# Retrofit Rebate Program Case Study



# City of Albuquerque Convention Center Savings



The lobby in the Convention Center's East Complex. State-of-the-art LEDs and daylighting make the space more energy-efficient and attractive for visitors.

### **Lighting Control System**

The new programmable lighting control system in the Albuquerque Convention Center's East Complex has reduced annual energy use by an estimated 940,000 kWh. Lighting quality has also been enhanced by replacing outdated lights with state-of-the-art LED fixtures. Visitors appreciate the new attractive, well-lit space.

PNM rebates of \$56,476 helped offset costs of the lighting system upgrade project, which was part of Phase I of the Convention Center's \$20 million renovation. The project was completed in June 2013.

#### **Project Financials**

<b>Project Cost:</b> \$1,112,894
<b>PNM Rebate:</b> \$56,476
Annual Energy Savings (kWh): 941,267
<b>Annual Utility Cost Savings:</b> \$94,438
Annual Water Savings (Gallons): 108,590
Annual CO <sub>2</sub> Savings (Metric tons): 664
Project Completed: June 2013

# More Lighting Improvements

The Convention Center has completed more lighting upgrades as part of its renovation plans. A new lighting system was installed in the West Complex, similar to the system in the East Complex. Changes in the Convention Center's parking garage include new energy-efficient bi-level lighting. Bi-level lighting detects movement, so lights are dimmed to 50 percent when the lot is empty.

# **Positive Impact:**

The Albuquerque Energy Council (AEC) recognized the East Complex lighting project for its positive impact on the business community for energy conservation and business asset improvement.











#### **Energy Efficiency Improvements Implemented**

Highlights of the East Complex lighting control system design:

- Replaced all T12 linear fluorescent fixtures and halogen, metal halide, incandescent and CFL lamps with a variety of LEDs.
- Added occupancy sensors in low usage areas and public walkways.
- Installed a Lutron programmable lighting control system.
- Enhanced task-tuning lighting levels for maximum energy conservation.
- Incorporated daylighting in the atrium, sky bridge and walkway leading to the convention Center parking structure.

# Additional benefits:

• Reduced lighting maintenance improves operational efficiency.

# **Annual Energy Savings**

The new advanced lighting control system in the East Complex will provide estimated annual energy savings of 941,267 kWh for the Convention Center. The City also reports that new 87 percent-efficiency natural gas boilers installed in 2012 will save 5,877 MMBTU annually.



#### **Customer Raves**

"The combination of LED lighting and digital controls allows the Convention Center to control light levels for various event requirements," said Tony Gurulé, Sustainability Program Manager, City of Albuquerque. "In addition to conserving energy through scheduled lighting for events, daylight harvesting is incorporated into the lighting system wherever natural lighting is available. People are finding the upgrades in the East Complex very attractive."

"The new lighting has been a remarkable enhancement to our facility, improving our efficiency and the functionality of our meeting spaces," said Jose Garcia, General Manager, Convention Center. "It has become a selling point for our center and we have seen an increase in the use of the facility in recent months."

#### Why improve energy efficiency?

- 1 Cuts your operating costs and improves profitability.
- Reduces maintenance demands.
- Distinguishes your business as being eco-friendly or "green."
- Allows you to use energy savings to finance business growth.
- You get money from PNM when you do it.

To learn more about the PNM Retrofit Rebate Program, please visit www.PNMenergyefficiency.com

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