	73,919	6,783	80,702	72.0%

From page 69.

On page 69, the applicant begins its discussion of the effect of the military population on CEMC:

> "*… CEMC's proximity to three military installations, Marine Corps Air Station Cherry Point, Marine Corps Base Camp Lejeune, and Marine Corps Air Station New River, necessitates that sufficient acute care and other capacity be available to accommodate the large swings in military population, dependents, and induced growth that results from base realignment and as well as the return of personnel from deployment.*

… In FFY 2012, 6.2 percent of CEMC's total patient days were attributable to TRICARE patients. In order to accommodate fluctuations in the community's healthcare needs due to unexpected changes related to the military installations, CEMC must maintain a sufficient number of acute care beds to accommodate these changes.

This flexibility has been especially necessary since the conversion of the Naval Hospital Cherry Point to an outpatient clinic in 2005… From 2006 to 2009, CEMC experienced a 224 percent increase in the number of TRICARE visits in its ED, with growth from nearly 1800 to more than 5,800 TRICARE visits over that time period. CEMC increased its provision of labor and delivery services from 169 TRICARE beneficiaries to 1,177 over the same time period, an increase of nearly 600%. Nursery utilization at CEMC also increased from 231 to 1,132 TRICARE days, a 390 percent increase. … some of that impact has been mitigated due to deployments. Thus, CEMC expects a … increase in the need for capacity for military and dependents as deployments wind down."

The applicant further states on page 70 that acute care bed flexibility is necessary as the military population increased from 11,477 in 2006 to 40,086 in 2011. And by 2009, Craven County had a 5.2% population increase from 97, 345 to 102,381. The applicant provides the following table on page 72, which demonstrates the potential impact of equivalent future changes on CEMC. If CEMC's acute utilization was 5.2% above expected, the resulting total acute days and occupancy rates would be as follows:

CEMC PROJECTED ACUTE CARE UTILIZATION INCLUDING OBSERVATION DAYS and MILITARY GROWTH				
	Total Acute Days incl. Observation Days	**5.2% Additional Volume (potential growth related to military)**	**Total Days**	**Total Occupancy**
2013	52,968	2,754	55,723	49.7%
2014	53,109	2,762	55,871	49.9%
2015	53,257	2,769	56,027	50.0%
2016	53,413	2,777	56,190	50.1%

2017	53,576	2,786	56,362	50.3%
2018	53,747	2,795	56,542	50.5%
2019 (PY1)	61,972	3,223	65,195	58.2%
2020 (PY2)	63,375	3,295	66,670	59.5%
2021 (PY3)	64,803	3,370	68,173	60.8%
2022	66,258	3,445	69,704	62.2%
2023	67,741	3,523	71,264	63.6%
2024	69,252	3,601	72,853	65.0%
2025	70,793	3,681	74,474	66.5%
2026	72,364	3,763	76,127	67.9%
2027	73,966	3,846	77,812	69.4%
2028	75,599	3,931	79,530	71.0%
2029	77,266	4,018	81,284	72.5%

In Section III, pages 72-73, the applicant states that when observation patients and increased military population are considered, CEMC could surpass its total acute care target occupancy of 71.4 percent by FFY 2029; which is eight years following PY3.

With the decline of US presence in Iraq and Afghanistan, hundreds of thousands of military personnel will be returning to military bases in the CEMC service area. Thus, there will be needed increased capacity at CEMC to treat the military personnel and their families. On pages 73-74, the applicant states,

> "*… observation patient days and unexpected changes at the nearby military installations have the potential to impact CEMC's total acute care utilization, thus necessitating that CEMC be able to accommodate these patients. Based on these factors, CEMC believes it has demonstrated sufficient need to maintain its existing 307 acute care beds after the completion of the proposed project.*
>
> *… for the purposes of the financial pro formas, CEMC is conservatively excluding the volume from observation and military growth; however, it believes these projections are also reasonable*."

Next, the applicant discusses projected utilization of three of the primary areas addressed in this proposed renovation and expansion project:

- Women's and Children's Services,
- Emergency Department, and
- Laboratory

Women's and Children's Services Concerns

In Section III.1, pages 38-49, the applicant states the need for renovation and expansion of the women's and children's services component. The applicant states:

"*… Currently, one of the most critical needs is to enlarge the size of the patient rooms to meet the clinical needs related to delivery of care in the 21st century as well as current requirements under the Americans with Disabilities Act of 1990 (ADA). In addition to the size of the rooms, other needs relate to the current lack of private showers … inadequate space in patient room doorways to accommodate extended/oversized beds, and a lack of storage.*

… The existing size of the patient rooms also makes it … difficult to fit a patient stretcher into the room.
… the current sizing of the nursery is suboptimal to accommodate babies, … clinical staff, physicians and equipment.

… One of the concerns voiced by CEMC's physicians is that because many of the patients recognize that the hospital facility is outdated, the patients also then perceive that the care provided must be out-of-date as well. … In turn, the outdated appearance of the medical center and resulting patient complaints makes it difficult to recruit needed physicians to the community.

…

The existing pediatric rooms, … are undersized and outdated.

In summary, the existing women's and children's services are antiquated, the rooms are extremely small and the fragmentation of services is not conducive to the way obstetrics, gynecology, and pediatrics are practiced in the 21st century. … The resulting enhancement of women's and children's services will not only improve services for Craven County residents, but will also support physician recruitment for the medical center."

Women's and Children's Services Projected Utilization

In Section IV, pages 116 and 119, the applicant provides historical and projected utilization for Women's and Children's Services as shown below in the table.

