



Building Efficiency for Commercial Construction

Energy Efficiency Pays. Now More Than Ever.

Program Update — June 2006 *for Commercial Design and Construction Professionals*

Program Activity Update

The popularity of the Building Efficiency program is growing. As of this month, more incentive payments have been made through Idaho Power's Building Efficiency program this year than in all of 2005.

The most common design feature is lighting with power densities (watts/square foot) that are below current Idaho code. Over half of the applications paid include more efficient lighting systems. These lighting measures alone provide the largest share of the program's energy savings—over a half million kWh/yr!

The next most common design feature is high-efficiency air conditioning units. Nearly half the applications paid include HVAC units with Energy Efficiency Ratios (EERs or SEERs) above what code requires. These measures generate the largest share of the program's summer peak load reduction. With these new HVAC units installed, the total cooling capacity is nearly 170 kW below what it would have been—an average load reduction of 14 kW per building.

Energy Efficient Computers

The opportunities for saving energy in the lighting and cooling systems while designing new buildings are great. But don't overlook the computing equipment inside. Computers collectively consume as much as 10 to 15 percent of the overall energy bill of a typical commercial building.

Now there is an option for saving energy in every new computer purchased by specifying an 80 PLUS computer.

80 PLUS sets the standard for what constitutes an energy-efficient power supply. On average, an 80 PLUS certified power supply saves 85 kWh per year in a desktop computer and 300 kWh per year in a desktop-derived server that run 24/7. When including energy savings from reductions in cooling demands and line losses, Ecos Consulting estimates

utility bill savings can be as high as \$70 or more over the life of each computer and more than \$200 for each server.

The 80 PLUS program is supported by Idaho Power through our participation in the Northwest Energy Efficiency Alliance. This program is designed to bring energy efficiency to the computer industry and deliver a new generation of energy-efficient computers to the marketplace. To learn more about the efficient computers available go to www.80plus.org.

Upcoming Training Opportunities

On Friday, June 23, BetterBricks is bringing a special session to Boise. This half-day class on Energy Scheming is in response to the need identified by many local architects.

This class will feature G. Z. Brown from the University of Oregon. He will showcase a design tool that provides the designer a simple means to look at system interactions within a building—glazing, orientation, airflow, thermal mass, and climate—and how they affect building loads.

Using Energy Scheming during schematic design can point out energy efficient design options early in the design process, eliminating much of the need for costly and time-consuming re-design later.

Registration includes a copy of Energy Scheming software, a \$250 value. With a grant from Idaho Power, the class and software will be free for the first 10 registrants.

Register through www.betterbricks.com. For more details on this class, call Ken Baker at (208) 861-6736.

For More Program Information

Do you know of any projects, planned or underway, that may qualify for this incentive? Are the owners or developers unaware of this program? If so, please share this information. For other questions, call Curt Nichols at (208) 388-6484.