BRIEFING MEMO

MaineGeneral Medical Center
New Inpatient Regional Hospital

DATE: November 4, 2010

TO: Brenda M. Harvey, Commissioner, DHHS

THROUGH: Catherine Cobb, Director, Division of Licensing and Regulatory Services

FROM: Phyllis Powell, Assistant Director, Planning, Development and Quality
Steven R. Keaten, Health Care Financial Analyst
Larry D. Carboneau, Health Care Financial Analyst
Richard F. April, Health Care Financial Analyst

SUBJECT: New Regional Hospital and Thayer Campus Comprehensive Outpatient Services Project


REGISTERED AFFECTED PARTIES: None

I. BACKGROUND:

- MaineGeneral Health (MGH) is the parent organization of MaineGeneral Medical Center (MGMC) (the applicant) and MaineGeneral Health Associates (MGHA). MGMC, a 501(c)(3) not-for-profit corporation, is licensed by the Maine Department of Health and Human Services. MGMC is accredited by The Joint Commission and is Medicare certified.

- MGMC presented an application on December 21, 2009 for a Certificate of Need proposing the construction of a new regional hospital located in North Augusta and redevelopment of the Waterville Campus.

- In the Preliminary Analysis dated September 23, 2010, the Certificate of Need Unit (CONU) recommended that the Commissioner approve the application subject to conditions.

- The applicant has provided additional information and comments pertaining to the Preliminary Analysis. CONU has considered these comments and modified some of the recommended conditions.
II. PROJECT DESCRIPTION:

- The project proposes to build a new hospital facility located in North Augusta adjacent to MGMC’s Harold Alfond Center for Cancer Care (HACCC). According to the applicant, the new hospital would consist of approximately 600,000 square feet and would consolidate all of MGMC’s inpatient beds into a single location (Augusta). The current hospital located in Augusta and the Seton Campus in Waterville would close. The Thayer Campus in Waterville would close to all inpatient services and be developed into a comprehensive outpatient facility. The Thayer Campus would offer a 24-hour Emergency Department, imaging and outpatient surgery services. The applicant proposes to reduce licensed bed capacity of 287 by 61. Staffed beds would remain at 226. The new inpatient hospital will have all private rooms.

- The applicant proposes 11 operating rooms in Augusta. The applicant proposes the 9 operating rooms in Waterville would become an outpatient surgery center. This would result in 20 MGMC operating rooms.

- The applicant proposes to add a CT machine at the new Augusta facility, resulting in 2 in Augusta and 1 in Waterville.

- The Waterville campus involves the Thayer facility becoming a Hospital/Provider-based off-campus ED, a type of “freestanding” ED. This type of emergency department will occur in Waterville as a result of relocating inpatient services from Waterville to the new hospital in Augusta. It will be the first ED of this type located in the state of Maine. The facility will need to meet specific requirements established by the Centers for Medicare and Medicaid Services (CMS). The applicants are engaged in discussions with CMS and the State of Maine Division of Licensing and Regulatory Services.

- MGMC is currently working with Maine DOT, the City of Augusta and various political representatives to ensure that a redesign of the Exit 113 interchange occurs. This interchange would provide direct access to the new hospital location in Augusta. MGMC is working with Delta Ambulance to provide transportation for Waterville ED and other patients requiring services in Augusta. MGMC will offer a limited transportation program through KVCA/KV Transit for people from the Waterville area to the new hospital in Augusta.
III. HIGHLIGHTS:

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter of Intent filed:</td>
<td>September 29, 2009</td>
</tr>
<tr>
<td>Technical assistance meeting held:</td>
<td>October 29, 2009</td>
</tr>
<tr>
<td>CON application filed:</td>
<td>December 21, 2009</td>
</tr>
<tr>
<td>CON certified as complete:</td>
<td>December 21, 2009</td>
</tr>
<tr>
<td>Public Information Meeting/Hearing - Waterville</td>
<td>January 20, 2010</td>
</tr>
<tr>
<td>Public Information Meeting/Hearing – Augusta</td>
<td>January 21, 2010</td>
</tr>
<tr>
<td>Public comment period ended:</td>
<td>February 22, 2010</td>
</tr>
<tr>
<td>Record reopened:</td>
<td>July 9, 2010</td>
</tr>
<tr>
<td>Public comment period ended:</td>
<td>September 7, 2010</td>
</tr>
<tr>
<td>Preliminary Analysis Released:</td>
<td>September 23, 2010</td>
</tr>
<tr>
<td>Public comment period ended:</td>
<td>October 12, 2010</td>
</tr>
</tbody>
</table>

IV. PUBLIC COMMENTS RECEIVED IN RESPONSE TO THE APPLICATION:

Separate public hearings were held in Waterville and Augusta. Testimonies were presented by the public, including MGMC staff, business owners, labor unions and politicians. The majority of the testimonies were in support of this project. The transcripts for these hearings are on file with CONU.

Thirty-five written comments were received from the public. Twenty-nine comments were in favor of the project and 6 comments were not in favor of the project. The 29 comments in favor of the projects included 3 comments on MaineGeneral letterhead and 3 comments from current legislators including 1 letter signed by 16 legislators.

The general consensus of the comments in favor of the project spoke to the need in the area and the economic conditions favoring the project at this time.

In general, the written comments not in favor of this project were more detailed including retired Colby economics Professor H. A. Gemery whose objections were described in the preliminary analysis. Two objections were raised by members of the public speaking to the degradation in walking access to the new Augusta hospital. Two other unfavorable comments were received by physicians who have worked or are working at MGMC. The former chief of staff at Thayer commented that the proposed “Free-standing” ED at Thayer was in his opinion “absurd from a medical point of view.” He further commented that “death in an ambulance miles away is not acceptable medically or legally.” A general surgeon in the Waterville area commented that in his opinion quality of care has markedly declined. The commentator also believed that administrators of the hospital were too quick to say that a new hospital would be a panacea for the problems faced by the applicant. Other than Professor Gemery’s comments, others presenting information did not quantify their comments.
John Del Vecchio, commented that the preliminary analysis identified some serious concerns with the proposal but still recommended approval with conditions. CONU determined that with the conditions proposed the project met the criteria for approval.

