

**DIVISION OF HEALTH PLANNING
AND RESOURCE DEVELOPMENT
FEBRUARY 2008**

**CON REVIEW HG-R-1207-030
SINGING RIVER HOSPITAL d/b/a OCEAN SPRINGS HOSPITAL
ADDITION OF A BACKUP GENERATOR,
THREE CENTRIFUGAL CHILLERS, AND THE ELECTRICAL DISTRIBUTION
CAPITAL EXPENDITURE: \$6,814,017
LOCATION: OCEAN SPRINGS, JACKSON COUNTY, MISSISSIPPI**

STAFF ANALYSIS

I. PROJECT SUMMARY

A. Applicant Information

Singing River Hospital System d/b/a Ocean Springs Hospital (SRHS) is a short-term, general acute care, public hospital located in Ocean Springs, Jackson County, Mississippi. The hospital is owned by Jackson County and is presently governed by a nine-member Board of Trustees. The facility is certified to participate in the Medicare and Medicaid programs and is accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

The licensed bed complement of SRHS consists of 136 short-term, general acute care beds. The occupancy rates, average length of stay (ALOS), and Medicaid Utilization for the three most recent years are as follows:

Fiscal Year	Occupancy Rate (%)	ALOS (DAYS)	Medicaid Utilization Rate
2004	67.13	4.67	12.31
2005	72.27	4.81	12.06
2006	25.59	4.51	16.38

Source: Division of Health Facilities, Licensure and Certification, MSDH

B. Project Description

Singing River Hospital System d/b/a Ocean Springs Hospital requests Certificate of Need (CON) authority to purchase a backup generator, three new 750 ton centrifugal chillers, and main electrical switchgear for Ocean Springs Hospital in Ocean Springs, Mississippi. In association with the purchase of a generator and electrical switchgear, the following additional items will be purchased: underground electrical cabling, electrical transfer switches, breakers, chill water piping, and three chilled water pumps. To house the three centrifugal chillers and main electrical switchgear, the applicant plans to construct a 4,000 square foot building on a concrete foundation west of the existing boiler room. Other work will consist of constructing an underground electrical duct bank and installing manholes and cabling.

Singing River Hospital System requested a local power company to make suggestions on what type of equipment to purchase to ensure adequate power to the hospital. The list is as follows: one 2,250kw Standby' 277/480V Caterpillar Generator in sound attenuated enclosures with sub-base fuel tank, two advanced Paralleling Switchgear, one 10,000 gallon UL listed double wall above ground fuel storage tank, conductors, duct bank, instrumental transformers, and power/control wiring.

The applicant provided a letter from the architect to verify the estimated cost to complete the project. The applicant asserts it will cost \$1,703.50 per square foot to construct 4,000 square feet of space on the grounds of the hospital. Also, SRHS submitted an equipment list to describe items which will be purchased. The list indicates that the total fixed equipment costs will be \$4,939,017; however, SRHS does not anticipate incurring any non-fixed costs.

The applicant includes a capital expenditure summary, a three-year projected operating statement, and an Audited Financial Statement. Relating to this project, new staff will not be required nor will SRHS have any transfer agreements with other health care providers and entities. The facility received site approval from the Mississippi State Department of Health, Division of Health Facilities Licensure and Certification. Singing River Hospital System will use cash reserves and income from other operations to fund the project. The applicant estimates that the project will be completed by January 1, 2010.

II. TYPE OF REVIEW REQUIRED

The Mississippi State Department of Health reviews applications for construction and renovation in accordance with Section 41-7-191, subparagraph (1) (j) Mississippi Code 1972 Annotated, as amended, and duly adopted rules, procedures, plans, criteria, and standards of the Mississippi State Department of Health.

In accordance with Section 41-7-197(2) of the Mississippi Code of 1972 Annotated, as amended, any affected person may request a public hearing on this project within 20 days of publication of the staff analysis. The opportunity to request a hearing expires March 6, 2008.

III. CONFORMANCE WITH THE STATE HEALTH PLAN AND OTHER ADOPTED CRITERIA AND STANDARDS

A. State Health Plan (SHP)

The *FY 2007 Mississippi State Health Plan (FY 2007 MSHP)* contains criteria and standards which the applicant is required to meet before receiving CON authority for construction, renovation, and the acquisition of major medical equipment. This application is in compliance with applicable criteria and standards.

