

## Gifford Medical Center – Energy Action Plan 2014 – UPDATE 2018

### 2014 Action Plan

#### 1. Optimization of building HVAC Systems:

- A. Balancing of air side HVAC systems to ensure proper distribution and pressure.

*Work was completed by April 2014. Since completing work GMC has annual balancing done to verify distribution and pressures.*

- B. Conversion of MOB constant-volume systems to variable air volume.

*Work was completed by September 2014. Scheduling of occupied/un-occupied settings has allowed the space to use less energy in off hours.*

- C. Study operation of run around heat recovery to determine upgrade potential.

*Work was completed by June 2016. Renovations took place within the Inpatient and Birthing centers which incorporated new chilled water cooling units, and utilization of existing baseboard heating systems.*

#### 2. Optimize lighting, IT systems, and plug loads across campus:

- A. Explore lighting audit for targeted applications across hospital.

*Lighting design program was initiated by hospital November 2017 with Efficiency Vermont. GMC plans to develop cost estimates spring/summer 2018 for implementations October 2018 within the main hospital.*

- B. Pilot use of plug-load controllers to determine deployment opportunities.

*IT loads within previous server room were metered for accurate energy usage. New server room was constructed based on accurate loads and put into service at the end of September 2017.*

#### 3. Upgrade of chilled water plant systems:

- A. Purchase and install new chiller.

*Installation of 90 Ton Chiller was completed by September 2014.*

- B. Installation of eGauge power sub-metering to monitor chilled water systems.

*Work was not performed.*

#### 4. Analyze use of waste heat to supplement hot water loads:

- A. Flow monitoring of domestic hot water loads.

*The domestic hot water systems were reviewed by engineering firm to identify flows and zones. Several deficiencies were found and corrected.*

5. Build operations and maintenance practices to reduce energy use:

A. Build a cross-departmental Energy Team and kick off regular meetings.

*Gifford Medical Center established an Energy Committee host the first meeting in October 2017. The committee meets monthly.*

B. Hold an informational seminar for hospital employees.

*Facilities shares Energy information to staff through an internal monthly news publication, as well as a bi-weekly all staff memo.*

C. Establish policies to reduce energy consumption for lighting systems.

*Gifford Medical Center has established Energy Star purchasing within the facilities department. All future lighting installations are LED.*

D. Verify Operational control strategies and scheduling for HVAC systems.

*Facilities have made several updates to the HVAC DDC programing with regards to scheduling and sequence of operations. GMC is continuously commissioning all mechanical systems.*

E. Establish purchasing specifications for energy efficient equipment.

*Gifford Medical Center has established Energy Star purchasing within the facilities department.*