V. APPLICANT'S RESPONSE (condensed) TO PRELIMINARY ANALYSIS WITH CONU COMMENTS:

The applicant accepted 8 of the 14 conditions contained in the Preliminary Analysis and objected to 6. The applicant elected to limit its response to the conditions recommended in the preliminary analysis. CONU has provided an abbreviated Project Description in Section II of this Briefing Memorandum to the Commissioner. A full analysis is contained in the Preliminary Analysis dated September 23, 2010.

**Condition A-1:** The applicant must demonstrate compliance with the CMS hospital Conditions of Participation (CoPs) and provider-based regulations at 42 CFR 413.65 or other regulations in force prior to operating the Waterville Emergency Department as a “Provider-based Off-campus Emergency Department”.

**Condition A-2:** The applicant will attain Joint Commission accreditation for the “Provider-based Off-campus ED” in Waterville by the end of the 2nd full year of operation.

**Applicant Response:**
The applicant accepts these conditions with the following comments:

“These two conditions require compliance with CMS Conditions of Participation (CoPs) and Joint Commission accreditation requirements. MGMC has a history of commitment to and compliance with both CMS and Joint Commission standards (CON Application Attachments 3 and 4). MGMC also recognizes its unique opportunity and responsibility to demonstrate the safety and efficacy of the first Provider-based Off-campus Emergency Department in the State of Maine.”

**CONU Response:**
These conditions will remain as part of the recommended approval.

**Condition B-1:** Upon approval of this CON and semi-annually until the third full fiscal year of the new hospital operation, MGMC will report, using forms approved by the Department, the results of physician recruitment compared to recruitment goals.

**Applicant Response:**
“MGMC requests that it be allowed to submit each of the five reports annually for a period of three years and that all five reporting requirements commence at the completion of the new regional hospital and Thayer renovations.”

**CONU Response:**
This condition will be revised as follows:
**Condition B-1, Revised:** Upon approval of this CON and annually thereafter, until the end of the 3rd full fiscal year of the new hospital operation, MGMC will report, using forms approved by the Department, the results of physician recruitment compared to recruitment goals.

**Condition B-2:** Upon the approval of this CON and annually until the third full fiscal year of the new hospital operation, MGMC will not modify its existing free care policy except in response to the impact of health care reform.

**Applicant Response:**
The applicant accepts this proposed condition.

**CONU Response:**
This condition will remain as part of the recommended approval.

**Condition C-1:** The applicant will demonstrate sufficient ED visits at both the Thayer and Augusta EDs to comply with the most recent guidelines published by the American College of Emergency Physicians or other guidelines acceptable to the Department. To support this demonstration, the applicant will provide quarterly utilization data for its emergency departments on forms approved by the Department. Failure by the applicant to demonstrate compliance with the guidelines for four consecutive quarters will trigger a subsequent review following approval pursuant to 22 MRSA 332(1)

**Applicant Response:**
“MGMC requests that it be allowed to submit each of the five reports annually for a period of three years and that all five reporting requirements commence at the completion of the new regional hospital and Thayer renovations.”

**CONU Response:**
Maine’s State Health Plan issued by the Governor’s Office of Health Policy and Finance with the Advisory Council On Health System Development has determined that non emergent ER use is a healthcare cost driver. In order to monitor the utilization of the applicant’s ER utilization, CONU will require quarterly utilization reports.

This condition will be revised as follows:

**Condition C-1, Revised:** The applicant will demonstrate sufficient ED visits at both the Thayer and Augusta EDs to comply with the most recent guidelines published by the American College of Emergency Physicians. To support this demonstration, the applicant will provide quarterly utilization data for its emergency departments on forms approved by the Department. Failure by the applicant to demonstrate compliance with the guidelines for 4 consecutive quarters will trigger a subsequent review following approval pursuant to 22 M.R.S.A. §332(1). These reports shall begin upon approval of this CON and quarterly thereafter until completion of the 3rd full fiscal year of the new hospital operation.
Condition C-2: The applicant shall reduce the med/surgical capacity by 34 beds to achieve the most recent range of efficiency recommended by the Health Care Advisory Board or other source acceptable to the Department and reduce the associated project costs.

Applicant Response:
“MGMC proposes some additional information for CONU's consideration. This information provides latitude in the event of unforeseen circumstances beyond the 2018 planning horizon of this project. In addition, this inpatient unit is a modest cost (1.4%) when taken as a percentage of total project cost on a project that has, by CONU's own determination, met the criteria for financial feasibility.”

“MGMC's August 20, 2010, submission to CONU performed several occupancy level sensitivity analyses under multiple scenarios. Those scenarios included variation from projected length of stay and volume impact of 100% success on physician recruitment, as well as the potential impact of volume increases resulting from healthcare reform, drawing from the Massachusetts experience. Those scenarios did not include the need for surge capacity in the event of a pandemic disease outbreak, nor did they project beyond the 2018 financial planning module for this project, when the impact of the aging population will continue to grow.”

“In recent discussions with MGMC, Fred Bentley, a contributor to the Advisory Board’s "2007 Hospital of the Future" document, from which the occupancy rates were referenced in the Preliminary Analysis, he confirmed that there are no industry standard occupancy rates for facilities with all private patient rooms. In addition, Mr. Bentley stated that the assumption in the "2007 Hospital of the Future" document was based on an "apples to apples" comparison for replacement towers and not on hospital consolidation/ replacement, as in this project. Mr. Bentley, when asked, stated that he is not aware of any other work on developing industry occupancy standards for all private rooms.”