SHP Criterion 1- Need

Singing River Hospital System states that the existing generator, centrifugal chillers, and electrical switchgear are needed to keep the hospital operating when power is lost due to inclement weather conditions, natural disasters, repairs to the power lines by local electrical companies, etc. The applicant asserts that SRHS' existing generator is outdated and the chillers and electrical switchgear have passed their life expectancy of 30 years. The existing equipment items have supported the facility's physical plant needs for a number of years; however, the units are powered according the current size of the hospital.

The applicant lists past and outstanding CONs and foresees expanding the facility in the future to accommodate and serve the growing population of Jackson County and surrounding areas. With this in mind, old equipment will not continue to meet the physical plant demands of the hospital. As a result,

patient care could be compromised and the hospital may suffer huge liabilities if new, modern equipment items are not purchased and installed to restore power to the hospital in less than 10 seconds. In addition, with current events focusing on consumers cutting back on energy and gas consumption, the applicant believes that new, low energy chillers will save the hospital more money and in turn, the facility can divert more resources to improving patient care.

To be in line with SRHS' long-term plans, the applicant designated their electrical engineering firm to assess the hospital's current electrical system. The firm made recommendations and listed what areas needed to be addressed relating to the emergency utility backup system. The administration reviewed the advice of the firm and submitted their comments to SRHS' Board of Trustees. In turn, a resolution was adopted by the Board to apply for a CON in order to construct a building to house replacement equipment.

The applicant asserts that SRHS is not adding additional beds or services or constructing or renovating their emergency department; however, the facility will continue to participate in the state's trauma system as a Level III center. Thus, this project will not have an adverse impact on existing facilities in GHSA 7.

SHP Criterion 2 - Bed Service Transfer/Reallocation/Relocation

The applicant asserts that this project does not involve transfer/reallocation/relocation of beds to another facility within GHSA 7; thus, this criterion is not applicable to the proposed project.

SHP Criterion 3 - Charity/Indigent Care

Singing River Hospital System affirms that it will provide a "reasonable amount" of indigent/charity care as described in Chapter I of the *FY 2007 MSHP*.

SHP Criterion 4 - Cost of Proposed Project

The applicant states that the *2007 Means Construction Cost Data* publication lists the following cost ranges per square foot associated with the construction of a power plant building: low- \$710; median-\$940; and high-\$1,725. Using the *Means Construction Cost Data* book as a cost guide, the applicant states it will cost \$1,703.50 per square foot to construct 4,000 square feet of space (See Attachment II).

Based on the *2007 Means Construction Cost Data* publication, the applicant states that the proposed project is within the high construction cost range for projects involving the construction of power plants in the state of Mississippi. In addition, the applicant notes that the type of equipment to operate the facility effectively is expensive and as a result, the cost per square foot to build a new structure to house the equipment will be high. The applicant also points out that there will be no unused space in the new building to offset or lower the cost per square foot.

The applicant asserts that the total fixed equipment cost is \$4,939,017 and does not anticipate any non-fixed cost. Singing River Hospital System affirms that equipment costs do not exceed the median costs for equipment of similar quality by more than 15%.

SHP Criterion 5 - Floor Area and Space Requirements

Singing River Hospital System proposes to construct 4,000 square feet of space and lists minimum space requirements reported in three state and national publications. Based on these requirements, the applicant states that it complies with state and national norms for similar projects. Regarding the proposed project, the applicant does not list any architectural design restraints of the existing building, nor does SRHS list any "special considerations due to local conditions."

SHP Criterion 6 – Cost of Proposed Renovation or Expansion Project

This project is for the purchase of a back-up generator, three centrifugal chillers, and the electrical distribution and the construction of a 4,000 square foot power plant building to house the equipment. No renovation is required by the project.

B. General Review (GR) Criteria

Chapter 8 of the *Mississippi Certificate of Need Review Manual, 2007 Revision*, addresses general criteria by which all CON applications are reviewed. This application is in substantial compliance with general review criteria.

GR Criterion 2 - Long Range Plan

The applicant states that SRHS reviewed the long range development plans for the Ocean Springs Hospital and requested SRHS's electrical engineering firm to evaluate the electrical system of the facility. All plans were presented to the Board of Trustees. On December 12, 2007, the Board adopted a resolution to apply for a CON in order to improve the plant's operation and maintenance through erecting a new building and upgrading specific equipment items. The applicant asserts that the proposed project will allow the facility to operate 24 hours per day, seven days per week without a disruption in electrical services.

