



SHOWCASE PROJECT: NAVAL STATION NEWPORT MELVILLE HOUSING

SOLUTION OVERVIEW

This property is part of a broader project to reduce energy use in 98 military-owned properties covering nearly 150,000 square feet at Naval Station (NAVSTA) Newport. The majority of the homes were built in 1961 and received some aesthetic upgrades in 2002 and 2007, but were largely energy inefficient. Since Melville is a military housing program, increasing rents to offset energy efficiency upgrades was not a possibility so identifying a “no cost” investment opportunity was imperative.

The 98 homes from the Melville community in Newport were placed under ownership and management of Balfour Beatty Communities in 2004 by the US Navy.

SECTOR TYPE

Multifamily

LOCATION

Newport County, Rhode Island

PROJECT SIZE

2,600 Square Feet

FINANCIAL OVERVIEW

Project Cost \$3,440

SOLUTIONS

Partnering with the local utility, National Grid, a goal was established to identify a suite of efficiency measures that would yield an appreciable amount of energy savings, but be supported almost entirely by utility incentive dollars. National Grid audited several buildings to find the most cost effective and least intrusive efficiency measures. The measures included LED and compact fluorescent lighting upgrades, envelope sealing, programmable thermostats, domestic hot water water-saving devices, and smart power strips.

While the efficiency improvements are expected to result in a 13% decrease in energy use, they are also expected to save~ \$24,000 a year, or \$235 per home per year. While the program’s overall cost was estimated to be over \$165,000, the partnership with National Grid reduced the cost to Balfour to less than \$1,000.

Since the homes are located on base and occupied by military residents and their families, the external contractors hired to execute the work had to be approved by the Navy and occupants in the

homes notified in advance. The project upgrades were carried out over a 4 month period of time in mid-2013 with minimal disruptions to the daily lives of the residents of the community.

OTHER BENEFITS

At the Melville properties a combustion safety test was also provided for gas-fired space-heating and domestic hot water devices on all homes. Additionally, Balfour Beatty Communities now regularly checks with the local utility providers across their entire portfolio of holdings to ensure that all available rebates are explored and reviewed.

Annual Energy Use

(Source EUI)

Baseline(June
2013-May 2014)

130 kBtu/sq. ft.

Expected(Summer
2015)

113 kBtu/sq. ft.

Actual()

Coming soon

Energy Savings

13%

Annual Energy Cost

Baseline(June
2013-May 2014)

\$3,230

Expected(Summer
2015)

\$2,760

Actual()

Coming soon

Cost Savings

\$24,000



Newport's Melville community duplex