

# case study



**Honeywell helps the University of North Dakota, Grand Forks, save energy, reduce costs and protect the environment.** The university pushes the envelope in energy and environmental research. With a 585-acre campus and more than 240 buildings, they need a partner who can apply the latest technologies to help get the most out of both new and existing systems. Honeywell is there.

## Honeywell

# Integration Yields Aggressive Energy Reduction

At the University of North Dakota, Grand Forks (UND), physical plants co-generate steam and electricity, which the university sells to local school districts and businesses — holding down costs for North Dakota taxpayers. At the same time, the university tirelessly seeks ways to reduce its own energy use. That's why UND relies on Honeywell building management systems to help attain its aggressive energy reduction targets. "We're passionate about energy management," says Randy Bohlman, UND technology advancement coordinator. "Honeywell makes it easy to protect our legacy investment. Plus, as technology and our needs change, we know Honeywell will have the advanced solutions to help us achieve our goals."

## ENHANCING OPERATIONS

"Honeywell's building automation and integration solutions help us overcome our current limitations and add significant capacity and versatility," says Bohlman.

"Its open architecture and BACnet®, LON and OLE for Process Control (OPC) capabilities facilitate third-party equipment and database integration."

Honeywell Building Manager™, a high-performance building automation system for monitoring and changing your building's devices and systems, currently monitors about 25,000 control points, with plans to migrate an additional 30,000 points from the third-party

industrial control system that monitors UND's central steam plant. Eventually, Building Manager will control all 80,000-plus points on the campus. UND also is considering adding other Honeywell applications for card access and digital video management, and to provide a window into the university's significant fire protection system.

The university began upgrading its legacy systems with Honeywell Enterprise Buildings Integrator™ (EBI) after UND pioneered performance contracting legislation in the state of North Dakota. (Under a performance contract, projected energy savings cover the cost of upgrades.) EBI, a comprehensive automation solution, integrates seamlessly with existing Honeywell equipment to boost control capabilities. UND will pay for the bonds issued to cover \$4 million in retrofits and improvements by cutting more than \$650,000 from its \$5 million utility bill each year.

## MORE INSIGHTS, BETTER PERFORMANCE

Bohlman also looks to Honeywell to provide more comprehensive intelligence regarding operational performance. Honeywell's suite of applications pulls together and integrates information from a variety of enterprise subsystems and databases. Among other initiatives, UND plans to give building occupants Web

access to their facilities' operational information, institute automated billing and use EBI to help pinpoint and address such issues as indoor air quality.

"Where Honeywell really shines is its ability to help us gather, understand and act on data," Bohlman notes. "As we move to become a 'smart' campus, Honeywell will help us critically analyze baseline and supplemental utility usage data, solve problems, and measure and verify the savings we achieve."

## UND AND HONEYWELL

UND relies on four generations of Honeywell controllers, from 1970s equipment to EBI, and the university selected Honeywell building automation for capabilities that include:

- Seamless integration with Honeywell legacy and third-party equipment.
- Open architecture that supports such standards as BACnet, LONMARK® and OPC.
- Ability to access and present data from enterprise subsystems and databases.
- Ability to manipulate and review data in a variety of formats.
- Expandability to provide a common network for energy, control, fire and security applications.
- Measurement and validation of UND's performance contract savings.
- A more comprehensive picture for effective, proactive control.

## Honeywell Building Solutions

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