The proposed project will support the physical plant demands of the facility while SRHS will offer/deliver healthcare services to the patients/residents in GHSA 7. Thus, the project is in compliance with this criterion.

GR Criterion 3- Availability of Alternatives

The proposed project requests CON approval to purchase new generators, centrifugal chillers, and electrical switchgear. Singing River Hospital states that the only alternative to purchasing new equipment is to rent a number of generators to operate the hospital during a power outage.

The alternative could not be considered because it would present problems with locating a company that would rent a generator at the onset of an electrical outage and implementing a plan to install/prepare the generator for use.

Regarding the chillers and electrical switchgear, the applicant asserts there are no other options to obtaining the equipment. The applicant indicates that the current chillers and boilers are located in the same room with each other; however, new regulations require them to be housed in separate buildings. Lastly, SRHS' electrical switchgear can no longer be serviced due to the age of the equipment.

In this case, the applicant believes the initial proposal will be the most cost effective method to provide adequate backup power to the facility so the hospital can deliver uninterrupted medical services to its patients and the residents of Jackson County. Thus, the applicant submits that construction and equipment upgrades are the only cost effective options available to continue to offer quality patient care.

GR Criterion 4 - Economic Viability

The applicant provided a three-year projected operating statement and indicated that net revenue over a projected three year period will increase from \$122,683,639 to \$139,228,904. The statement shows that the net income will increase from \$6,486,560 to \$13,474,683 over the same three year period. The applicant affirms the proposed costs and charges associated with the project are comparable to similar construction and expansion projects in the state (see Attachment I). The applicant asserts that proposed charges are based on historical trends and will be determined by third party payor market rates.

Since the proposed project is for construction and upgrading equipment regarding SRHS' plant operations and maintenance, the applicant affirms that SRHS's projected levels of utilization and the levels of utilization as they relate to the need level are comparable to similar facilities in the in GHSA 7.

The applicant affirms that the project will be funded using SRHS' cash reserves and income from other operations. The Chief Financial Officer (CFO) submitted a letter stating that SRHS has the financial ability to undertake the proposed project. The CFO also indicates that the Three Year Operating Statement shows the amount of money that will be spent for the projected three years, will have a positive effect on present and future operating costs. Based on the projections listed in the three-year operating statement, all financial requirements will be met during the projected three years and after. Thus, this proposed project appears to be financially feasible.

GR Criterion 5 - Need for the Project

The applicant states that the existing electrical load of Ocean Springs Hospital is almost at the peak of its maximum operating level. The applicant contends that any prospective expansions may be postponed because existing generators, centrifugal chillers, and electrical switchgear may not be

able to supply backup power to the facility in case of a power failure. The applicant is hopeful that the equipment listed above will not fail in the near future; however, permanent breakdown of one or more of the units is inevitable. If a power failure occurs, the facility will be forced to rent the units above at a costly rate until new units are manufactured within three to four months. In this case, the equipment items in the plant are too small to handle the daily, physical operations of the facility. Thus, the applicant believes that the facility's emergency backup equipment must be upgraded to handle the capacity of the hospital in order to continue to serve the residents of GHSA 7 without incident.

Although the applicant is requesting to upgrade its plant equipment, SRHS states the facility will serve all patients in GHSA 7 without respect to race, color, age, sex, ethnicity, or ability to pay. Singing River Hospital System will operate 7 days per week, 24 hours per day.

The applicant asserts this project does not involve relocating the facility or service; thus, current and projected utilization of like facilities or services within GHSA 7 is not applicable to this project.

Since SRHS is not adding additional beds or services but only upgrading equipment, the applicant affirms this project will not have an adverse impact on existing facilities in GHSA 7.

One endorsement letter from a local political official was included in the CON application dated December 3, 2007. According to the applicant, the community official recognizes that the SRHS complies with all federal regulations regarding community service and supports SRHS's efforts to serve all patients in GHSA 7 regardless of race, creed, sex, or ability to pay.

GR Criterion 6 -Accessibility

As previously stated, SRHS will serve all patients in GHSA 7 without respect to race, color, age, sex, ethnicity, or ability to pay. The hospital will operate 7 days per week, 24 hours per day.

GR Criterion 7- Information Requirement

The applicant affirms that SRHS will record and maintain the information required by this criterion and shall make the data available to the Mississippi State Department of Health within fifteen (15) business days of request.

