



Northeastern Vermont Regional Hospital - Energy Action Plan (2014-15)

Efficiency Vermont

Purpose: To reduce operational cost savings, improve building comfort & performance, improve patient experience, be an effective steward of resources, and reduce our environmental impact.

Current: Annual energy costs (baseline): \$ 1,025,512

Annual energy use per square-foot: 256 kbtu

Goals: Reduce energy costs by 19%: \$ 194,847.33

Reduce energy use per sq-ft by 19%: 207 kbtu

Signed: *Michael Leonard*
Michael Leonard, Account Manager

Action Plan

Category	Project Costs	Annual Savings
Operational		
Retro-commission of steam system & chilled water plant	\$ 75,000	\$ 13,000
Reduce plug loads through controls and increased awareness targeting printers, copiers, fax machines, coffee makers, etc.	\$ 2,000	\$ 6,900
Window		
Install aluminum frame double pane windows	\$115,000	\$5,500
Roof		
Insulate built-up roof surface and re-roof	\$ 221,000	\$ 16,000
Lights		
Decrease lighting utilization by scheduling controls, raising awareness, installing placards, and assigning responsibility.	\$ 2,000	\$ 1,000
Upgrade 2-watt LED exit signs with new 0.2-watt electroluminescent exit signs.	\$1,500	\$400
Cooling		
Increase cooling set point to 74 degrees. This set point is in accordance with ASHRAE Standard 55-2004 "Thermal Conditions for Human Occupancy"	\$ 5,000	\$ 24,000
Wall		
Add blown-in wall insulation	\$ 63,000	\$ 900
Totals:	\$ 484,500	\$ 67,700

Completed Efforts

Project Description	Date	Proj. Costs	Incentives	Annual Savings	kWh Reduce	MMBtu
Physical Therapy Associates	May04	\$ 870	\$ 690	\$ 289	3,021	(4)
NVRH - Air Handling Unit	Jul04	\$ 4,231	\$ 2,135	\$ 11,931	114,267	-
NVRH - Pumps	Aug05	\$ 776	\$ 636	\$ 287	2,550	-
Norris Cotton Cancer Center - HVAC	Sep05	\$ 33,952	\$ 13,092	\$ 16,382	134,489	100
NVRH - Addition	Dec05	\$ 22,904	\$ 8,037	\$ 9,449	93,354	(101)
NVRH - Medical Arts - Lighting	Nov06	\$ 2,420	\$ 2,030	\$ 515	4,975	(6)
NVRH - Lighting and Motors	Mar07	\$ 576	\$ 494	\$ 532	5,012	(2)
NVRH - Air Cooled Chiller	Mar08	\$ 25,589	\$ 1,700	\$ 2,414	26,101	-
NVRH - Expansion	Dec09	\$ 228,039	\$ 23,000	\$ 47,315	431,168	(33)
NVRH - Lighting	Jul11	\$ 13,575	\$ 3,540	\$ 2,343	20,134	(8)
NVRH - 55 Sherman Dr - Rx Lighting 1	Aug11	\$ 2,252	\$ 2,480	\$ 898	7,693	(8)
NVRH - Rx Lighting 2	Oct11	\$ 875	\$ 6,040	\$ 1,586	12,953	(1)
Corner Medical - Rx Lighting 1	Oct11	\$ 1,000	\$ 1,800	\$ 445	3,587	-
NVR Medical Center - Rx Lighting 3	Feb12	\$ 1,000	\$ 800	\$ 207	1,572	-
NVRH - Cooling Tower Fan vfd's-416271	May12	\$ 5,172	\$ 375	\$ 2,025	15,769	-
NVRH - Rx Lighting 4	Jan13	\$ 7,900	\$ 4,705	\$ 2,370	17,439	(2)
NVRH - Rx Lighting 5	Mar14	\$ 1,695	\$ 904	\$ 497	4,033	(3)
NVRH - Rx Lighting 6	Mar14	\$ 6,615	\$ 4,475	\$ 2,208	15,611	(1)
NVRH - Rx Lighting 7	Mar14	\$ 7,770	\$ 4,660	\$ 1,526	11,558	(5)
Totals:		\$ 367,211	\$ 81,593	\$ 103,219	925,286	(74)

Total Energy Use per Square-Foot