CEMC UTILIZATION WOMEN'S & CHILDREN'S, LABOR & DELIVERY, PEDIATRICS					
	Prior FY **(10/1/10-9/30/11)**	**Last FY** **(10/1/10-9/30/11)**	**Project Yr 1** **(10/1/18-9/30/19)**	**Project Yr 2** **(10/1/19-9/30/20)**	**Project Yr 3** **(10/1/20-9/30/21)**
OB/GYN					
# Beds	22	22	28	28	28
# Admissions	1,657	1,600	2,013	2,061	2,110
# Pt Days	3,283	3,081	3,875	3,969	4,063
L&D, C-Section, Women's Triage					

# Births	1,368	1,369	1,722	1,763	1,806
# C-Section Rooms	1	1	1	1	1
# C-Sections	345	366	460	471	483
#OB Triage Rooms	3	3	4	4	4
#OB Triage Patients	2,720	2,783	3,501	3,585	3,670
Pediatrics					
# Beds	8	8	6	6	6
# Admissions	396	380	401	404	407
# Pt Days	1,110	1,272	1,342	1,352	1,362

In Section III, page 76-88, the applicant provides methodology and assumptions to demonstrate the need for the expansion and consolidation of women's and children's services. The applicant states,

1. "*… assumes that every existing provider currently serving Carteret, Craven, Jones, Onslow, and Pamlico counties will maintain their existing patient base, with the exception of Vidant Medical Center. … CEMC is not proposing to compete with Vidant Medical Center in the case of high-risk maternity care. …*

   The following table demonstrates FFY 2012 OB/GYN patients in the five-county service area (Carteret, Craven, Jones, Onslow, and Pamlico counties)."

FFY 2012 OB/GYN PATIENTS						
	Carteret	**Craven**	**Jones**	**Onslow**	**Pamlico**	**Total Service Area**
CEMC	41	1,363	28	41	76	1,549
Other Providers	762	462	41	2,390	27	3,682
Total Market Discharges	803	1,825	69	2,431	103	5,231

Applicant states source as Truven.

2. "*The 2012 to 2021 CAGR for the population of each of the five counties was calculated from NC OSBM data, as shown below.*"

2012 TO 2021 POPULATION CAGR					
	Carteret	**Craven**	**Jones**	**Onslow**	**Pamlico**
Population CAGR	1.3%	0.8%	0.1%	1.8%	0.2%

3. "*Incremental discharges were projected by applying the growth rates above to the historical market discharges. … CEMC believes … it will serve 100 percent of the incremental patients in Craven, Jones, and Pamlico counties. … Due to the presence of competitors, CEMC conservatively expects to serve 50% of the incremental patients in Carteret and Onslow counties.*"

4. "*… beginning with the first project year CEMC expects to serve Craven, Jones, and Pamlico county patients currently being served at Vidant Medical Center (VMC) in Greenville. … that facility has experienced a very high inpatient census for a number of years. As a result, Vidant has worked with other providers, … to encourage patients that can be treated closer to home to do so. … CEMC believes that 75% of Vidant's projected non-high risk discharges in these counties will shift to CEMC due to the modernization of women's services and the ability to receive care closer to home. … The following table depicts the number of non-high risk cases expected to be served by CEMC at the completion of the proposed project.*"

CEMC PROJECTED SERVICE AREA OB/GYN DISCHARGES				
	CEMC Existing	**Vidant Shift**	**SA Incremental**	**Total SA**
2019 (PYI)	1,549	93	306	1,948
2020 (PY2)	1,549	94	353	1,995
2021 (PY3)	1,549	94	400	2,043

CEMC does not project to capture incremental discharges until Project Year 1. SA = service area.

"*… the total discharges projected above are reasonable as they represent an increase of only five percentage points of market share for total service area discharges, as summarized in the table below.*"

CEMC SHARE OF OB/GYN DISCHARGES			
	2012 Discharges	**2012-2021 Incremental**	**2021 Discharges**
CEMC	1,549	494	2,043
Total Market Discharges	5,231	667	5,898
CEMC Share	29.6%	NA	34.6%

5. "*… to determine discharges served from outside of its service areas, CEMC assumed its future inmigration rate will remain equal to its current level, three percent. … CEMC assumed that its current OB/GYN average length of stay (ALOS) of 1.9 days would remain unchanged through the project years. … CEMC predicts the following utilization of women's services …*"

CEMC PROJECTED OB/GYN UTILIZATION								
	CEMC SA DCs	**Inmigration DCs**	**Total DCs**	**ALOS**	**Total Days**	**ADC**	**Beds**	**Occupancy**
2019 PY1	1,948	64	2,013	1.9	3,875	11	28	37.9%
2020 PY2	1,995	66	2,061	1.9	3,969	11	28	38.8%
2020 PY2	2,043	67	2,110	1.9	4,063	11	28	39.8%

SA = service area, DCs = discharges, ADC = average daily census

6. Future Births: "*CEMC has projected future births by assuming that the historical ratio of births to OB/GYN discharges will remain constant throughout the project*

years. In FFY 2012, the ratio of total births to OB/GYN discharges has equaled six births for every seven OB/GYN discharges, or 0.86. The ratio of C-Sections to OB/GYN discharges was 0.23 and the ratio of vaginal births to OB/GYN discharges was 0.63. … The following table demonstrates projected C-Sections, vaginal births, and total births based on their respective ratios to women's admissions."

CEMC PROJECTED LABOR & DELIVERY UTILIZATION				
FFY	**OB/GYN DCs**	**C-Sections**	**Vaginal Births**	**Total Births**
2019 (PYI)	2,013	460	1,262	1,722
2020 (PY2)	2,061	471	1,292	1,763
2021 (PY3)	2,110	483	1,323	1,806
Ratio to OB/GYN DCs	NA	0.23	0.63	0.86

From page 84.