“In addition to the sensitivity analysis, MGMC presented information showing that, if the beds had to be added later, the cost of adding them would be double that of constructing space for them today. The same result - doubling of the cost - occurs if even 10 beds have to be added back.”

“To accommodate the potentially costly unknowns and to allow this project to be implemented in the most prudent and cost effective manner, MGMC offers the following option for CONU’s consideration:

“Reduce the project by 10 med/surgical beds, retaining 24 med/surgical beds to preserve the scope of the building's HVAC infrastructure, and allow for expansion to 34 beds as necessary with minimum disruption to hospital operations and patients. The resulting project savings would be $1.166 million.”

“In the event that the CONU does not allow for these 24 beds, then the prudent business decision would be to allow MGMC to build shell space, again preserving infrastructure and flexibility in the face of the unknown impact of healthcare reform. The estimated project savings are $2,811
million. As currently designed, the unit is 19,524 square feet. Therefore, this option would allow a modest 3.2% of the total project square footage to respond to the unforeseen medical needs of the region in the most cost-effective, least disruptive manner possible while maintaining the integrity of the building design and flow."

"In presenting these options, MGMC assumes that it will retain its licensed capacity of 226 beds."

**CONU Response:**

It is the applicant’s responsibility to provide the information necessary to meet the CON criteria. In this case the applicant has not quantified the need for the 34 medical/surgical beds. Instead, the applicant argues that this expenditure is a small portion of the overall project and therefore is not reviewable. If the applicant is permitted to construct shell space to accommodate the 34 medical/surgical beds in the future, the result would be excess capacity in the present. The dilemma is that allowing 19,524 sq. ft. of shell space to be constructed prior to determination of need is counter to CON statute. CONU has determined that there are no public needs being met by this shell space. The proposal by the applicant to build the 10 medical/surgical beds instead of the 34 would require that sufficient shell space exist to eventually accommodate the 34 medical/surgical beds. CONU recommends that because no additional evidence has been presented that quantifies the need for the additional 34 medical/surgical beds or an additional 10 medical/surgical beds with shell space, the provision to eliminate 34 beds and associated space remains. CONU maintains that the proposed shell space is theoretical and speculative.

This condition will be revised as follows:

**Condition C-2, Revised:** The applicant shall submit a revised description of the project to eliminate 34 medical/surgical beds and any shell space resulting from this removal, thereby eliminating excess capacity. This condition does not impair the ability of the applicant to anticipate future expansion. To the extent practical, internal hospital systems (HVAC, etc) may be sized to support future expansion up to 34 beds.

**Condition C-3:** The applicant will demonstrate sufficient inpatient bed stays per year at the new Augusta campus to attain effective occupancy according to the most recent guidelines published by the Health Care Advisory Board. The applicant will provide annual utilization data for its inpatient beds on forms approved by the Department. Failure by the applicant to demonstrate the required number of bed stays per year, for two consecutive years, will trigger a subsequent review following approval pursuant to 22 M.R.S.A. §332(1).

**Applicant Response:**

"MGMC requests that it be allowed to submit each of the five reports annually for a period of three years and that all five reporting requirements commence at the completion of the new regional hospital and Thayer renovations."

**CONU Response:**

This condition has been revised as follows:
**Condition C-3, Revised:** The applicant will demonstrate sufficient inpatient bed stays per year at the new Augusta campus to attain effective occupancy according to the most recent guidelines published by the Health Care Advisory Board or other source acceptable to the Department. The applicant will provide annual utilization data for its inpatient beds on forms approved by the Department. Failure by the applicant to demonstrate a sufficient number of bed stays per year, for 2 consecutive years, will trigger a subsequent review following approval pursuant to 22 M.R.S.A. §332(1). These reports shall begin upon the opening of the new Augusta hospital and continue annually until the completion of the 3rd fiscal year of the new hospital operation.

**Condition C-4:** The applicant must provide historic and projected utilization to demonstrate the need for two additional ORs at the new Augusta hospital.

**Applicant Response:**

“Table 1 of the appendix provides 2009 and 2010 historical combined (Augusta and Waterville) surgical volumes and Augusta 2018 projected volumes. 2018 volumes reflect the Nobliss projections (CON Application at page 30 of Attachment 8) incorporating the impact of both demographic and technology trends. The Augusta 2018 surgical volume of 11,300 is net of the 2,915 procedures at the outpatient program on the Thayer campus in Waterville."

“To derive the number of ORs required to support the projected Augusta volume, the following calculations/assumptions were applied to the 11,300 procedure base: average daily volume of 45 patients, average total procedure time of 86 minutes per patient, non-emergency scheduled hours of operation 8 hours per day, 250 days per year, and 1,047 procedures per OP per year with a 75% efficiency/occupancy level. These assumptions result in the need for 10.8 operating rooms. The total procedure time was based on an average 66-minute procedure with a 20-minute turnaround time. The endoscopy rooms and cath lab volume are not included in this calculation. The calculations yield a need for 10.8 rooms, and the plan addresses no more than the 11 rooms – providing for 11 rooms (8 ORs, 2 OR/Specialty rooms, and 1 Cysto/Procedure room).”

