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October 29, 2013

MEMORANDUM

TO: Council Members

FROM: Shirley Lindstrom

SUBJECT: Briefing on Idaho Power Company and Integrated Design Lab projects

Idaho Power Co. (IPC) and the University of Idaho – Integrated Design Lab (UI-IDL) have been working together since 2004 and in a substantial capacity for the past 5 years. This joint presentation between Sheree Willhite of IPC and Kevin Van Den Wymelenberg of UI-IDL, will discuss some of the ways that IPC and IU-IDL are working together, as well as describing some of the specific projects in detail.



The University of Idaho's Integrated Design Lab:

An important partner in Idaho Power's energy-saving efforts

Chris Pollow, an Idaho Power Energy Efficiency Engineer for large and industrial customers, described the contributions the University of Idaho's (U of I) Integrated Design Lab (IDL) makes to the company's energy efficiency efforts. "The IDL plays a big part in making the Custom Efficiency program a success." The IDL works closely with Idaho Power and other regional stakeholders on commercial/industrial and residential programs.

"Idaho Power and its programs are driving factors behind our work," said Kevin Van Den Wymelenberg, Director of the IDL. "We do a lot of work with their commercial and industrial efficiency teams, helping them with evaluations, energy modeling, measurements, and verification."

Most companies would be happy with those services, but Idaho Power gets more out of the IDL. "We also ask them to do specific research," Chris added, "conduct customer surveys, deliver training and education programs, develop energy efficiency calculation tools, and perform other tasks to help support both our current and future energy efficiency programs."

Studying new ways to save energy comes naturally to the IDL

The IDL operates as a part of the U of I's College of Art and Architecture. In fact, most of its employees are U of I graduate students in architecture. They work with various entities throughout the state—both public and private—to help design buildings that are as energy efficient as possible.

"There's a synergy between academia and the professional world that benefits the consumer," said Kevin. "We bring an impartial, third-party perspective to the process that can be a little harder to achieve for a for-profit company." *Continued on back*



Building a valuable public/ private partnership

One of the primary services the IDL provides is energy modeling, which consists of computer simulations demonstrating a building's energy efficiency under multiple scenarios.

"When we opened our doors in 2004,"
Kevin said, "very few firms did energy modeling."
At the time, some might have thought the public university was competing with private business.
Actually, the opposite was true.



www.idahopower.com/business

"Idaho Power and its programs are driving factors behind our work."

Kevin Van Den Wymelenberg,
 Director, U of I's IDL

Studying new ways to save energy comes naturally to the IDL (continued)

One of the projects the IDL is working with Idaho Power on involves a system called an economizer.

"The concept of an economizer is simple," explained Kevin. "If the air outside is cool enough, we use it to cool the air inside a building that's getting warmed up by people, lights, and equipment instead of conditioning it. As long as it's the appropriate temperature, it can save a substantial amount of energy compared to re-cooling the interior air."

"In the long run," says Chris, "systems like the economizer will help our customers save megwatts of energy, and the IDL is helping us analyze and develop the right technologies for our service territory."

Uncommon savings are quite common

Saving energy has always been a smart business decision. Now, Idaho Power makes it attainable. Our complete suite of energy efficiency programs provides attractive incentives to commercial and industrial customers who want to reduce their utility costs.

- The Custom Efficiency program offers substantial rebates to large commercial and industrial customers who invest energy-saving improvements in their facilities.
- **Easy Upgrades** provides incentives of up to \$100,000 when companies retrofit their infrastructures with energy-saving upgrades.
- The Building Efficiency program pays up to \$100,000 per project to mitigate the additional capital costs when companies upgrade their lighting, cooling, controls, and building shells to more efficient components.
- FlexPeak Management offers commercial and industrial customers incentives in the form of recurring payments for reducing their power consumption during times of overall peak demand.



Building a valuable public/ private partnership (continued)

"We offered professional courses on energy modeling," Kevin said. "We taught architects and engineers how to do energy modeling. We brought in outside experts to share their knowledge. Now several firms around the valley are doing them and getting paid for them."

How much can your company save?

For more information about Idaho Power's energy efficiency incentive programs, go to www.idahopower.com/business or call us at 208-388-5624. We'll show how you can join smart companies like the IDL, saving energy and money.

