

26 May 2008

Mr. John McGuire,
Bassett Consulting Engineers
Level 9, 8 Exhibition Street
Melbourne, VIC, Australia 3000

Re: Royal Melbourne Hospital

Dear John:

We are pleased to submit our proposal to provide engineering services for a master plan study of the central heating, cooling, and cogeneration system for the referenced project.

A. Background and Project Objectives

The Royal Melbourne Hospital is over 50 years old. The Hospital is currently under planning for total renovation which will include demolishing existing buildings and constructing new buildings with the total area of approximately 240,000 square meters. Currently heating and power is supplied by a privately owned cogeneration plant and cooling is provided by two chiller plants in the Hospital.

Bassett intends to retain WM Group Engineers to perform a master plan study of a combined heat and power plant that will centrally supply heating, cooling, and power to the Hospital.

B. Scope of Work

As the Royal Melbourne Hospital is an existing facility, historical operating data of the existing cogeneration and chiller plants would provide valuable information of the load characteristics of the Hospital. If such data are available, we will extrapolate the data to develop heating/cooling/power load profiles for the Hospital after renovation. If the data are not available, Bassett will provide us with the hour-by-hour heating/cooling/power load estimates. Bassett will also provide the following information:

- Plans, studies, and other documentation related to the new Hospital
- Rates schedules for electricity, natural gas, #2 fuel oil and water

WM Group will perform the master plan study and prepare a report. The study approach is as follows:

- Establish system parameters and basis of design
- Obtain typical annual hourly weather data for Melbourne
- Determine system configuration options for detail analysis for Heating and Cooling system with and without cogeneration
- Produce a computer model to evaluate the heating, cooling, and power requirements and costs of the Royal Melbourne Hospital on an hourly basis
- Technologies to be considered for use to meet the utility requirements include the following:
 - Gas turbine generators
 - Reciprocating engine generators
 - Natural gas fuel cells
 - Microturbines and distributed generation
 - Condensing steam turbine generators
 - Backpressure steam turbine generators
 - Steam turbine centrifugal chillers
 - Double-effect absorption chillers
 - Electric centrifugal chillers
 - Watertube and firetube boilers
- Steam vs. hot water systems
- Perform a screening analysis for the suitability of the different technologies to specific conditions relevant to the site
- Evaluate suitable technologies to determine appropriate system sizing
- Determine system redundancy requirements and firm capacity for the renovated Hospital
- Model each suitable option with computer software on an hourly basis to compare operating costs, efficiency, and electric and thermal load factors
- Generate annual operating costs for each option including cost of energy, maintenance, service, and manpower
- Prepare schematic diagrams and equipment layouts for each option.
- Determine an approximate first cost for each option with the assistance from Bassett
- Establish equipment lifecycles and replacement costs for each component
- Perform a 30-year lifecycle economic analysis of each option factoring first cost, operating cost, component replacement costs, inflation, discount rate, and other economic factors
- Evaluate subjective issues of each option
- Provide a recommended equipment configuration for the utility plant based on physical, economic, and subjective issues
- Provide a written report and PowerPoint presentation summarizing the findings

We will provide an on-site visit for duration of one week to attend meetings, and make presentation of the study results to the concerned parties.

C. Compensation

Our engineering fees for this project will be on a lump sum of **US\$85,000**. The fee includes an allowance for project related travel and living expenses, document reproduction, and normal out of pocket expenses incurred on behalf of the project.

We appreciate this opportunity to offer our services to you. If you have any questions with regard to the above, please do not hesitate to contact us.

Very truly yours,

WM GROUP ENGINEERS, P.C.



Douglas Wen, P.E.
Vice President