**CONU Response:**

Table 1, reproduced from materials provided by the applicant in response to the preliminary analysis, provides 2009 and 2010 historical combined (Augusta and Waterville) surgical volumes and Augusta 2018 projected volumes. 2018 volumes reflect the Nobliss projections (originally included at page 30 of Attachment 8 of the application). The 11,300 surgical procedures do not include 2,915 procedures projected by the applicant to be performed at the Thayer campus in Waterville.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>IP</th>
<th>OP</th>
<th>TOTAL VOLUME</th>
<th>PROC/PT</th>
<th>PATIENTS</th>
<th>AVG PATIENTS PER DAY</th>
<th>AVG PROC TIME</th>
<th>HOURS/DAY</th>
<th>DAYS/YR</th>
<th>PROC/DAYS</th>
<th>@ 75% OCC</th>
<th>DRIVE RS REQ</th>
<th>DRIVERS REQ (ROUND)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>3,483</td>
<td>7,817</td>
<td>11,300</td>
<td>1.00</td>
<td>11,300</td>
<td>45</td>
<td>86</td>
<td>8</td>
<td>250</td>
<td>1,395</td>
<td>1,047</td>
<td>10.80</td>
<td>11</td>
</tr>
<tr>
<td>2009</td>
<td>2,783</td>
<td>8,366</td>
<td>11,104</td>
<td>1.00</td>
<td>11,104</td>
<td>44</td>
<td>86</td>
<td>8</td>
<td>250</td>
<td>1,395</td>
<td>1,047</td>
<td>10.61</td>
<td>11</td>
</tr>
<tr>
<td>2010</td>
<td>2,492</td>
<td>8,539</td>
<td>11,031</td>
<td>1.00</td>
<td>11,031</td>
<td>44</td>
<td>86</td>
<td>8</td>
<td>250</td>
<td>1,395</td>
<td>1,047</td>
<td>10.54</td>
<td>11</td>
</tr>
</tbody>
</table>

As discussed in the preliminary analysis, the applicant must demonstrate need in order to satisfy the proposed condition. Table 2, developed by CONU, based on information provided by the
applicant, incorporates the number of outpatient procedures expected at the Thayer Campus. The

The table illustrates that the projected need of ORs is 13.59 at both facilities (combined).

<table>
<thead>
<tr>
<th>Facility</th>
<th>IP</th>
<th>OP</th>
<th>TOTAL VOLUME</th>
<th>PROCT/PAT</th>
<th>PATIENTS</th>
<th>AVG PATIENTS PER DAY</th>
<th>AVG PROC TIME</th>
<th>HOURS/DAY</th>
<th>DAYS/YR</th>
<th>PROC/DRIVER/YR</th>
<th>@ 75% OCC.</th>
<th>DRIVERS REQ (RAW)</th>
<th>OR AVAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augusta</td>
<td>3,483</td>
<td>7,817</td>
<td>11,300</td>
<td>1.00</td>
<td>11,300</td>
<td>45</td>
<td>86</td>
<td>8</td>
<td>250</td>
<td>1,395</td>
<td>1,047</td>
<td>10.80</td>
<td>11</td>
</tr>
<tr>
<td>Watvl</td>
<td>0</td>
<td>2,915</td>
<td>2,915</td>
<td>1.00</td>
<td>2,915</td>
<td>12</td>
<td>86</td>
<td>8</td>
<td>250</td>
<td>1,395</td>
<td>1,047</td>
<td>2.79</td>
<td>9</td>
</tr>
<tr>
<td>Comb</td>
<td>3,483</td>
<td>10,732</td>
<td>14,215</td>
<td>1.00</td>
<td>14,215</td>
<td>57</td>
<td>86</td>
<td>8</td>
<td>250</td>
<td>1,395</td>
<td>1,047</td>
<td>13.59</td>
<td>20</td>
</tr>
</tbody>
</table>

The applicants plan would create an overabundance of existing OR capacity in the area. The applicants have shown that there is a present need through 2018 for 13.59 operating rooms, based upon projected volume. Accordingly, the CONU recommends that the applicant operate 14 operating rooms in 2018.

**Condition C-4, Revised:** The applicant will demonstrate sufficient operating room utilization based upon the Health Care Advisory Board guidelines or other sources acceptable to the Department. The applicant will provide annual operating room utilization data on forms approved by the Department. Failure by the applicant to demonstrate sufficient operating room utilization, for 2 consecutive years, will trigger a subsequent review following approval pursuant to 22 M.R.S.A. §332(1). These reports are required upon the opening of the new Augusta hospital and continue annually until completion of the 3rd full fiscal year of the new hospital operation.

**Condition C-5:** The applicant shall remove the new additional CT machine and associated costs from the proposed project.

**Applicant Response:**

"Table 2 of the appendix shows the current volume and projected volume for the CT machines requested in the CON application. As the application notes, the current and projected volumes demonstrate a need for 2.5 CT machines - 2 in Augusta to support both (i) the combined Waterville and Augusta inpatient volume and (ii) the emergency and scheduled outpatient volume, and 1 in Waterville to support the emergency and scheduled outpatient volume."

"The following volumes and other information demonstrate the need for the additional CT scanner and the risks of its loss":

**Patient Mix Augusta**

- "The new regional hospital will treat MGMC’s total inpatient volume (13,298 excluding newborns)."
- "The new regional hospital will diagnose and treat a combined ER volume of 41,630 visits. Evidence-based protocols currently dictate best practice for many acute diagnostic groups such as stroke where diagnosis within a prescribed time period is required for access to certain pharmacologic treatment protocols such as administration of IV thrombolytic therapy. For example, the stroke protocol requires a total time of 45 minutes from order to report completion for acute cases from the emergency room and inpatient floors."
• “The majority of interventional CT procedures will be conducted at the new regional hospital, including procedures such as radiofrequency ablation and abscess drainage and biopsies, which may require between 2 and 6 hours to perform. Without the availability of the second CT machine our ability to meet the requirements of evidence-based protocols would create unnecessary risk to our patients. As explained in the CON application, volume at the Harold Alfond Center for Cancer Care has grown by almost 20% since its opening. To support the work of that Cancer Center, MGMC currently performs 10-16 diagnostic biopsies per week using the CT equipment.”
• “To maintain patient access and continuity of care, the new regional hospital will continue to be the comprehensive outpatient service center for MGMC’s southern tier communities, providing scheduled outpatient CT testing.”