7. Women's Triage: "*The volume of triage patients is expected to remain at its historical ratio to OB/GYN discharges. In FFY 2012, this ratio equaled 1.74, with 2,783 women's triage patients and 1,600 OB/GYN discharges.*"

8. Level I Bassinets: "*… CEMC believes its 22 Level I bassinets will provide an adequate number of bassinets for its projected number of births.*"

9. Pediatric Beds: "*… Although admissions have declined since 2010, days have grown … from 2010 to 2012 as evident by the nine percent CAGR. … CEMC … assumes a .08 percent annual growth in utilization for pediatrics, consistent with the projected population growth in Craven County. … While other types of acute care beds discussed above include a projection of incremental patients, CEMC does not believe this approach is suitable for pediatric services, particularly since CEMC is not a tertiary pediatrics provider. … Please note that beginning with FFY 2019, occupancy levels are calculated based on the remaining six pediatric beds. The following table demonstrates the projected utilization of pediatric services at CEMC for the proposed project. As shown … occupancy of pediatric beds is projected to grow from 43.6 percent in FFY 2012 to 62.2 percent by the end of the third project year due to increase utilization and a reduction in bed capacity …*"

CEMC HISTORICAL & PROJECTED PEDIATRIC UTILIZATION					
FFY	**Admissions**	**Days**	**ADC**	**Beds**	**Occupancy**
2010	435	1,071	2.9	8	36.7%
2011	396	1,110	3.0	8	38.0%
2012	380	1,272	3.5	8	43.6%
CAGR	-6.5%	9.0%	9.0%	NA	NA
2019 (PYI)	401	1,342	3.7	6	61.3%
2020 (PY2)	404	1,352	3.7	6	61.7%
2021 (PY3)	407	1,362	3.7	6	62.2%
CAGR	0.8%	0.8%	0.8%	NA	4.5%

(CAGR calculated for 2013-2021, see page 88)

The applicant adequately demonstrates the need to renovate, expand and consolidate its existing women's and children's services.

Emergency Department Concerns

In Section III.1, pages 49-51, the applicant states the need for renovation and expansion of the emergency services component. The applicant states on page 50:

> "*CEMC's ED is grossly undersized … . … according to recommendations from the American College of Emergency Physicians, Exhibit 11, an ED with projected annual visits between 70,000 and 80,000 should operate within a range of 40 and 61 rooms and approximately 825 square feet per bed while an ED with projected annual visits between 30,000 and 40,000 should operate within a range of 20 to 33 beds and approximately 875 square feet per bed.*
>
> *During federal fiscal year 2012, the ED provided care for more than 72,000 patient visits. More than half of those visits, approximately 39,247, were provided in the main ED using 34 exam rooms in only 15,770 square feet of space. Those numbers represent more than 1,150 patient visits per room and approximately 463 square feet per bed.*
>
> *… As noted above, CEMC's main ED currently operates with approximately 463 square feet per bed, which is … less than recommended by the American College of American* [sic] *Physicians*."

In Exhibit 11, the applicant provides a copy of the American College of Emergency Physicians (ACEP) guidelines for hospitals with a range of 10,000 to 150,000 annual ED visits. CEMC's range of ED visits is shown below in the table.

ACEP RECOMMENDED NUMBER OF ED VISITS PER TREATMENT ROOM

Annual number of ED visits	Treatment Rooms		Annual visits per treatment room		Estimated Area/Bed
	Low	High	Low	High	
40,000 ED visits	25	33	1,600	1,212	875 SF
70,000 ED visits	40	54	1,750	1,296	825 SF

In Section III, page 50-51, the applicant states,

> "*The department is overcrowded and … cannot continue to operate under such constraints. … Patient privacy is compromised in these areas and state and federal privacy requirements are difficult to meet in such a restricted environment. … The*

expanded ED space will also allow the medical center to develop space to hold mental health/psychiatric patients until they can be transferred to the appropriate treatment setting. At present, there is no separate space for psychiatric patients that must wait, often for a period of days, in CEMC's ED in the event CEMC's adult psychiatric unit is full or the patient does not meet inpatient requirements (i.e., violent or pediatric patients).

CEMC MAIN EMERGENCY DEPARTMENT		
Main ED	**Current**	**After Proposed Project**
#Exam Rooms	34	45
Total Square Feet	15,770	27,352
Sq.Ft. per Bed	463.8	607.8

The applicant does not propose any changes to the minor ED, because it is capable of handling its current and projected number of visits.

Emergency Department Historical and Projected Utilization

In Section IV, pages 117 and 120, the applicant provides historical and projected utilization for the ED as shown below in the table.

CEMC EMERGENCY DEPARTMENT UTILIZATION					
ED (main)	**Prior FY (10/1/10-9/30/11)**	**Last FY (10/1/10-9/30/11)**	**Project Yr 1 (10/1/18-9/30/19)**	**Project Yr 2 (10/1/19-9/30/20)**	**Project Yr 3 (10/1/20-9/30/21)**
# Treatment Rooms	34	34	45	45	45
# Visits	39,450	39,247	41,580	42,079	42,583

In Section III, page 91-93, the applicant provides methodology and assumptions to demonstrate the need for the expansion of the ED.

1. "*… 54 percent of total ED visits occurring in the main ED while the remaining patients are seen in the minor ED. … the utilization projections … are for the main ED only. The main ED will increase its capacity from 34 rooms to 45 rooms …*"

The following table illustrates CEMC's historical utilization and compound annual growth rate (CAGR) for ED visit volume.

CEMC HISTORICAL & PROJECTED EMERGENCY DEPARTMENT UTILIZATION			
FFY	**Total Visits**	**# Exam Rooms**	**Visits per Room**
2010	38,972	34	1,146
2011	39,450	34	1,160
2012	39,247	34	1,154
CAGR	0.4%	NA	0.4%

2019 (PYI)	41,580	45	924
2020 (PY2)	42,079	45	935
2021 (PY3)	42,583	45	946
CAGR*	0.8%	NA	-1.7%

* (CAGR from 2010-2021)

2. "*CEMC projects 0.8 percent growth annually from FFY 2013 through FFY 2018, based on the expected population growth of Craven County. Beginning in the first project year, CEMC projects a 1.2 percent annual growth rate, which is equal to one-half of the total acute care growth noted previously. CEMC believes this assumption is reasonable based on the increased total acute care need for its facility. This assumption is also supported by the increased space of the proposed main ED, which will lead to shorter wait times and fewer patients leaving the main ED without being seen.*

3. "*According to ACEP guidelines (see Exhibit 11), an ED with projected annual visits between 70,000 and 80,000 should operate within a range of 40 and 61 rooms. Based on total projected visits, the ED at CEMC will experience 78,913 total patient visits in the third project year. Therefore, CEMC believes the 11 additional proposed traditional ED rooms, bringing total ED rooms to 60 by the third project year, are necessary to accommodate the future growth in visits.*"

This utilization exceeds the recommended utilization for ED visits per treatment rooms as recommended by the ACEP. The applicant's projections are based on historical ED utilization as the only hospital in Craven County and a regional tertiary care provider in eastern North Carolina. The applicant adequately demonstrates the need to renovate and expand its existing main ED by 11 treatment bays to accommodate the future growth in visits and to operate within ACEP guidelines.

