



Security Jewelers

PROFILE

Multifaceted Lighting Project Brightens Jewelry Store

The brilliant diamonds, rubies and emeralds on display at Security Jewelers in Duluth are cut and set to reflect light beautifully. They sparkle and shine in their display cases, catching the eye of anyone who enters the store.

Light is very important at Security Jewelers, from the window displays and showroom floor to the goldsmithing and diamond setting shop in back. Customers might be surprised to learn that all of the lighting in the store is ENERGY STAR®-qualified for energy savings and high performance.

Minnesota Power helped persuade Security Jewelers to switch from standard incandescent to energy-saving compact fluorescent light (CFL) and T8 fluorescent bulbs and fixtures. Owners weighed the decision carefully before investing in the project.

“At first, I worried whether we could get the effect we wanted,” said Jack Seiler, a partner in Security Jewelers. “Proper lighting is crucial in our business. The right effect is bright, inviting and flattering, but true to color and true to life.”

“Customers and employees appreciate the new lighting, and the numbers speak for themselves. For businesses looking to save energy and trim costs, this is a great way to do it.”

Jack Seiler, partner in Security Jewelers

Minnesota Power energy consultant Tanuj Gulati, of Matt Haley & Associates, worked with Security Jewelers, testing different styles and colors of energy-efficient bulbs throughout the store. He measured light output, compared color rendering and calculated projected costs, savings and rebates.

Seiler and his partners were pleased to learn that CFL bulbs could produce different ambient lighting in different places. For example, they wanted softer, warmer light in the home gift section than by the jewelry counters or back in the shop.



(Left to right) Exterior display windows are illuminated with energy-efficient bulbs; Minnesota Power Energy Consultant Tanuj Gulati with Jack Seiler, a partner in Security Jewelers; T8 fluorescent lighting in the goldsmithing and diamond setting shop is bright enough for precision work; CFL floodlights create a warm, homelike atmosphere in the gift section.

Learn more about **POWER Grant**.

Minnesota Power's Conservation Improvement Program
218-722-5642 or toll-free at 800-228-4966, ext. 2909

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“Energizing Our Region” through Conservation Improvement

Minnesota Power’s Conservation Improvement Program (CIP) works with local leaders, businesses, community groups, other energy providers and government entities to help customers reap the economic and environmental benefits of sustainable energy savings. Minnesota Power and its partners accomplish this through research, education, evaluation and direct impact initiatives.

Find out how *POWER Grant* can help you.

Minnesota Power awards grants to commercial/industrial customers who use innovative technologies, improve manufacturing processes, undertake renewable electric energy projects, or who need project design assistance. *POWER Grant* is available for a wide variety of projects employing diverse technologies.

Here are some examples of activities or products that could qualify for Minnesota Power funding under the *POWER Grant* Program:

- New electro-technologies that lower energy costs per unit of production in a manufacturing process
- Innovative technologies that are new and underutilized in our regional marketplace
- Inclusion of energy-efficient options in the design phase of a project

Maximum annual grants are determined by a customer’s average billing demand:

Customer Demand	Maximum Grant
Less than 100 kW	\$10,000
100 to 300 kW	\$25,000
Over 300 kW	\$50,000

Minnesota Power may consider higher rebate levels.

Other Minnesota Power Products and Services

In addition to *POWER Grants*, Minnesota Power offers commercial, industrial and agricultural customers other energy efficiency products and services. These include energy audits, rebates, dual fuel, storage/off-peak services, outdoor and area lighting, and economic development assistance.



Converting all overhead and display lighting to energy-efficient bulbs and fixtures will save Security Jewelers around \$3,000 per year on its electric bill.

“Once we realized that energy-efficient lighting could perform the way we wanted, we went strictly by the numbers,” Seiler said. “The energy- and cost-saving projections were very attractive. It made sense.”

The multifaceted project replaced all of the store’s lighting. New 23-Watt CFLs were installed in place of 75-Watt incandescent bulbs, providing more light with less energy. Four-lamp ceiling fixtures with magnetic ballasts were replaced by energy-efficient, two-lamp models with electronic ballasts. Recessed ceiling fixtures, warm flood lights, and dramatic spotlights were combined for a beautiful, sophisticated effect. A \$3,380 *POWER Grant* rebate from Minnesota Power helped offset the initial cost.

Minnesota Power estimates the new lighting will conserve 42,780 kWh of electricity per year, lower monthly demand by 17 kW, and shave almost \$3,000 off the company’s annual electric bill. The savings come from lower wattage bulbs and energy-efficient ballasts, plus reduced air conditioning costs since fluorescent light radiates less heat. Security Jewelers typically runs its air conditioner year round because it is difficult to regulate steam heat from the city’s district energy system. Radiant heat from incandescent lights had always exacerbated the problem.

Seiler already notices a difference. The store is brighter, cooler and less expensive to operate. Its electric bill dropped 37% in April 2008, the first full month after the project was completed.

“I’m extremely pleased with the results,” Seiler said. “Customers and employees appreciate the new lighting, and the numbers speak for themselves. For businesses looking to save energy and trim costs, this is a great way to do it.”