Patient Mix Waterville
• “The Thayer Provider-Based Off-Campus Hospital Emergency Department will diagnose and treat approximately 21,100 visits in 2018.”
• “To preserve patient access to comprehensive outpatient services, the Thayer Comprehensive Outpatient Center will provide an estimated 13,110 outpatient (combined ED treated and released and scheduled outpatient) tests/procedures per year (CON Application at page 43 of Attachment 8).”

Equipment Efficiency
“MGMC is using and will continue to use state-of-the-art, high-speed CT imaging equipment which will allow for optimal test throughput. The projections assume 13 hours of operation per day/300 days per year per machine. The days of operation incorporate assumptions of approximately 80 hours per year of scheduled maintenance downtime and 100 hours per year of unscheduled downtime. If only one CT scanner were approved for Augusta, that machine would be expected to run at 140% of normal CT volume, a rate that is not feasible.”

“If a single scanner were operated at that intensity, unscheduled down-time would likely increase dramatically. By way of illustration, if a scanner were operated merely at the level of expected downtime, inpatients and emergency room patients would not have access to CT in Augusta seven days per year.”

“Given the clear need for the requested CT scanners based upon current and projected volumes, and the time requirements of evidence-based protocols, MGMC requests that this condition be removed.”

CONU Response:
The applicant’s consultant Noblis projects 29,200 CT scans in 2018 (on file CONU). As presented in Table 3, the applicant asserts a need for 2.5 CT machines. CONU reviewed the information, provided by the applicant, and prepared Table 4, which presents 2018 volume by facility.
As indicated in Table 4, based on Noblis projections for 2018, Augusta procedures are projected at 16,091 and Waterville at 13,109. This results in a need in Augusta for 1.38 CT machines and 1.2 CT machines in Waterville.

The applicant also stated that interventional CT procedures may cause additional demand and that volume at the Harold Alfond Center for Cancer Care (HACCC) has grown by 20% since opening. Neither of these statements were quantified by the applicant. CONU recommends that if the demand for a CT machine is at the HACCC, the applicant may file a CON for a CT machine at that facility.

According to the applicant, the Augusta regional hospital will diagnose and treat an ED volume of 41,530 visits in 2018. Noblis, projected 43,665 ED visits for the new Augusta hospital. According to the applicant, ED visits are a source of imaging procedures. Information provided by the applicant in July 2010 reflected a shift in higher acuity ED visits from Augusta ED volume to Waterville ED Volume.

The difference between the projections contained in the application and the later July submission is due to a shift of 2,135 ED visits from Augusta to Waterville. This shift represents 5% of ED visits in Augusta and 10% of ED visits in Waterville (as revised by applicant 7/2010). The applicant did not revise their CT utilization calculations to account for this shift. It appears the number of ED visit related CT scans, as presented by the applicant, is overstated for Augusta and understated for Waterville.

The applicant submitted Table 3 to support the need for an additional CT machine. Table 3 is based upon data that does not indicate to which facility the volume relates. Table 4 presents data based upon the Noblis projections, by facility, and considers the impact of the shift from Augusta to Waterville. The applicant has not provided sufficient information to support the approval of an additional CT in Augusta at this time.

Table 3 - Provided by the Applicant, Submitted Oct. 12, 2010

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Procedures</th>
<th>Procedures PT</th>
<th>Patients</th>
<th>Average Procedures Per Day</th>
<th>Average Procedure Time</th>
<th>Hours of Continuous Operation per Day</th>
<th>Days of Continuous Operation per Year</th>
<th>Procedures per Machine</th>
<th>75% Efficiency</th>
<th>Number of CTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>29,200</td>
<td>1.2</td>
<td>24,333</td>
<td>97.3</td>
<td>15</td>
<td>13</td>
<td>300</td>
<td>15,600</td>
<td>11,700</td>
<td>2.5</td>
</tr>
<tr>
<td>2009</td>
<td>23,470</td>
<td>1.2</td>
<td>19,558</td>
<td>78.2</td>
<td>15</td>
<td>13</td>
<td>300</td>
<td>15,600</td>
<td>11,700</td>
<td>2.0</td>
</tr>
<tr>
<td>2010</td>
<td>22,079</td>
<td>1.2</td>
<td>18,399</td>
<td>73.6</td>
<td>15</td>
<td>13</td>
<td>300</td>
<td>15,600</td>
<td>11,700</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Table 4 was developed by CONU. It represents the volume of projected CT procedures based on the applicant’s originally submitted materials.

Table 4 - 2018 Projected CT utilization – By CONU, from Noblis data contained in the Dec. 21, 2009 Application

<table>
<thead>
<tr>
<th>Facility</th>
<th>Procedures</th>
<th>Procedures PT</th>
<th>Patients</th>
<th>Average Procedures Per Day</th>
<th>Procedures per Machine Year</th>
<th>75% Efficiency</th>
<th>Number of CTs</th>
<th>Expected Impact of ED Shift</th>
<th>Expected Change in CT Need</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augusta</td>
<td>16,091</td>
<td>1.2</td>
<td>13,409</td>
<td>53.6</td>
<td>15,600</td>
<td>11,700</td>
<td>1.38</td>
<td>Decrease # of procedures</td>
<td>Decrease in CT Need</td>
</tr>
<tr>
<td>Waterville</td>
<td>13,109</td>
<td>1.2</td>
<td>10,924</td>
<td>43.70</td>
<td>15,600</td>
<td>11,700</td>
<td>1.12</td>
<td>Increase # of procedures</td>
<td>Increase CT Need</td>
</tr>
<tr>
<td>Total</td>
<td>29,200</td>
<td>1.2</td>
<td>24,333</td>
<td>97.3</td>
<td>15,600</td>
<td>11,700</td>
<td>2.50</td>
<td>No Change</td>
<td>No Change</td>
</tr>
</tbody>
</table>
Based upon costs contained in the original application's equipment list, $1,965,971 will be removed for the additional CT machine.