Laboratory

In Section III, page 94-95, the applicant provides methodology and assumptions to demonstrate the need for relocating the laboratory.

1. "*CEMC assumes a 0.8 percent annual growth rate from FFY 2013 to FFY 2018, consistent with the projected population growth of Craven County. The three project years are assumed to have a growth rate of 1.2 percent due to the relationship that exists between inpatient utilization and laboratory tests. This 1.2 percent growth rate is equal to half of the projected overall total acute care bed growth of 2.4 percent …*"

CEMC HISTORICAL & PROJECTED LAB TESTS	
FFY	**Lab Tests**
2010	780,528

2011	766,686
2012	735,798
CAGR	-2.9%
2019 (PYI)	779,529
2020 (PY2)	788,883
2021 (PY3)	798,350
CAGR*	0.9%

*(CAGR from 2013-2021, see p. 95)

The applicant adequately demonstrates the need to relocate its laboratory based on renovations and expansion for the Women's and Children's Pavilion, the Emergency Department and the Surgery suite, and the projected population growth of Craven County.

In summary, the applicant adequately identifies the population to be served and demonstrates the need the population has for each service component of the project. Therefore, the application is conforming to 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.

C

In Section III.3, pages 99-100, the applicant describes three alternatives considered which include the following:

1) Maintain Status Quo – the applicant concludes that doing nothing would impair its ability to satisfactorily serve the community.

2) Renovate Existing Space Only – the applicant concludes that this alternative would not allow women's services to be co-located, the emergency department nor surgical services could be expanded, and therefore, the major needs behind the proposal would not be met.

3) The applicant concludes that developing the project as proposed is the most effective and least costly option because existing space will be used while adding sufficient new construction to meet the needs of the service components. The project will increase access to women's, children's surgical and emergency department services, as well as improving the medical center's internal thoroughfare.

Furthermore, the application is conforming to all other applicable statutory and regulatory review criteria, and thus, is approvable. A project that cannot be approved cannot be an effective alternative. Therefore, the application is conforming to this criterion and approved subject to the following conditions:

1. **CarolinaEast Medical Center, Inc. shall materially comply with all representations made in its certificate of need application.**

2. **Upon completion of the project, CarolinaEast Medical Center, Inc. shall be licensed for no more than:**
   - **307 general acute care beds**
   - **20 inpatient rehabilitation beds**
   - **23 psychiatry beds, and**
   - **12 operating rooms; including 1 dedicated C-Section room**

3. **CarolinaEast Medical Center, Inc. shall 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 representations in the written statement as described in paragraph one of Policy GEN-4.**

4. **CarolinaEast Medical Center, Inc. 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 and which would otherwise require a certificate of need.**

5. **Prior to issuance of the certificate of need, CarolinaEast Medical Center, Inc. shall acknowledge acceptance of and agree to comply with all conditions stated herein in writing to the Certificate of Need Section.**

(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.

C

In Section VIII, page 168-187, the applicant states the capital cost for the project will be $63,973,459, as depicted below in the table:

CEMC PROJECT CAPITAL COST	
Item	**Cost**
Site Costs	$504,828

Construction Contract	$46,429,023
Miscellaneous	
Other equip/IT	$6,571,445
Furniture	$2,977,121
Consultant Fees	
A&E	$2,713,419
Other (CON & reimbursable expenses)	$274,750
Contingency	$4,502,873
TOTAL Capital Cost	$63,973,459

In Section IX, page 172, the applicant states that there will be no start up or initial operating expenses associated with the proposed project. In Section VIII.3, page 168, the applicant states that the project will be funded by the accumulated reserves of its parent company, CarolinaEast Health System. Exhibit 26 contains a June 17, 2013 letter from the Chief Financial Officer for CarolinaEast Health System, which states:

> "*As the Chief Financial Officer for CarolinaEast Health System and CarolinaEast Medical Center, I am responsible for the financial operations of the System and the medical center. As such, I am very familiar with the organization's financial position.*
>
> *CarolinaEast Health System will fund the capital costs of the project, estimated to be $63,973,459, with hospital reserves. As shown in the audited financials included with the application, CarolinaEast Health System has sufficient cash and assets limited as to use in reserves required for the capital costs of the proposed project.*"

Exhibit 27 of the application contains the consolidated financial statements for CarolinaEast Health System for the years ending September 30, 2011 and 2012. As of September 30, 2012, CarolinaEast Health System had $15,480,515 in cash and cash equivalents, unrestricted net assets of $259,653,952 and $376,499,372 in net assets (total assets less total liabilities). The applicant adequately demonstrates the availability of sufficient funds for the capital needs of the project.

On pages 186-214, the applicant provided pro forma financial statements and assumptions for the first three years of the project for the entire Health System and for the proposed expansion and renovations at CEMC. In Form C, the applicant projects that expenses will exceed revenue for the General Med/Surg beds, OB/GYN beds and Pediatric beds for all three project years. The applicant projects that expenses will exceed revenue for the Nursery for the first project year; but for Project Years 2 and 3, revenue will exceed expenses. However, the applicant projects that revenue will exceed operating expenses in each of the first three operating years of the project for the ED, the Laboratory, Labor and Delivery, and the Surgery Department as illustrated below in the tables.

