This Month's Event

Tuesday, September 9, 2008

LEDs—A Bright Idea for Cold Storage Applications

Speaker: Steven Parker & Myra Parker

Description:

Food service and food sales facilities are very energy-intensive facilities. In commissaries, the largest energy consumer is usually the refrigeration system, which can account for half of the total annual energy consumption. The second largest energy consumer is usually the lighting system. In restaurants, the kitchen is usually the largest energy consumer followed by the lighting and refrigeration systems. Conventional lighting and refrigeration systems typically work against each other. Low temperatures typically reduce the efficacy of lighting systems. The lights generate heat, and inefficient lights generate more heat, which the refrigeration system needs to remove. Because heat is the enemy, cold-storage areas are sometimes poorly illuminated. Improving the efficacy of the lighting system will have a positive impact on the refrigeration system.

Light-emitting diodes (LEDs), a type of solid-state lighting, are an emerging technology that is proving to be ready for certain commercial applications. While commercially-available and reliable products are still limited, LEDs are particularly suited for cold-storage applications—cold climates increase the efficacy of LEDs. Two case studies will be presented illustrating the potential of LEDs in cold-storage applications.

Steven Parker, a chief engineer with the Pacific Northwest National Laboratory, will present the results of a demonstration involving the installation of LEDs in a large freezer storage room at the Fort George G. Meade Commissary. Following, Myra Parker, a regional training manager for Red Lobster, will discuss and present the installation of LEDs in the Kennewick Red Lobster's walk-in freezer storage. The second presentation will include an owner/operators perspective on the benefits of LEDs in this application. Both applications are documented as a result of metered demonstrations performed by the Pacific Northwest National Laboratory.

About Steven Parker:

Steven Parker is a chief engineer at the Pacific Northwest National Laboratory, where he supports research activities in the assessment and deployment of new and emerging energy-efficient technologies. Steven is a Past President of the Association of Energy Engineers and still participates on several technical and policy boards. Involved in energy management since 1981, Steven has conducted several hundred energy surveys instructed over 50 energy-efficiency workshops, in addition to speaking at numerous conferences. Steven Parker has authored over 100 technical reports, articles, and book chapters on energy efficiency and energy cost reduction

About Myra Parker:

Myra Parker has been with Red Lobster for almost 15 years. She is the Service Manager here at Kennewick's Red Lobster. Myra has a strong passion for Red Lobster's commitment to fresh delicious seafood and friendly attentive service, which has lead to her role as the Regional Training Manager the past 3 years. She is a mentor, leader and trainer to all Red Lobster managers in Washington and Northern Idaho.

Location: Red Lobster
1120 N Columbia Center Blvd
Kennewick, WA 99336

When: 12:00 noon

Cost: $20.00 Lunch and Program

RSVP: Mark Simon at (509) 438-9561 or e-mail at msimon@energy-northwest.com
Please RSVP by September 8, 2008 if you plan to attend.

Program Calendar (2008–2009)

September 9, 2008: *LEDs—A Bright Idea for Cold Storage Applications, Steven Parker & Myra Parker*

October 14, 2007: *Practical Application of ASHRAE 62.1, Christopher Mueller, ASHRAE DL*

November 11, 2007: *Waterside Economizers, TBD*

December 9, 2007: *ASHRAE Headquarters Renovation, Ron Jarnigan*

January 13, 2008: *Energy Efficiency, Traci Hannigan*

February ??, 2008: *Engineers Week Banquet*

March 17, 2008: *ASHRAE President, Phil Harrison*

April 14, 2008: *Variable Refrigerant Flow, Greg Nelson*

May 12, 2008: *TBD*

June ??, 2008: *Mid-Columbia ASHRAE Golf Tournament to benefit ASHRAE/Research.*