**Condition C-5, Revised:** The applicant shall remove the new additional CT machine and associated costs of $1,965,971 from the proposed project. Upon approval of this CON and continuing annually until the end of the 3rd full fiscal year of the new hospital operation, the applicant will report, using forms approved by the Department, annual utilization data for its CT machines.

**Condition C-6:** Upon the approval of this CON and annually for a 3-year period following the opening of the Augusta facility, the applicant will provide data and statistics regarding the project's impact on improving public health indicators on forms approved by the Department.

**Applicant Response:**

"MGMC requests that it be allowed to submit each of the five reports annually for a period of three years and that all five reporting requirements commence at the completion of the new regional hospital and Thayer renovations."

**CONU Response:**

This condition has been revised as follows:

**Condition C-6, Revised:** Upon the opening of the Augusta facility and continuing annually until the end of the 3rd full fiscal year of the new hospital operation, the applicant shall provide data and statistics regarding the project's impact on improving public health indicators on forms approved by the department.

**Condition C-7:** The applicant shall not close the inpatient services at their Waterville Thayer Campus prior to the completion of the interstate interchange.

**Applicant Response:**

"These two conditions preclude MGMC from closing and consolidating services in Waterville until the new interstate interchange/exit is finally constructed. Although there is every reason to believe that completion of the new interstate exit will precede or coincide with MGMC's completion of its own construction, MGMC has no control over the interstate highway project."

"Under the requirements of these two conditions a delay in the completion of the interstate exit - which could result from any number of unforeseen circumstances - would result in significant harm to MGMC. First, should construction of the exit lag behind MGMC's construction by a few months, MGMC would bear an additional monthly operating cost in excess of $2.67 Million ($25 mil annual debt service without benefit and $7.1 million annual operational efficiency). Second, these conditions may pose a significant barrier to securing project financing, because lenders may be unsure of this risk given the dependence on external circumstances over which MGMC has no control."
"These two conditions result from an unduly narrow definition of "access" - one that limits consideration of patient access to the 2.5-3.8 mile difference the new exit will make. Through information presented in the CON application, by consolidating services, a State Health Plan objective, MGMC will be able to recruit the physicians required to improve access for potentially more than 1,000 residents in our region who otherwise may have traveled an hour, or more, for health care. Second, in addition to consolidating services at the new hospital, MGMC has committed to annual spending of $100,000 towards improving inter- and intra-public transportation in the region including services to both the Augusta and Waterville campuses. This is a service that does not exist at the present time and will enhance access for all our service area citizens."

"MGMC is aggressively pursuing the interstate exit project. However, that project, once completed, will represent an additional, substantial improvement to patient access, access that will also result from both the new centrally-located hospital and MGMC's annual commitment of $100,000 towards improving public transportation."

"Given the potential costs to MGMC, the risk to project financing, and the availability of improved patient access by other means, MGMC requests that these two conditions be removed."

CONU Response:
The applicant stated in the application, "MGMC recognizes that transportation may be an impediment to access." Although the applicant has plans to engage KV Cap to address certain aspects of the transportation issue, MGMC has not addressed what the long term plans would be if the Exit 113 redesign were not to occur.

The project was developed with this redesign being an integral part of the project. There is concern that the Exit 112 area will become gridlocked further impeding access. At the public hearing on January 20, 2010, Scott Bullock, President and CEO of MaineGeneral Health stated, "Part of the issue in that region right now is that that Civic Center Drive or Exit 112 is predicted to basically be a gridlock within about 10 or 15 years if there's no develop out there. So the DOT knows that they have to address that issue, the city knows that they have to address it and the federal highway knows they have to address it. The access ramp from 113 buys them quite a bit more time, relieves the congestion and also allows them an alternate route if they have to do any -- any modifications to exit 112."

This project is a regional plan to provide inpatient, outpatient and emergency care. As a consequence, all aspects of the project are interrelated. Direct access from the interstate is an integral part of this application. The creation of a “freestanding” ED in Waterville dependent upon transportation of ED patients that require inpatient care in an adjacent community creates a higher burden of demonstrated access. Additional considerations include the high number of individuals seeking emergency services that self-transport and the acuity level of patients transferring from the “freestanding” ED to the inpatient facility.

Access to care “means the ability to obtain in a timely manner needed personal health services to achieve the best possible health outcomes balanced by the health system’s resource limitations. Access to care may be influenced by many factors, including, without limitation, travel, distance,
waiting time, available resources, availability of a source of care and the health status of the population served.” 22 M.R.S.A. §328.

It is clear that patients, particularly those traveling from the north to the new hospital, would encounter travel difficulties if they were forced to navigate confusing back roads to a regional hospital that has no access to Interstate 95. If the hospital were built with no Interstate 95 access, travel would be impeded and distance of travel and travel time would be greater. In addition, Condition C of the Harold Alfond Foundation grant award letter (on file with CONU) makes “timely federal and state approval, funding, and construction of I-95 highway access to the new regional hospital site” a condition of receiving the $35 million grant.

In conclusion, Condition C-7 as stated in the Preliminary Analysis will be revised in order to ensure adequate access to quality patient care.