GR Criterion 8 - Relationship to Existing Health Care System

The applicant states that SRHS is only enhancing their facility and will continue to provide services to the community. Relating to this project, Singing River Hospital System does not have any transfer agreements with other health care providers and entities. Thus, the applicant asserts this project will not have an adverse impact on existing facilities in GHSA 7.

GR Criterion 9 - Availability of Resources

The applicant contends that SRHS maintains a full complement of professional and support staff to operate the facility. The applicant submitted a three year operating statement indicating it will cost \$44,548,999 to utilize an existing staff of 713.7 FTEs. No additional staffing will be required as a result of this project.

Singing River Hospital System states that the hospital has demonstrated a successful staffing history and asserts that sufficient physicians nursing, allied health, and support services are available to ensure proper implementation of this project.

The applicant did not identify nor consider other alternative uses of resources for the provision of other health services.

GR Criterion 10 - Relationship to Ancillary or Support Services

The applicant asserts that the project is not expected to have an adverse effect upon the delivery of ancillary or support services or the cost and charges associated with the services.

GR Criterion 11- Health Professional Training Programs

Since the proposed project involves construction and equipment upgrades, the clinical needs of health professional training programs will not be affected by the project. Thus, this criterion is not applicable to the proposed project and will not have an adverse effect upon the health professional training programs in GHSA 7.

GR Criterion 12- Access by Health Professional Schools

The project does not propose to establish or offer any type of health services which may require health professional schools in GHSA 7 to have access to the services for training purposes. Thus, the applicant asserts that this criterion is not applicable to the proposed project.

GR Criterion 14 - Construction Projects

The architect hired by the hospital submitted a cost estimate to show a proposed capital expenditure of \$6,814,017. The application includes a site approval letter from the Division of Health Facilities Licensure and Certification includes a schematic drawing to show how the area will look after the construction process has been completed.

In addition, the applicant states that the project complies with state and local building codes, zoning ordinances, and all appropriate regulatory authorities. The applicant has provided written assurance that SRHS will comply with state statutes and regulations for the protection of the environment.

Presently, chillers and boilers are housed in the same room with each other; however, new regulations require chillers and boilers to be housed in separate buildings. The applicant asserts that modernizations to the old building will not meet new standards; thus, there are no other options to the proposed project but to build a new structure to place the new equipment in.

Since hospital officials and consultants opted to complete construction and purchase new equipment, the hospital used the construction formula listed in the CON Manual to show how much the proposed project will cost per square foot. The applicant states that the cost to construct 4,000 square feet of space will be \$1,703.50 per square foot.

GR Criterion 16 - Quality of Care

The applicant asserts that SRHS is certified to participate in the Medicare and Medicaid programs, and is accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Also, SRHS participates in and has received awards/recognition from three other healthcare organizations for the hospital's delivery of healthcare services.

Singing River Hospital System affirms it has a history of providing quality care to the residents of Jackson County and will continue its efforts to deliver superior medical care.

IV. FINANCIAL FEASIBILITY

A. Capital Expenditure Summary

Cost Item	Projected Cost	% of Total
Construction Cost - New	\$600,000	8.80%
Construction Cost - Renovation		
Capital Improvements		
Total Fixed Equip Cost	4,939,017	72.45%
Total Non-Fixed Equip Cost		
Land Cost		
Site Prep Cost		
Fees	875,000	12.84%
Contingency Reserve	400,000	5.87%
Capitalized Interest		
Other Cost		
Total Proposed Expenditures	\$6,817,017	100% (99.96%)

Singing River Hospital System will construct a 4,000 square foot building to house all backup equipment associated with the proposed project. The cost to construct 4,000 square feet of space will be \$1,703.50 per square foot.

B. Method of Financing

Singing River Hospital System will use cash reserves and income from other operations to fund the project. Audited financial statements, along with a Financial Feasibility Statement from the Chief Financial Officer, demonstrate that SRHS has sufficient cash reserves and income to fund the project.

C. Effects on Operating Costs

The applicant projects gross patient revenue of \$432,173,585, \$466,747,471, and \$504,087,270 the first, second, and third year of operation, respectively, and expenses of \$119,236,821, \$123,874,280, and \$128,793,963 for the first three years of operation. Utilization, cost, and charges are included in the applicant's Three-Year Projected Operating Statement (See Attachment I).