CEMC GENERAL MED/SURG			
	Project Yr 1 10/1/18-9/30/19	**Project Yr 2 10/1/19-9/30/20**	**Project Yr 3 10/1/20-9/30/21**
Projected # Patient Days/Cases	12,698	14,941	17,184

Projected Average Charge (Gross Patient Revenue/ Projected # of Procedures)	$593	$617	$641
Gross Patient Revenue	$7,530,126	$9,214,906	$11,022,420
Deductions from Gross Patient Revenue	$4,415,441	$5,403,346	$6,463,218
Net Patient Revenue	$3,114,685	$3,811,560	$4,559,202
Total Expenses	$9,767,318	$11,401,024	$13,150,804
Net Income	$(6,652,634)	$(7,589,464)	$(8,591,602)

CEMC EMERGENCY DEPARTMENT			
	Project Yr 1 10/1/18-9/30/19	**Project Yr 2 10/1/19-9/30/20**	**Project Yr 3 10/1/20-9/30/21**
Projected # Visits	41,580	42,079	42,583
Projected Average Charge (Gross Patient Revenue/ Projected # of Procedures)	$896	$931	$969
Gross Patient Revenue	$37,236,202	$39,190,358	$41,247,068
Deductions from Gross Patient Revenue	$23,495,028	$24,728,047	$26,025,775
Net Patient Revenue	$13,741,174	$14,462,311	$15,221,293
Total Expenses	$10,965,219	$11,460,523	$11,980,429
Net Income	$2,775,955	$3,001,788	$3,240,863

CEMC LABORATORY			
	Project Yr 1 10/1/18-9/30/19	**Project Yr 2 10/1/19-9/30/20**	**Project Yr 3 10/1/20-9/30/21**
Projected # Procedures	779,529	788,883	798,350
Projected Average Charge (Gross Patient Revenue/ Projected # of Procedures)	$103	$108	$112
Gross Patient Revenue	$80,577,344	$84,806,043	$89,256,664
Deductions from Gross Patient Revenue	$50,414,006	$53,059,733	$55,844,308
Net Patient Revenue	$30,163,338	$31,746,310	$33,412,357
Total Expenses	$17,400,846	$18,238,840	$19,118,584
Net Income	$12,762,493	$13,507,470	$14,293,773

CEMC LABOR & DELIVERY			
	Project Yr 1 10/1/18-9/30/19	**Project Yr 2 10/1/19-9/30/20**	**Project Yr 3 10/1/20-9/30/21**
Projected # Births	1,722	1,763	1,806

Projected Average Charge (Gross Patient Revenue/ Projected # of Procedures)	$4,160	$4,326	$4,499
Gross Patient Revenue	$7,163,341	$7,629,382	$8,123,886
Deductions from Gross Patient Revenue	$2,916,656	$3,106,411	$3,307,755
Net Patient Revenue	$4,246,686	$4,522,971	$4,816,131
Total Expenses	$2,945,330	$3,101,616	$3,266,889
Net Income	$1,301,355	$1,421,355	$1,549,242

CEMC NURSERY			
	Project Yr 1 10/1/18-9/30/19	**Project Yr 2 10/1/19-9/30/20**	**Project Yr 3 10/1/20-9/30/21**
Projected # Births	1,722	1,763	1,806
Projected Average Charge (Gross Patient Revenue/ Projected # of Procedures)	$2,275	$2,366	$2,460
Gross Patient Revenue	$3,916,717	$4,171,535	$4,441,916
Deductions from Gross Patient Revenue	$1,414,281	$1,506,293	$1,603,925
Net Patient Revenue	$2,502,435	$2,665,241	$2,837,991
Total Expenses	$2,509,052	$2,650,882	$2,800,907
Net Income	$(6,617)	$14,360	$37,085

CEMC OB/GYN BEDS			
	Project Yr 1 10/1/18-9/30/19	**Project Yr 2 10/1/19-9/30/20**	**Project Yr 3 10/1/20-9/30/21**
Projected # Patient Days	3,875	3,969	4,063
Projected Average Charge (Gross Patient Revenue/ Projected # of Procedures)	$474	$493	$513
Gross Patient Revenue	$1,836,378	$1,955,852	$2,082,622
Deductions from Gross Patient Revenue	$794,601	$846,297	$901,150
Net Patient Revenue	$1,041,778	$1,109,555	$1,181,471
Total Expenses	$2,697,468	$2,847,126	$3,005,445
Net Income	$(1,655,690)	$(1,737,572)	$(1,823,974)

CEMC PEDIATRIC BEDS			
	Project Yr 1 10/1/18-9/30/19	**Project Yr 2 10/1/19-9/30/20**	**Project Yr 3 10/1/20-9/30/21**
Projected # Patient Days	1,342	1,352	1,362
Projected Average Charge			

(Gross Patient Revenue/ Projected # of Procedures)	$620	$645	$671
Gross Patient Revenue	$832,578	$872,517	$914,372
Deductions from Gross Patient Revenue	$506,858	$531,172	$556,652
Net Patient Revenue	$325,721	$341,346	$357,720
Total Expenses	$1,743,131	$1,817,865	$1,896,042
Net Income	$(1,417,410)	$(1,476,519)	$(1,538,322)

CEMC SURGERY DEPARTMENT			
	Project Yr 1 10/1/18-9/30/19	**Project Yr 2 10/1/19-9/30/20**	**Project Yr 3 10/1/20-9/30/21**
Projected # Cases	7,677	7,930	8,194
Projected Average Charge (Gross Patient Revenue/ Projected # of Procedures)	$13,178	$13,705	$14,253
Gross Patient Revenue	$101,162,894	$108,676,623	$116,786,811
Deductions from Gross Patient Revenue	$58,076,283	$62,389,816	$67,045,768
Net Patient Revenue	$43,086,611	$46,286,808	$49,741,044
Total Expenses	$35,894,100	$38,213,729	$40,702,692
Net Income	$7,192,512	$8,073,079	$9,038,352

The applicant also projects a positive net income for the entire hospital system in each of the first three operating years of the project. The assumptions used by the applicant in preparation of the pro forma financial statements are reasonable, including projected utilization, costs and charges. See the financial section for the assumptions regarding cost and charges. See Criterion (3) for discussion of utilization projections which is hereby incorporated as if fully set forth herein. The applicant adequately demonstrates that the financial feasibility of the proposal is based upon reasonable projections of costs and charges, and therefore, the application is conforming to 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.