**Condition C-7, Revised:** This condition incorporates a condition included in the Harold Alfond Foundation grant award to MGMC dated May 3, 2010, namely that the applicant shall secure “timely federal and state approval, funding and construction of the I-95 highway access to the new regional hospital site, with MaineGeneral’s financial contribution to such access not to exceed Two Million Dollars.” Additionally, if the I-95 highway interchange at exit 113 is not completed 6 months prior to the opening of the “Provider-based Off-campus ED”, the applicant shall submit patient transportation and transfer protocols to assure patient safety and timely access to inpatient services, subject to Department approval.

**Condition D-1:** The applicant shall reduce the cost of the administrative and medical office space to an amount agreed upon by the Department.

**Applicant Response:**
“Both MGMC’s July 26, 2010 submission to CONU and its CON application reflected a total construction cost of $237,710,183. The July 26 submission contained a detailed discussion of the Marshall & Swift methodology, including Marshall & Swift's failure to account for $22,626,318 in construction costs in its calculations. To analyze the various occupancy types of the medical and administrative space and to create an "apples to apples" comparison to the Marshall & Swift methodology used by CONU, Table 3 breaks out the average cost per square foot by construction type”:

**D-1: Table 3**

<table>
<thead>
<tr>
<th>Type of Construction</th>
<th>Square Feet</th>
<th>Cost per SF</th>
<th>Total Construction Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Admin Floor</td>
<td>20,198</td>
<td>$176</td>
<td>$3,554,848</td>
</tr>
<tr>
<td>Cost of Out Patient Services</td>
<td>22,344</td>
<td>$192</td>
<td>$4,290,048</td>
</tr>
<tr>
<td>Cost of Physician Offices</td>
<td>20,369</td>
<td>$192</td>
<td>$3,910,848</td>
</tr>
<tr>
<td>Average for MOB</td>
<td>62,911</td>
<td>$187</td>
<td>$11,755,744</td>
</tr>
<tr>
<td>Hospital Grade Construction</td>
<td>554,829</td>
<td>$366</td>
<td>$203,328,121</td>
</tr>
</tbody>
</table>

“As Table 3 shows, the construction cost per square foot is $176 for administration, $192 for outpatient services, and $192 for physician office space, for a total average square foot cost of
$187 for the medical office building. This is well within the "unadjusted Marshall & Swift standard of $198.50" cited by CONU on page 12 of the Preliminary Analysis."

"Table 3 also allows comparisons to the hospital grade construction in the other areas of the new regional hospital building. Hospital grade construction averages $366 per square foot. It includes a mix of high cost surgical suite space and less costly inpatient space. As discussed in previous submissions, Marshall & Swift calculations estimate good hospital grade construction at $316.78 and excellent hospital grade construction at $414.04. Adjusting the $316.18 for the cost of excellent level HVAC and additional glazing to meet the LEED and evidence-based design goals of this project yields a cost per square foot of $367.58, which is comparable to the cost estimate of $366 per square foot for this project."

"In summary, total construction project cost- for the medical office building is $11,755,744. Total cost for the hospital grade construction is $203,328,121. Adding the medical office building space to the hospital grade construction space to the project costs not accounted for in the Marshall & Swift calculations of $22,626,318 brings the overall project construction cost to $237,710,183."

"Based on the above clarifying information, costs for MGMC administrative and office space are actually below, not above, the "unadjusted Marshall & Swift standard of $198.50" cited by CONU at page 12 of the Preliminary Analysis. MGMC requests that the project's costs for administrative and office space not be reduced."

CONU Response:
The applicant provided data that the estimated cost of construction for Physician Office Space, Administrative Space and Outpatient Services Space is within Marshall and Swift's cost estimates when using an excellent level HVAC system and additional glazing to meet the LEED and evidenced-based design goals of this project. The applicant provided Table 3 to show costs of construction for a Medical Office Building space (MOB).

The applicant proposed a $428,513,021 project including $80,186,583 in non-reviewable costs. The applicant supplied additional information that verified that the base costs of the project were in compliance with standards employed by CONU. As a result, an analysis entitled "Cost Analysis and Revaluation of Inflated Costs – MGMC Summer 2010" was developed by CONU. This analysis is contained in the record on file with CONU. This analysis resulted in the reduction of project costs by $36,134,200 based on these five adjustments:

- $23,209,639 reduction for excess inflation of project cost;
- $4,475,475 reduction from the savings identified by the applicant due to the 34 room reduction in med/surgical room capacity;
- $1,965,971 reduction from eliminating the purchase of the new CT machine;
- $1,373,454 reduction in contingency expenditures; and
- $5,109,661 reduction in capitalized debt service expenditures.
These reduced project expenditures result in approvable project costs and contingency figures as follows: Total project costs $392,278,821 with $61,616,991 in non CON reviewable expenditures. This results in approvable project costs of $317,408,920 with a contingency of $13,352,910. Total reviewable project costs are $330,761,830. These reductions result in a decrease of third-year operating costs of $3,566,042. The CIF debit proposed by the original application was $25,791,702. The CIF debit is reduced by $1,906,656.

CONU will allow the cost of new construction not to exceed $366/sq. ft. for hospital grade construction and $187/sq. ft. for all other construction as follows:

**Condition D-1, Revised:** The applicant shall limit the cost of the project as follows:
- Average of $366/sq. ft. for hospital grade construction.
- Average of $187/sq. ft. for all other construction.

**Condition E-1:** The consolidation of services between campuses proposed in this application will not occur until the highway exit ramp is completed.

**CONU Response:**
This condition has been consolidated with C-7.

**Condition F-1:** The applicant shall report baseline data and measurable improvements in quality outcomes as a result of this project annually for a period of three years from the opening of the new North Augusta Hospital.