D. Cost to Medicaid/Medicare

Patient Mix	Utilization Percentage	First Year Cost
Medicare	52.0%	\$ 62,003,146.92
Medicaid	07.0%	8,346,577.47
Other Payors	41.0%	48,887,096.61
Total	100.0%	\$ 119,236,821.00

V. RECOMMENDATION OF OTHER AFFECTED AGENCIES

The Division of Medicaid was provided a copy of this application for comment; however, no written comments were received from the Division.

VI. CONCLUSION AND RECOMMENDATION

This project is in substantial compliance with the criteria and standards for construction, renovation, and expansion projects as contained in the *2007 Mississippi State Health Plan*; Chapter 8 of the *Mississippi Certificate of Need Review Manual, Revised 2007*; and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

The Division of Health Planning and Resource Development recommends approval of this application submitted by Singing River Hospital System (SRHS).

**ATTACHMENT I
 SINGING RIVER HOSPITAL SYSTEM
 THREE YEAR OPERATING STATEMENT
 (WITH PROJECT)**

	First Year	Second Year	Third Year
Revenue			
Inpatient Care Revenue	\$ 253,612,071	\$ 273,901,036	\$ 295,813,120
Outpatient Care Revenue	<u>178,561,514</u>	<u>192,846,435</u>	<u>208,274,150</u>
Gross Patient Care Revenue	\$ 432,173,585	\$ 466,747,471	\$ 504,087,270
Charity Care	\$ 13,665,480	\$ 14,712,880	\$ 16,110,264
Deductions from Revenue	<u>295,824,466</u>	<u>318,498,139</u>	<u>348,748,102</u>
Net Patient Care Revenue	\$ 122,683,639	\$ 133,536,452	\$ 139,228,904
Other Operating Revenue	<u>3,039,742</u>	<u>3,039,742</u>	<u>3,039,742</u>
Total Operating Revenue	\$ 125,723,381	\$ 136,576,194	\$ 142,268,646
Operating Expense			
Salaries	\$ 44,548,999	\$ 46,330,959	\$ 48,184,197
Benefits	13,001,423	13,435,978	13,973,417
Supplies	25,386,499	26,655,824	27,988,615
Services	5,587,500	5,755,125	5,927,779
Lease	1,553,832	1,600,447	1,648,460
Depreciation	7,220,729	7,563,722	7,923,865
Interest	796,877	757,034	719,182
Other	21,140,962	21,775,191	22,428,447
Total Operating Expense	\$ 119,236,821	\$ 123,874,280	\$ 128,793,963*
Net Operating Income (Loss)	<u>\$ 6,486,560</u>	<u>\$ 12,701,914</u>	<u>\$ 13,474,683 *</u>
Inpatient days	32,531	33,507	34,512
Outpatient days	0	0	0
Procedures	\$ 551,145	\$ 567,679	\$ 584,710
Charge per outpatient day	0	0	0
Charge per inpatient day	\$ 7,796	\$ 8,174	\$ 8,571
Charge per procedure	784	822	862
Cost per inpatient day	3,665	3,697	3,732
Cost per outpatient day	0	0	0
Cost per procedure	216	218	220

Note: * Applicant's totals are off by \$1 due to rounding.

**ATTACHMENT II
 SINGING RIVER HOSPITAL SYSTEM
 COMPUTATION OF CONSTRUCTION AND RENOVATION COST**

	Total	New Construction	Renovation
<u>Cost Component</u>			
A New Construction Cost	\$600,000	\$600,000	
B Renovation Cost			\$0
C Total Fixed Equipment Cost	\$4,939,017	\$4,939,017	
Total Non-Fixed Equipment Cost	\$0	\$0	
Capital Improvement	\$0	\$0	
Land Cost	\$0	\$0	
D Site Preparation Cost		\$0	
E <i>Fees (Architectural, Consultant, etc.)</i>	\$875,000	\$875,000	\$0
F <i>Contingency Reserve</i>	\$400,000	\$400,000	\$0
G <i>Capitalized Interest</i>		\$0	\$0
Total Proposed Capital Expenditure	\$6,814,017	\$6,814,017	\$0
- Square Footage	4,000	4,000	0
- <i>Allocation Percent</i>		100.00%	0.00%
Costs Less Land, Non-Fixed Eqt. & Cap. Improvement	\$6,814,017	\$6,814,017	\$0
Cost Per Square Foot	\$1,703.50	\$1,703.50	\$0.00