C

CarolinaEast Medical Center, Inc. in New Bern is the only hospital in Craven County and also serves as a regional tertiary care provider. In this application, CEMC proposes to expand and renovate space for women's and children's, emergency and surgical services. The applicant proposes to construct 45,470 square feet of new space and to renovate 96,029 square feet. The applicant adequately demonstrates the need for its proposed renovation and expansion based on reasonable, credible and supported projected utilization (which is based on historical utilization as the only hospital in Craven County). See Criterion (3) for additional discussion of the respective services and the recent and projected utilization for each project component which is hereby incorporated as if fully set forth herein. This

analysis demonstrates the reasonableness of the proposed project. Thus, the applicant adequately demonstrates the renovation and expansion of the proposed service components at CEMC will not result in the unnecessary duplication of services. Consequently, the application is conforming to 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.

C

In Section VII, pages 152-159, the applicant provides the existing staff for each component proposed and the projected staffing for the second full fiscal year, as illustrated below in the tables.

CEMC STAFFING		
Service Component	**Existing FTE Positions FY 2013**	**Proposed FTE Positions PY2 - 2020**
General Med/Surg Beds		
RN	40.3	52.9
PCT II	8.1	12.0
Nurse Mgr.	2.0	2.0
Assoc Mgr.	1.0	2.0
Secretary	10.8	10.8
Total	**62.2**	**79.7**

CEMC STAFFING		
Service Component	**Existing FTE Positions FY 2013**	**Proposed FTE Positions PY2 - 2020**
OB/GYN Beds*		
RN	10.5	*
Tech	1.6	*
Secretary	0.9	*
Total	**13.0**	*
Nursery*		*
RN	14.0	*
Total	**14.0**	*
Pediatric Beds*		*
RN	10.5	*
Total	**10.5**	*
Women's & Children's Pavilion*		
RN	**35**	33.6*
Tech	**1.6**	6.3*
Secretary	**0.9**	2.8*
Total	**37.5**	**42.7***

*Proposed staffing for the Women's & Children's Pavilion includes staff for OB/GYN beds, pediatric beds and nursery. L&D including Women's Triage is separate.

CEMC STAFFING

Service Component	Existing FTE Positions FY 2013	Proposed FTE Positions PY2 - 2020
Labor & Delivery (incl Women's Triage)		
RN	13.8	14.8
Tech	0.9	0.9
Total	**14.7**	**15.7**

CEMC STAFFING		
Service Component	**Existing FTE Positions FY 2013**	**Proposed FTE Positions PY2 - 2020**
Surgery		
Surgical RN	28.3	33.3
Surgical Techs	16.9	25.8
Surgical CRNA	19.8	24.8
Surgical NAs	6.0	6.0
Periop Business Mgr.	1.0	1.0
Materials Coordinator	2.0	2.0
Surg. Inventory Specialist	2.0	2.0
Business Office Coord.	1.0	1.0
Registration Clerks	7.9	7.9
Billers	2.0	2.0
Central Sterile Techs	18.0	19.0
Pre/Post RNs	16.9	19.4
Pre/Post PCTs	1.6	1.6
Unit Secretary	0.7	0.7
OR Manager	1.0	1.0
Anesthesia Manager	1.0	1.0
Central Sterile Manager	1.0	1.0
Total	**127.1**	**149.5**

CEMC STAFFING		
Service Component	**Existing FTE Positions FY 2013**	**Proposed FTE Positions PY2 - 2020**
Emergency		
RN	43.0	50.1
PCT	10.0	11.8
Clinical Mgr.	1.0	1.0
Business Mgr.	1.0	1.0
Associate Mgr.	3.0	3.0
Patient Liaison	1.5	1.5
Unit Secretary	8.7	8.7
Total	**68.2**	**77.1**

CEMC STAFFING		
Service Component	**Existing FTE Positions FY 2013**	**Proposed FTE Positions PY2 - 2020**
Laboratory		
Director	1.0	1.0
Manager	1.0	1.0
Med. Tech.	16.4	16.4
MLT	2.2	2.2

MT Supervisor	3.0	3.0
Phlebotomist	11.2	13.2
POC Coordinator	1.0	1.0
Specimen Acquisition Coord.	1.0	1.0
Info. Systems Coord	1.0	1.0
Clinical Lab Tech	1.0	1.0
Total	**38.8**	**40.8**

TOTAL CEMC STAFFING		
Project Service Components	**Existing FTE Positions FY 2013**	**Proposed FTE Positions PY2 - 2020**
General Med/Surg Beds	62.2	79.7
Women's & Children's Pavilion*	37.5	42.7*
Labor & Delivery (incl Women's Triage)	14.7	15.7
Surgery	127.1	149.5
Emergency	68.2	77.1
Laboratory	38.8	40.8
GRAND TOTAL	**348.5**	**405.5**

*Proposed staffing for the Women's & Children's Pavilion includes staff for OB/GYN beds, pediatric beds and nursery. L&D including women's triage is separate.

In Section VII.3, page 162, the applicant states:

> "*No new positions will be established as a result of the proposed project. All positions identified in Table VII.1 already exist at CEMC. Incremental FTEs to be added in existing positions by the second full fiscal year of the project are identified …*"

In Section V.3, page 125, the applicant identifies the Chief of Staff as Dr. T. Reed Underhill. The applicant states that Dr. Underhill will continue in the role of Chief of Staff. Exhibit 30 contains Dr. Underhill's letter of support for the project.

The applicant adequately demonstrates the availability of adequate health manpower and management personnel for the provision of the proposed services. Therefore, the application is conforming to 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.

The applicant is an existing hospital and provider of general med/surg, surgical, OB/GYN, labor and delivery (including women's triage), pediatrics, emergency and laboratory services, and the necessary ancillary and support services are currently available. In Section II.2, page 30, the applicant states:

> "*CEMC has been in operation as an acute care facility for 50 years. As an existing full-service acute care hospital, CEMC currently has all ancillary and support services in place necessary to support medical center operations. These existing ancillary and support services will also support the services included in the proposed project. CEMC's existing ancillary and support services, including laboratory, radiology, pharmacy, dietary, housekeeping, maintenance, and administration, among others, are available to support the proposed expansion and renovation …*"

See Exhibit 6 for a letter dated June 17, 2013, from the President and Chief Executive Officer of CEMC documenting that CEMC has sufficient ancillary and support services.