**Applicant Response:**
"MGMC requests that it be allowed to submit each of the five reports annually for a period of three years and that all five reporting requirements commence at the completion of the new regional hospital and Thayer renovations."

**CONU Response:**
This condition has been revised as follows:

**Condition F-1, Revised:** Upon the opening of the Augusta facility and annually thereafter, until the end of the 3rd full fiscal year of the new hospital operation, the applicant will report baseline data and measurable improvements in quality outcomes as a result of this project.

**VI. CONCLUSION:**

The Preliminary Analysis by CONU staff dated September 23, 2010 concluded that this application, with conditions, satisfied CONU review criteria. For all the reasons set forth in the Preliminary Analysis and in the record, CONU concludes that the review criteria have been satisfied and recommends the approval of a CON with conditions.

**VII. RECOMMENDATION:**
The CONU recommends this proposal be **Approved with the following conditions:**

**Condition A-1:** The applicant must demonstrate compliance with the CMS hospital Conditions of Participation (CoPs) and provider-based regulations at 42 CFR 413.65 or other regulations in force prior to operating the Waterville Emergency Department as a “Provider-based Off-campus Emergency Department”.

**Condition A-2:** The applicant will attain Joint Commission accreditation for the “Provider-based Off-campus ED” in Waterville by the end of the 2nd full year of operation.

**Condition B-1, Revised:** Upon approval of this CON and annually thereafter, until the end of the 3rd full fiscal year of the new hospital operation, MGMC will report, using forms approved by the Department, the results of physician recruitment compared to recruitment goals.

**Condition B-2:** Upon the approval of this CON and annually until the 3rd full fiscal year of the new hospital operation, MGMC will not modify its existing free care policy except in response to the impact of health care reform.

**Condition C-1, Revised:** The applicant will demonstrate sufficient ED visits at both the Thayer and Augusta EDs to comply with the most recent guidelines published by the American College of Emergency Physicians. To support this demonstration, the applicant will provide quarterly utilization data for its emergency departments on forms approved by the Department. Failure by the applicant to demonstrate compliance with the guidelines for 4 consecutive quarters will trigger a subsequent review following approval pursuant to 22 M.R.S.A. §332(1). These reports shall begin upon approval of this CON and quarterly thereafter until completion of the 3rd full fiscal year of the new hospital operation.

**Condition C-2, Revised:** The applicant shall submit a revised description of the project to eliminate 34 medical/surgical beds and any shell space resulting from this removal, thereby eliminating excess capacity. This condition does not impair the ability of the applicant to anticipate future expansion. To the extent practical, internal hospital systems (HVAC, etc) may be sized to support future expansion.

**Condition C-3, Revised:** The applicant will demonstrate sufficient inpatient bed stays per year at the new Augusta campus to attain effective occupancy according to the most recent guidelines published by the Health Care Advisory Board or other source acceptable to the Department. The applicant will provide annual utilization data for its inpatient beds on forms approved by the Department. Failure by the applicant to demonstrate a sufficient number of bed stays per year, for 2 consecutive years, will trigger a subsequent review following approval pursuant to 22 M.R.S.A. §332(1). These reports shall begin upon the opening of the new Augusta hospital and continue annually until the completion of the 5th fiscal year of the new hospital operation.

**Condition C-4, Revised:** The applicant will demonstrate sufficient operating room utilization based upon the Health Care Advisory Board guidelines or other sources acceptable to the Department. The applicant will provide annual operating room utilization data on forms
approved by the Department. Failure by the applicant to demonstrate sufficient operating room utilization, for 2 consecutive years, will trigger a subsequent review following approval pursuant to 22 M.R.S.A. §332(1). These reports are required upon the opening of the new Augusta hospital and continue annually until completion of the 3rd full fiscal year of the new hospital operation.

**Condition C-5, Revised:** The applicant shall remove the new additional CT machine and associated costs of $1,965,971 from the proposed project. Upon approval of this CON and continuing annually until the end of 3rd full fiscal year of the new hospital operation, the applicant will report, using forms approved by the Department, annual utilization data for its CT machines.

**Condition C-6, Revised:** Upon the opening of the Augusta facility and continuing annually until the end of the 3rd full fiscal year of the new hospital operation, the applicant shall provide data and statistics regarding the project's impact on improving public health indicators on forms approved by the department.

**Condition C-7, Revised:** This condition incorporates a condition included in the Harold Alfond Foundation grant award to MGMC dated May 3, 2010, namely that the applicant shall secure “timely federal and state approval, funding and construction of the I-95 highway access to the new regional hospital site, with MaineGeneral's financial contribution to such access not to exceed Two Million Dollars.” Additionally, if the I-95 highway interchange at exit 113 is not completed 6 months prior to the opening of the “Provider-based Off-campus ED”, the applicant shall submit patient transportation and transfer protocols to assure patient safety and timely access to inpatient services, subject to Department approval.

**Condition D-1, Revised:** The applicant shall limit the cost of the project as follows:
- Average of $366/sq. ft. for hospital grade construction.
- Average of $187/sq. ft. for all other construction.

**Condition F-1, Revised:** Upon the opening of the Augusta facility and annually thereafter, until the end of the 3rd full fiscal year of the new hospital operation, the applicant will report baseline data and measurable improvements in quality outcomes as a result of this project.

CONU recommends approval of the following award amount:

<table>
<thead>
<tr>
<th>Capital Costs</th>
<th>Approved Capital Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>$317,408,920</td>
<td></td>
</tr>
<tr>
<td>$13,352,910</td>
<td>Contingency</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Incremental 3rd Year Costs</th>
<th>Approved Incremental Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>$38,160,958</td>
<td></td>
</tr>
</tbody>
</table>

Capital Investment Fund $23,885,046 Approved Capital Investment Fund