

# Breadth Topics

## Structural/Architectural

The inclusion of a thermal storage tank and possibly an additional hot water heater will add to the dead load of the building. Both components, in addition to smaller, miscellaneous equipment such as pumps, will add significant weight. This will require an analysis of the hospital's structural support. As of now, both the thermal storage tank and hot water heater are proposed to be located in the penthouse or on the sixth floor roof. Depending on the required size of the equipment (following the mechanical redesign), additional space may be needed.

## Electrical

With the addition of new equipment, there is requirement for additional power as the electrical load will change. Possible changes to the main distribution system and panelboards need to be analyzed. Although emergency power for the vertical expansion is already available from a new generator installed on the project, the system will need to be reworked in order to supply the new equipment.