The applicant adequately demonstrates 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 to 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.

C

In Section XI.4, page 179, the applicant provides the existing and proposed square footage for the facility, as illustrated below in the table:

Existing/Proposed Project	**Square Feet**
Total square feet of existing facility	438,266
Total square feet of new construction	45,470
Total square feet at project completion	478,818*
Total square feet in existing facility to be renovated	96,029

*Total amount includes total square feet in the existing facility + total square feet of new construction minus the square feet to be demolished to complete the new construction (438,266 + 45,470 – 4,918)

Further in Section XI.4, page 180, the applicant provides a more detailed summary of the existing and proposed square footage for each department to be renovated or expanded, as illustrated below in the table.

CEMC SQUARE FOOTAGE				
Department	**Existing SF**	**New SF**	**Renovated SF**	**Total Department SF**
Surgical Services	28,865	1,825	8,508	30,690
Environmental Services	5,299	2,488	1,412	7,787
Emergency	15,770	0	27,352	27,352
Registration	2,995	0	4,565	4,565
Lobby, Snack & Gift Shop	4,918	0	0	0
Admin, Public Areas, Lobby	6,399	12,717	0	12,717
Connecting Corridor	4,077	4,112	4,983	9,095
Labor & Delivery	5,635	0	8,378	8,378
Triage & Pre-Op	855	0	2,266	2,266
Nursery	3,376	275	3,086	3,361
GYN	4,235	275	5,336	5,611
Post-Partum	6,665	0	13,615	13,615
Pediatric	6,920	0	3,539	3,539
2Surg	13,516	11,600	1,068	12,668
2100 Med/Surg	7,985	0	0	0
Laboratory	7,721	7,025	4,711	11,736
New Mechanical	0	5,153	0	5,153
Fifth Floor Patient Unit	10,442	0	7,210	17,652
Area Not in Project Scope	302,633	0	0	302,633
TOTAL	438,266	45,470	96,029	*478,818

*Total amount includes total square feet in the existing facility + total square feet of new construction minus the square feet to be demolished to complete the new construction (438,266 + 45,470 – 4,918)

In Section XI.4, page 181, the applicant provides the total cost per square foot, as illustrated below in the table.

CEMC CONSTRUCTION COST			
	Estimated Sq. Ft.	**Construction Cost Per Sq. Ft.**	**Total Cost Per Sq. Ft.**
Total	141,499	$328.12	$452.11

Exhibit 29 contains an April 10, 2013 cost estimate for the surgery department renovation from Wilkerson Associates Architects and an April 12, 2013 letter from McCulloch England Associates Architects which estimate the cost of expansion and renovations to the Women's and Children's Pavilion, Emergency Department and the Surgery Department.

See Exhibit 2 for line drawings of the existing medical center and Exhibit 3 for line drawings for the proposed project. In Section XI.7, page 182, the applicant states that it will comply with Policy GEN-4: *Energy Efficiency and Sustainability for Health Service Facilities* to ensure the facility is energy efficient. See Exhibit 18 for the applicant's energy and sustainability statement with a list of steps regarding compliance with Policy GEN-4.

The applicant adequately demonstrates that the cost, design, and means of construction represent the most reasonable alternative for the proposed hospital expansion and renovation project. See Criterion (5) for discussion of costs and charges which is hereby incorporated by reference as if fully set forth herein. Therefore, the application is conforming to this criterion.

(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;

C

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 for Craven County, CEMC's service area (Jones, Pamlico, Carteret and Onslow counties) and statewide.

	Total # of Medicaid Eligibles as % of Total Population	Total # of Medicaid Eligibles Age 21 and older as % of Total Population	% Uninsured CY 2009 (Estimate by Cecil G. Sheps Center)
Craven	15.0%	6.5%	19.6%
Jones	20.0%	9.8%	20.9%
Pamlico	18.0%	8.1%	20.3%
Carteret	14.0%	6.6%	19.5%
Onslow	11.0%	4.2%	23.4%
State	17.0%	6.7%	19.7%

*More current data, particularly with regard to the estimated uninsured percentages, was not available.

The majority of Medicaid eligibles are children under the age of 21. This age group would not typically utilize the health services proposed in this application at the same rate as older segments of the population.

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 of persons eligible to receive dental services who actually received dental services 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. In addition, data is available by age, race or gender. However, a direct comparison to the applicant's 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.

In Section VI.12 and VI.13, pages 147-150, the applicant provides the payor mix during Federal Fiscal Year 2012 for the entire hospital and each proposed service component, as illustrated below in the tables:

CEMC PAYOR MIX 10/1/11 to 9/30/12 PATIENT DAYS AS % OF TOTAL UTILIZATION	
	Entire Hospital
Medicare/Medicare Managed Care	59.5%
Medicaid	13.1%

Self Pay/Indigent/Charity/Other*	9.3%
Managed Care/Commercial	11.9%
TriCare	6.2%
TOTAL	100.0%

*Other includes workers comp and other government payors.

CEMC
PAYOR MIX
10/1/11 to 9/30/12
PATIENT DAYS AS % OF TOTAL UTILIZATION

	Med/Surg Beds	Emergency Department
Medicare/Medicare Managed Care	64.1%	35.0%
Managed Care/Commercial	13.7%	16.8%
Medicaid	10.5%	18.3%
Self Pay/Indigent/Charity/ Other*	8.6%	19.7%
TriCare	3.0%	10.2%
TOTAL	100.0%	100.0%

*Other includes workers comp and other government payors.

CEMC
PAYOR MIX
10/1/11 to 9/30/12
PATIENT DAYS AS % OF TOTAL UTILIZATION

	Laboratory	Labor & Delivery
Medicare/Medicare Managed Care	53.5%	0.2%
Managed Care/Commercial	15.1%	21.0%
Medicaid	12.6%	30.4%
Self Pay/Indigent/Charity/ Other*	12.5%	4.3%
TriCare	6.3%	44.1%
TOTAL	100.0%	100.0%

*Other includes workers comp and other government payors.

