

## Custom Efficiency

for Complex Projects



Photo courtesy of Rafanelli and Nahas.

### Rafanelli and Nahas Office Building

Boise Plaza  
1111 W. Jefferson Street  
Boise, ID 83702  
208- 947-0407

Owner: Rafanelli and Nahas

Quote: "Frankly, without the help of Idaho Power, we might have opted for a less energy efficient light fixture. We would not have seen the decrease we have in our operating cost and we would not have as nice a lighting level in the building." Scott Schoenherr, a Rafanelli and Nahas manager.

## Boise Plaza Upgrades Benefits More Than The Bottom Line

### The Business

Boise Plaza is the largest office building in Idaho, located in downtown Boise. Constructed in 1971, it is the only building in the Gem State designed by the premier architectural and engineering firm Skidmore, Owings and Merrill. Boise Plaza features a sky lighted interior atrium extending from the entry plaza to the top of the building. Numerous businesses rent offices in this spacious building, which is currently at full capacity with over 750 office workers.

### The Challenge

Rafanelli and Nahas, a Boise-based real estate developer, purchased the 330,000 square foot building from Boise Cascade in March 2006. Creating outstanding office space meant upgrades were in order. Before the project started, the indoor lighting was inconsistent. Office spaces were too bright in some locations and too dim in others. Scott Schoenherr, a manager with Rafanelli and Nahas and partner in the Boise Plaza project, investigated energy efficient lighting options. He said, "We found we could have a fresh clean look and significantly decrease our operating expenses."

### The Solution

Started in August 2006 and completed in five phases over two years, Boise Plaza implemented lighting changes. Floor-by-floor, new T5 light fixtures replaced the existing T12 light fixtures. All light switches were removed and now operate via energy management system controls and occupancy sensors.

Each office floor in the building contained approximately 1,800 light fixtures before the renovations. Improved lighting efficiency resulted in a reduction of fixtures to 750 per floor. Previous external lighting consisted of 372 recessed, 250-watt mercury vapor light fixtures. The new floodlight system successfully reduced the lighting requirements to eight 1000-watt metal halide floodlights.

### The Outcome

Replacing the T12 fixtures with energy efficient T5 fixtures affected more than energy consumption. Schoenherr said, "We have happy tenants, lower operating costs and the whole building looks better."

## The Savings

During the first two years of occupancy in a renovated energy efficient building, Boise Plaza reduced their total building power demand by nearly 20 percent. Estimated energy savings from the projects between June 2006 and June 2007 are more than three million kilowatt hours per year, yielding about \$78,000 per year in savings.

## The Bottom Line

Idaho Power provided Boise Plaza incentives totaling about \$350,000 for projects completed through June 2008. Other energy efficiency projects are underway. Plans include replacing the lighting ballasts in the building's basement, an area spanning an entire city block. The change allows for fixtures with lower wattage lamps, enhancing energy savings. Boise Plaza continues to work with the Custom Efficiency program, investigating alternative heating and cooling equipment in conjunction with building controls for additional energy savings.

Boise Plaza is also working with Idaho Power's Building Efficiency program on energy efficient lighting in a new seven-story parking garage located west of the Boise Plaza building. If you are looking for similar success, Idaho Power's Custom Efficiency program can help. Call 208-388-5949 for more information on this incentive program. The above Success Story was produced in cooperation with, and approval from, Idaho Power customer Rafanelli and Nahas.



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