CEMC
PAYOR MIX
10/1/11 to 9/30/12
PATIENT DAYS AS % OF TOTAL UTILIZATION

	Nursery	OB/GYN
Medicare/Medicare Managed Care	0.0%	2.4%
Managed Care/Commercial	18.2%	21.6%
Medicaid	38.9%	33.0%
Self Pay/Indigent/Charity/ Other*	3.9%	4.5%
TriCare	39.0%	38.6%
TOTAL	100.0%	100.0%

*Other includes workers comp and other government payors.

CEMC PAYOR MIX 10/1/11 to 9/30/12 PATIENT DAYS AS % OF TOTAL UTILIZATION		
	Pediatrics	**Surgery** (includes C-Section)
Medicare/Medicare Managed Care	37.2%	46.7%
Managed Care/Commercial	16.6%	24.7%
Medicaid	28.7%	9.7%
Self Pay/Indigent/Charity/ Other*	8.1%	10.1%
TriCare	9.5%	8.8%
TOTAL	100.0%	100.0%

*Other includes workers comp and other government payors.

In Section VI.2, page 130, the applicant states:

"*CEMC does not discriminate against low-income persons, racial or ethnic minorities, women, handicapped persons, the elderly, or other underserved persons, including the medically indigent. CEMC provides access to care to all patients regardless of age, race, national or ethnic origin, disability, gender, income, or immediate ability to pay. Patients are admitted and services are rendered in compliance with: (1) Title VI of Civil Rights Act of 1963 (2) Section 504 of Rehabilitation Act of 1973 (3) The age Discrimination Act of 1975 (4) Americans with Disabilities Act.* "

The applicant demonstrates that medically underserved populations currently have adequate access to the services offered at CarolinaEast Medical Center. Therefore, the application is conforming to 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;

C

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 146, the applicant states:

"*CEMC has had no obligations to provide uncompensated care during the last three years. … CEHS … partners with local community service organizations and businesses to facilitate health fairs and screenings for the public at large as well as targeted segments of the population. This outreach is in addition to the charity care CEHS provides directly to its patients who have no ability to pay for that care*."

In Section VI.10, page 146, the applicant states:

"*No complaints have been filed against any affiliated entity of CEHS regarding civil rights equal access in the last five years*."

The application is conforming to 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

C

In Section VI.14, page 150, the applicant provides the projected payor mix for the entire facility for the second full fiscal year (2020) of operations for the proposal. The applicant states the projected payor mix will not change from the current payor mix as stated in Section VI.12, page 147. In Section VI.15, page 151, the applicant states that the projected payor mix for each service component as indicated in Section VI.13, pages 147-150, will remain unchanged through the project years.
The applicant demonstrates that medically underserved populations will have adequate access to the proposed service components. Therefore, the application is conforming to 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.

C

In Section VI.9, page 145, the applicant states:

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

The applicant adequately demonstrates the means by which patients will have access to the proposed services. Therefore, the application is conforming to 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.

C

In Section V.1(a) and (c), pages 121-123, the applicant provides documentation that CEMC will continue to accommodate the clinical needs of area health professional training programs. The table below includes some of the clinical training programs that currently utilize CEMC.

CEMC CLINICAL TRAINING AFFILIATIONS	
School	**Clinical Program**
Area High Schools	Health Occupations, Job Shadow
Beaufort Community College	Medical Lab Science, Nursing
Brunswick Community College	Health Information Technology
Campbell University	Pharmacy
Carteret Community College	Nursing, Nursing Assistant, Radiology
Duke University Medical Center	CRNA, Nursing, Physical & Occupational Therapy
East Carolina University	Cardiac Rehab, Health Fitness, Physician Assistant, Social Work, Nutrition/Dietetics
Eastern Virginia Medical School	Physician Assistant
Pitt Community College	Cardiovascular Interventional Technology, Medical Cardiovascular Sonography, Nuclear Medicine, Computed Tomography, MRI, Radiology Oncology

The information provided is reasonable and credible and supports a finding of conformity to 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.

C

The applicant is the only acute care hospital in the Craven/Jones/Pamlico county service area. In Section V.7, pages 127-128, the applicant provides a narrative stating why it believes the renovations and expansion of the medical center will foster competition by promoting cost effectiveness, quality and access to healthcare services in Craven County and the other counties in its service area. See also Sections II, III, VI and VII of the application for additional discussion by the applicant about the impact of its proposal on cost effectiveness, quality and access to medical/surgical beds, women's and children's, surgical, emergency, and laboratory services.

The applicant adequately demonstrates that its proposal would enhance competition by promoting cost effectiveness, quality and access to the proposed service components based on the following analysis:

1) Projected utilization of the medical/surgical beds, women's and children's, surgical, emergency, and laboratory services are based on reasonable, credible and supported assumptions which are based on historical utilization. See Criterion (3) for discussion regarding projected utilization which is hereby incorporated as if fully set forth herein. The applicant adequately demonstrates the financial feasibility of the proposal is based upon reasonable projections of costs and charges. See the Pro Formas and Criterion (5) for discussion regarding financial feasibility which is hereby incorporated as if fully set forth herein. Therefore, the applicant adequately demonstrates the cost effectiveness of its proposal.

2) The applicant projects to continue to provide adequate access to medically underserved groups, including self pay/charity care patients, Medicare beneficiaries and Medicaid recipients. See Section VI of the application. See Criterion (13c) for discussion regarding projected access by these groups which is hereby incorporated as if fully set forth herein.

3) The applicant adequately documents that it will continue to provide quality care. See Sections II and VII of the application.

Therefore, the applicant adequately demonstrates that its proposal 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.

C

CEMC 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, DHSR, no incidents occurred within eighteen months immediately preceding the data of this decision, for which any sanctions or penalties related to quality of care were imposed by the State on the hospital. Therefore, the application is conforming to 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